CONSOLIDATED ANNUAL ACTIVITIES REPORT

FOR 2015



'The Academy of Europe' Registered office

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Company limited by Guarantee and registered at Companies House. Registration number 07028223

Registered with the Charity Commission, registration number

1133902

THE TRUSTEES, AND COUNCIL OF THE ACADEMIA EUROPAEA

Board of TRUSTEES (at 31 December 2015)

Officers

President: Professor Sierd Cloetingh Utrecht, (elected June 2014,

renewable at AGM of 2017)

Vice President: Professor Anne Buttimer Dublin, (till 2018)

Hon. Treasurer: Professor Sir Roger Elliott Oxford, (till September 2015)

Professor Peter Scott London (from September 2015)

Co-opted Members: Professor Theo D'haen Leuven, (till 2016)

Professor Ole Petersen Cardiff, (till 2017)
Professor Hermann Maurer Graz, (till end 2015)

Appointed by Council: Professor Balazs Gulyas Stockholm, (till Dec. 2016)

Professor Don Dingwell Munich, (till 2017)
Professor Svend Erik Larsen Copenhagen, (till 2017)

At the time of writing this report, the number of independent members elected to Council was set at a maximum of three. The Chairs of the Academic Sections are *de facto* members of the Council. Periods of office of Section chairs are as described in the regulations. The list of Section chairs, as at 31 December 2015, is at annex 1a of this report. Three members of the Council are nominated to the Board of Trustees – Professors Gulyas, Dingwell and Larsen. Prof. D'Haen is the Editor-in-Chief of the European Review. Prof. Maurer is without portfolio. The AGM of 2014 approved a restructuring of the Sections into four Classes, each with an interim chair (until 2017). These are:

Class A1 - Humanities and Arts - Chair Professor Svend Erik Larsen (Trustee)

Class A2 - Social and related Sciences - Chair Professor Anne Buttimer (Vice President and Trustee)

Class B - Exact Sciences - Professor Don Dingwell (Trustee)

Class C – Life Sciences – Professor Ole Petersen (Trustee)

At the AGM of 2015, changes I the Regulations were approved. AS a result Professors Dingwell, Petersen and Larsen were appointed as Vice Presidents (ex officio)

The composition of the Council as at 31st December 2015 is at annex 1a.

With the election of a new President: The Board agreed to delay election of a replacement Vice president, in order to undertake a review of the Board structure and the nominations processes. The Trustees proposed amendments to the Regulations at the AGM of 2015, and prior to any further appointments or elections.

London General Secretariat

Executive Secretary: Dr David Coates
Senior Administrator: Ms Teresa McGovern

Accounts and payroll: outsourced to Keith Vaudrey Ltd.

Membership Secretary: Function provided by the Wroclaw office

Membership administration and database outsourced: Technical University of Graz, Contact is Mrs Dana Kaiser

The Executive Secretary is the Chief Executive Officer and Company Secretary with responsibility for day-to-day operations of the London office; oversight of the regional hubs and secretariat support to the Board and other committees.

In 2015 The registered office re-located to Room 251, Senate House, University of London, Malet Street. London WC1E 7HU

Wroclaw Knowledge Hub (www.acadeuro.wroclaw.pl/)

Academic Director: Professor Tadeusz Luty

Administrators: Dr Ola Nowak and Ms Kasia Majkowska

Barcelona Hub (http://barcelona.acadeuro.org/)

Academic Director: Professor Ricard Guerrero.

Hub Manager: Dr Núria Radó until autumn 2015, then Ms Anna Wassmer.

Bergen Hub (www.acadeuro.b.uib.no/)

Academic Director: Professor Jan Vaagen (Deputy, Prof. Laszlo Csernai).

Office manager: Mr Vidar Totland.

Graz data Centre. Responsible (under contract) for delivery, support, development and content management of the AE corporate website (ae-info.org). The data centre team include: (Director) Professor Frank Kappe, Project Manager H. Leitner, M.Sc., Chief Programmer Robert Hoffmann and Main Editorial Management Dana Kaiser, M.A.

Cardiff Hub (www.aecardiffknowledgehub.wales/)

From autumn 2015, a new regional hub based at Cardiff University was established, to be formally launched in 2016. Academic Director: Pofessor Ole Petersen (Trustee & VP). Office manager: Mrs Judith Lockett

Auditors	Principal Bankers	Solicitors
Keith-Vaudrey & Co	NatWest Bank Plc	Hewitson Becke+Shaw
Chartered Accountants	PO Box 2AG	Shakespeare House
First Floor, 15 Young St.	63, Piccadilly	42, Newmarket Road
London W8 5EH	London W1A 2AG	Cambridge, CB5 8EP

ACADEMIA EUROPAEA

The structure of the Academia Europaea

Prior to 2010 the Academia Europaea operated under a Deed of Trust and was registered as a Charity with the Charity Commission of England and Wales (former registration number 1001978).

On 23 September, 2009: the Academia Europaea was incorporated as a Company limited by Guarantee and was registered at Companies House (number 07028223). See: https://beta.companieshouse.gov.uk/company/07028223. The Company was also registered as a not-for-profit charity (registration number 1133902,

http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/CharityWithPartB.aspx?RegisteredCharityNumber=1133902&SubsidiaryNumber=0

Governance and management

The affairs of the Academia Europaea are managed by a Board of Trustees. There is consultative Council and other operational sub committees that are described in annex 1. Elections and appointments to the Board and to the Council are as described in the regulations. These can also be found on the corporate website at www.ae-info.org.

The officers of the Academia (President, Vice President(s) and Treasurer) are elected by members. Other Trustees are either appointed from the Council, or co-opted directly by the Board. The AGM confirms these appointments in accordance with the regulations. The Vice Presidents (ex officio) are appointed by the Board of trustees for a defined term

Training and Induction of new Trustees

New Trustees are provided with a copy of the statutes and regulations; governance documents and sets of minutes of the past year meetings. Trustees also receive copies of documents describing the role and responsibilities of Directors and Trustees and links to the appropriate Charity Commission and Company House websites.

The mission of the Academia Europaea

The Academia Europaea is an international, non-governmental association of individual scientists and scholars, who are experts and leaders in their own subject areas as recognised by their peers.

The Academia will:

- · Promote European scholarship and research and increase the wider appreciation of its value and importance
- Make recommendations to national governments and international agencies concerning matters affecting science, scholarship and academic life in Europe.
- Encourage interdisciplinary and international research in all areas of learning, particularly in relation to European issues.
- Identify topics of trans-European importance to science and scholarship, and propose appropriate action to ensure that these issues are adequately studied.

The Academia will endeavour to:

- Encourage the highest possible standards in scholarship, research and education.
- Promote a better understanding among the public at large of the benefits of knowledge and learning, and of scientific and scholarly issues, which affect society, its quality of life and its standards of living.

Charitable Objectives:

The advancement and propagation of excellence in scholarship in the humanities, law, the economic, social and political sciences, mathematics, medicine, and all branches of natural and technological sciences anywhere in the world for the public benefit and for the advancement of the education of the public of all ages in the aforesaid subjects in Europe

Trustees' report for the period ended 31 December 2015

The Trustees would like to thank all of the organisations that have sustained the Academia through their generous general financial sponsorships and those that have contributed to specific events and activities of the Academia during the period of this report. These organisations are identified in various places within this report and in the accounts and have been identified within with the various 'reports to members' of events held during the current period, where appropriate. The Trustees have been active in their engagement in the affairs of the Academia and a majority has attended every Board (and the annual Advisory Council) meeting. Trustees have been active in monitoring the affairs of the Academy and with respect to the financial management of the Academy. The Trustees wish to express their gratitude to the elected officers of the Academy for their hard work on behalf of the membership, in particular to those Trustees who stepped down during the period of this report (Professors Elliott and Maurer). This reporting period was carried out against the background of an improving financial position especially in respect of member donations and income from Hub sponsors. However, the Trustees are fully aware of eh need to continue to search for new sources of sponsorship, in particular to support core costs. The Trustees wishes to acknowledge support received in 2015 from the following organisations: The Riksbankens Jubileumsfond; the Heinz Nixdorf Foundation for the renewal of sponsorship of the Erasmus Lecture, the Technical University of Graz for their dedicated IT and corporate web support, the Wenner Gren Foundations in Stockholm and the Volkswagen Stiftung for support to the HERCuLES group. In addition the Trustees are grateful to Professor Fellner at the IICM Fraunhofer institute at Darmstadt and the Technical University of Darmstadt for organising and supporting the 2015 Annual conference. The Trustees specifically wish to thanks the Mayor and city authorities of Wroclaw, for their renewal of the Hub agreement, for a period of three years. Further financial support was gained locally for new initiatives that were organised by and run through the regional hubs. Hub activity reports for 2015 are contained within this report.

The Trustees are pleased to report that in 2015, inter –organisational links were strengthened with a number of European federation organisations (ALLEA, FEAM, EASAC and euroCASE) and a joint undertaking was agreed to prepare a major European Union funded project proposal providing the European institutions with high level and independent scientific advice from 2016/17 onwards. In addition the Trustees agreed to collaborate closely with ALLEA to share annual conferences from 2017 onwards. The AE also engaged in a number of specific activities that responded to policy issues across Europe and made a specific focus on strengthening links with Eastern European and Southern European communities, including in the North African states.

The Trustees are pleased to report a further widening of the membership of the Academia Europaea with the election and invitation in 2015 of 233 scholars. The Trustees also continued to support the further development of the Young Academy of Europe, in recognition of the AE mission to promote young researchers. The Trustees continue to recognise the difficult economic circumstances and are pleased to report that the Hubs are fully financed with local support and were not reliant on core financial support from central funds for their day-to-day operations. Finally in this period, the Trustees were able to reflect the improving financial situation through the launch of the Hubert Curien Initiative Fund, in honour of the second President of the AE. A report on competitive projects supported through the fund can be found below. In 2015 plans were agreed for the launch of a new award – the Adam Kondorosi prizes, to honour the memory and achievements of Professor Adam Kondorosi. These will recognise both young emerging researchers in the fields of plant microbiology and senior achievement in plant sciences.

The Trustees, are pleased to place on record, their belief that at the time of compilation of this report, there are no unforeseen risks that may place continuation in jeopardy.

Public benefit statement

Over the year the Academia has published articles and papers in commercial journals; organised academic meetings and conferences that are open to young scholars and the interested public. The Academia has provided prizes and awards to support and recognise researchers in pursuit of their scholarship. To enhance the accessibility of the European scholarly community to the public, the Academia has maintained and enhanced its Web portal and has contributed to the betterment of European Policy through participation in providing expert, impartial advice to authorities and governmental organisations and has supported the Young Academy of Europe and launched a series of summer schools targeted at young researcher education. A full description of all of the main activities is included elsewhere in this report.

The Trustees have consulted the guidance made by the Charity Commission for England and Wales on the Public Benefit requirement of the charities Act 2006. The Trustees are confident that they have complied with their duty under section 4 of the Charities Act 2006 in that they have had a due regard to public benefit guidance published by the Commission

Future Plans

In the coming year the Trustees will continue to deliver the mission of the Academia through the running of appropriate workshops, publications and related activities. More focus will be given to activity through the regional hubs. The Young Academy of Europe, will continue to be supported, specifically to provide a focus to engage with and support young researchers from across Europe, who are embarking on an academic and research career. The AE engagement in European Science policy advice will be strengthened through the launch of a new Science Advice Policy project and the Trustees will endeavour to find additional core funding and sponsorship sources.

Activities during the period, 1 January 2015 - 31 December 2015

Generous donations by a number of Foundations and sponsoring organisations and the regional knowledge hub network have enabled the Board to expand on the range of activities carried out under the umbrella of the Academia. The Trustees also launched a new initiatives fund.

These activities are described in the following sections.

27th Annual Meeting of the Academia Europaea, September 2015.

Theme: "Symbiosis - Synergy of Humans & Technology".

The 27th annual conference (7 - 10 September 2015) was held in Darmstadt, under patronage of the Fraunhofer Institute for and the Rector of the Technical University of Darmstadt. The Trustees wish to thank Professor Dieter Fellner MAE (Director of the Fraunhofer IGD Institute) and Hans-Peter Seidel, General Conference Chairs and Hans Prömel President of TU Darmstadt. The list of all sponsors and Patrons can be found

An online archive of the events and photographs and a downloadable proceedings document can be found via this link: http://ae2015.eu



the

Jürgen below



The 2015 Erasmus Medal was awarded to the distinguished classical scholar

Professor Dame Edith Hall MAE

Citation: For a unique contribution to classical scholarship, combining detailed and analytic research with public performance and interpretation of ancient theatrical arts and literature for modern public understanding of classics and historical context.



BIOGRAPHICAL NOTE

Edith Hall is Professor in the Department of Classics and Centre for Hellenic Studies at King's College London and Chairman of the Gilbert Murray Trust. Her research interests cover ancient Greek literature, thought, politics and culture and their reception in modern times. One specialism is ancient theatre; she is also Co-Founder and Consultant Director of the Archive of Performances of Greek & Roman Drama at the University of Oxford. She was awarded her doctoral degree at Oxford in 1988; her thesis Inventing the Barbarian, a study of the representation of ethnicity in Greek tragedy, won the Hellenic Foundation annual prize for the best PhD in Greek Studies. It was published by OUP in 1989. She taught at the universities of Oxford, Cambridge, Reading, Durham and Royal Holloway before taking up her present position; she has also held visiting appointments at Swarthmore College, PA, Northwestern University, IL, Leiden and Erfurt. She has published over twenty books, both monographs and edited volumes, most recently Introducing the Ancient Greeks: From Bronze Age Seafarers to Navigators of the Western Mind (2014, Bodley Head). Her monograph Adventures with Iphigenia in Tauris: A Cultural History of Euripides' Black Sea Tragedy (OUP 2013) won a Goodwin Award of Merit from the American Philological Association. She appears regularly on BBC Radio and TV, has acted as Consultant to numerous professional theatres including the Royal Shakespeare Company and the National Theatre, and writes in Times Literary Supplement, The Guardian, The Times, and New York Review of Books. She has been awarded research grants by numerous funding bodies including the Leverhulme Trust and the British Academy. In 2012 she accepted a Humboldt Research Award. Her current research, funded by the Arts and Humanities Research Council UK, Classics and Class in Britain 1789-1939 (http://www.classicsandclass.info/) investigates the exciting historical uses made of ancient Greek and Roman culture beyond the scholarly community.

The laudation was made by **Professor dr. Svend Erilk Larsen MAE (**Aarhus), Trustee and Chair of the Literary and Theatrical Studies Section.

2015 Heinz-Nixdorf Erasmus Lecture: "Master of Those Who Know": Aristotle as Inspiration for the 21st-century Academician?

The 2015 Erasmus Lecture and Medal ceremony sponsored by The HNF(see for further information



this link

http://www.heinz-nixdorf-stiftung.de/)

For full information about the life and works of Professor Hall, go to this link (http://edithhall.co.uk/). The lecture will be published in a future issue of The European Review (2016).

ABSTRACT:

Of all the great minds of antiquity, Aristotle's is the one which most clearly celebrated curiosity for its own sake and has most profoundly affected how we all do literature, philosophy and science. But his historically contingent ideas about women, slaves, empires and elites, decontextualised from their expression in a single treatise—his *Politics*—have recently tended to eclipse his monumental achievements in other fields: Aristotle wrote over a hundred and fifty other treatises which changed intellectual history for ever. There was no constituent of the universe in which he was not interested, whether it was empirically discernible to the senses (plants, animals, planets), or lying beneath and beyond the perceptible surface of things (ethical impulses, principles of logic, time, chance).

This illustrated lecture first traces some key moments in the history of the reception, perception, representation and influence of the man whom Dante called simply 'master of those who know', *il Maestro di color che sanno*—Aristotle of Stageira. It then asks whether celebrating certain aspects of Aristotle's thought and its reception could bolster all our academic endeavours today. These aspects include his insistence of identifying a-theological causes while respecting the practice of religion, his assumption of the inter-relatedness of the natural environment and human activity, his importance to both Arabic and 'western' traditions of intellectual and scientific enquiry, and his emphasis on individual mental fulfilment and virtue-based happiness, responsible to the wider community, rather than wealth acquisition, as the primary goal of human life.

The 2015 Burgen Scholars awards Monday 7 September 2015, Darmstadt



The Academia Europaea was pleased to award the 2015 Burgen Scholar awards to:

Paul Ayris
Ulrich Hennecke
Lars Kindler
Kawa Nazemi
Laura Spina
Tatiana von Landesberger

The Burgen Scholarships are named in honour of our founding President - Professor Arnold Burgen.

They provide recognition to younger European scholars, at the post-doctoral level, who are emerging talents and potential future leaders in their field. Recipients may or may not yet have an established position.

The nomination of candidates is a task given to the members of the Academia Europaea resident in the country that is hosting the annual meeting.

Up to ten awards can be made. The awards cover the costs of attendance and participation in the Annual Conference (registration fees, travel and accommodation).

The Burgen Scholarship award is marked by the presentation of a certificate to the successful candidates, and a book prize generously donated by the Cambridge University Press.

A local committee of Academia Europaea members who are responsible for the organisation of the Annual Conference make the final selection of the list of Burgen scholars from amongst those nominated by their fellow national members of the Academia Europaea.

The 2015 Scholars' biographical information is below (in alphabetical order by family name).



NAME: Paul Martin Ayris

AFFILIATION: Department of Earth and Environmental Science, Ludwig Maximilians

Universitat München

FIELD OF SCHOLARSHIP: Earth and Cosmic Sciences

BIOGRAPHICAL NOTE:

Dr Paul Ayris obtained B.Sc Hons and M.Res degrees in Environmental Science at the University of Lancaster, UK. He completed a PhD in the study of SO₂ adsorption by glass surfaces, with special relevance to ash material in volcanic eruption plumes. His PhD was supervised jointly by Dr Pierre Delmelle, then at the Environment Department at the University of York, and by Dr Adam Lee and Dr Karen Wilson within the Surface Chemistry group at the

Chemistry Department. Thereafter, Dr Ayris worked as a postdoctoral researcher with Dr Delmelle at the Université Catholique de Louvain in Belgium. In 2012 until the present day, Dr Ayris has been working as part of the Experimental Volcanology research group in the Department of Mineralogy at Ludwig Maximilians Universitat München, under the supervision of Prof Dr Donald B Dingwell.

DETAILS OF RESEARCH:

Since the completion of his PhD, Dr Ayris has worked to constrain the variables and processes which shape the surface chemistry of volcanic ash. His work has considered the significance of ash surface chemistry in relation to its impacts on terrestrial and marine ecosystems, and the relevance of transient, high temperature gas adsorption processes acting on ash surfaces at the instant of a volcanic eruption in shaping those impacts. In his current work at LMU, Dr Ayris has developed a unique apparatus to simulate the interactions between hot volcanic gas mixtures and the surfaces of both volcanic ash. He is also investigating the effect of magma fragmentation processes on the chemistry and mineralogy of

those surfaces. In his most recent paper, Dr Ayris and co-authors conducted a retrospective examination of the soluble constituents of ash surfaces from the famous eruption of Mount St Helens in 1980, and used their findings to offer insights into how similar studies in the future might be best be undertaken.

TWO KEY PUBLICATION REFERENCES:

Ayris PM, Delmelle P (2012) The immediate environmental effects of tephra emission. Bulletin of Volcanology, 74 (9) 1905-1936

Ayris PM, Delmelle P, Pereira B, Maters EC, Damby DE, Durant AJ, Dingwell DB (2015) Spatial analysis of Mount St. Helens tephra leachate compositions: implications for future sampling strategies. Bulletin of Volcanology, 77(7) 1-17.



NAME: Ulrich Hennecke

AFFILIATION: Westfälische Wilhelms-Universität Münster, Organisch-Chemisches Institut FIELD OF SCHOLARSHIP: Organic Chemistry, Bioorganic Chemistry and Catalysis BIOGRAPHICAL NOTE:

Ulrich Hennecke was born and raised in Lower Saxony, Germany. He studied Chemistry at Philipps-University Marburg and received his Diploma degree in 2002. For his doctoral studies he joined Thomas Carell's group to work on the photochemistry and photo lesions of DNA and obtained his PhD degree in 2007 from the LMU Munich. This was followed by a postdoctoral stay funded by a DAAD postdoctoral fellowship with Jonathan Clayden at the University of Manchester, where he worked on novel rearrangement reactions of organolithium compounds. He took up his current position as junior group leader in organic chemistry at the Westfälische Wilhelms-Universität Münster in 2008. Since 2010 he is a project leader in the

frame work of the Collaborative Research Center 858 – "Synergetic Effects in Chemistry". In October 2014, he received the "venia legendi" in Organic Chemistry from the WWU Münster.

DETAILS OF RESEARCH:

The research interests of the Hennecke group range from synthetic organic chemistry and catalysis to nucleic acid chemistry and bioorganic chemistry in general. Currently, the main areas are the development of new asymmetric halogenations reactions, the chemistry and biochemistry of organohalogen compounds, the use of biomimetic iron complexes in oxidation catalysis and the application of (chemically modified) nucleic acid in asymmetric catalysis and nanotechnology.

In general, the basic starting point of all research in the Hennecke group is the use of synthetic organic chemistry to solve novel and highly interesting scientific questions either in chemistry or in related disciplines, which require the design and synthesis of "smart" molecules.

TWO KEY PUBLICATION REFERENCES:

"Enantioselective, Desymmetrizing Bromolactonization of Alkynes"

M. Wilking, C. Mück-Lichtenfeld, C. G. Daniliuc, U. Hennecke, J. Am. Chem. Soc. 2013, 135, 8133-8136.

"Enantioselective Haloetherification by Asymmetric Opening of meso-Halonium Ions" U. Hennecke, C. H. Müller, R. Fröhlich, Org. Lett. **2011**, *13*, 860-863.



NAME: Lars Kindler

AFFILIATION: Freie Universität Berlin, currently Harvard University

FIELD OF SCHOLARSHIP: Mathematics

BIOGRAPHICAL NOTE:

- Began studying Mathematics in 2003, at the Georg-August-University Göttingen
- One year abroad at University of California, Berkeley
- Finished Diplom in 2009 under the supervision of Prof. Dr. Yuri Tschinkel
- Began Ph.D. studies in 2009 at University of Duisburg-Essen under the supervision of Prof. Dr. Dr. mult. Hélène Esnault
- Extended stay at University of Chicago, 2012
- Defended thesis in 2013, title: "Regular singular stratified bundles in positive characteristic", grade: "summa cum laude"
- From 2013: Research Assistant (Wissenschaftlicher Mitarbeiter) at Freie Universität Berlin
- Fall 2016 Summer 2017: Visiting Scholar at Harvard University

DETAILS OF RESEARCH:

The field of my research is Algebraic Geometry. It is part of what is called "pure" mathematics. Its content is the interplay between algebraic and geometric ideas; more precisely it encompasses the study of geometric problems by algebraic (as opposed to analytic) methods and conversely, the study of algebraic problems with geometric methods.

The formalism of Algebraic Geometry as it mainstream today, was initiated by Alexander Grothendieck (1928-2014) in the 1950s. One great achievement of this formalism is that it allows one to transpose purely geometric settings into contexts in which there is no clear geometric intuition; one of these contexts is what is called "positive characteristic Algebraic Geometry".

My work is concerned with one instance of such a transposition: I study differential equations in positive characteristic. Parallel to the classical singularity theory of algebraic differential equations, I was able to define and study a notion of regular singularity for differential equations in positive characteristic. My work shows that this theory is closely related to the notion of "tame ramification" which occurs in a neighboring part of algebraic geometry.

TWO KEY PUBLICATION REFERENCES:

Regular singular stratified bundles and tame ramification (Trans. Amer. Math. Soc. 367 (2015), 6461-6485)

Local-to-global extensions of D-modules in positive characteristic (International Mathematics Research Notices, 2014, doi: 10.1093/imrn/rnu227)

NAME: Kawa Nazemi

AFFILIATION: Fraunhofer Institute for Computer Graphics Research

FIELD OF SCHOLARSHIP: Computer Science

BIOGRAPHICAL NOTE:

Kawa Nazemi is currently head of the group Semantics Visualization at the Fraunhofer Institute for Computer Graphics Research (Fraunhofer IGD) in Darmstadt, Germany. His group develops user-centered intelligent visualization and visual analytics solutions. Further, he teaches User-Centered Visual computing at the Technische Universität Darmstadt.

After his graduation in Media Computer Science in 2006, Kawa started as researcher at Fraunhofer IGD, where he developed methods and approaches for "Visual Learning". He researched at the intersection between humans' cognition and computer-aided graphics in various European research projects. In 2007 he undertook the leadership and management of the THESEUS Core-Technology-Project "Innovative User Interfaces and Visualizations", where he established a new research group focusing on semantics visualization. He researched various ways of humans' visual information processing, interaction with computer-based graphics, and humans' experience with visual information. His research on information visualization, intelligent visualization, and visual analytics led to more than 60 peer-reviewed publications at international conference, journals, and edited books. Kawa is further program committee member of various conferences and journals. His research at the intersection of human and visual information includes the entire transformation from mass amount of raw data to human-centered interactive visual representations. He developed a variety of algorithms and methods for intelligent visualizations and visual analytics including data mining and machine learning for processing both, data and humans' behavior to explore novel ways of adaptive information visualization. Kawa defended his PhD entitled "Adaptive Semantics Visualization" under the supervision of Dieter W. Fellner with distinction at the Technische Universität Darmstadt.

Kawa was and is involved in acquiring, conducting, and leading various European and national research projects, and a variety of industrial contract research projects.

DETAILS OF RESEARCH:

Kawa research focus on adaptive and intelligent visualization, visual analytics, semantics visualization, information visualization, and text and data mining with a special focus on human visual perception and human cognition. He

researches at the intersection of human and visual information that includes the entire transformation from mass amount of raw data to intelligent visualizations. He developed a variety of algorithms and methods for intelligent visualizations and visual analytics including data mining and machine learning for processing both, data and humans' behavior to explore novel ways of adaptive information visualization.

TWO KEY PUBLICATION REFERENCES:

Nazemi, Kawa: Adaptive Semantics Visualization. Eurographics Association, 2014. PhD Thesis at the TU Darmstadt. http://diglib.eg.org/handle/10.2312/12076. Eurographics 2014.

Nazemi, Kawa; Stab, Christian; Fellner, Dieter W.: Interaction Analysis for Adaptive User Interfaces. In proceedings of the 6th International Conference on Intelligent Computing: Advanced Intelligent Computing Theories and Applications. Berlin, Heidelberg, New York: Springer, 2010. (Lecture Notes in Computer Science (LNCS) 6215), pp. 362-371, 2010.



NAME: Laura Spina

AFFILIATION: Department of Earth and Environmental Sciences, Section for Mineralogy, Petrology and Geochemistry, Ludwig Maximilians Universität München FIELD OF SCHOLARSHIP: Earth and Cosmic Science

BIOGRAPHICAL NOTE:

Laura Spina (1986) received her Bachelor Degree in Geological Science, with distinction (110/110 con lode), in 2008 at the *University of Catania*, with a study based on paleomagnetic dating of Mt. Etna historical lava, performed in collaboration with the *Institut de physique du globe de Paris*. In the following two years she did an internship at *Istituto Nazionale di Geofisica e Vulcanogia* (INGV), studying volcanic infrasound and seismic-noise signals. In October 2010,

she received her Master Degree in Geophysical Science, with distinction (110/110 con lode), at the *University of Catania*. In December 2010, she started her PhD and focused her studies on the dynamics of shallow conduit at basaltic active volcanoes (Mt. Etna, Italy; Mt. Yasur, Vanuatu), inferred through the analysis of acoustic and seismic signals, in collaboration with INGV. In February 2014, she received her PhD in Earth Science at *University of Catania*. From October 2012 to March 2015, she was enrolled in a Marie Curie Initial Training Network (NEMOH project) at Ludwig Maximilians University (LMU), Munich, where she performed shock-tube decompression experiments on analogue materials. She is actually a post-Doc researcher at LMU, where she is studying the effect of physical properties and decompression rate on the degassing response of analogue fluids.

DETAILS OF RESEARCH:

During my previous studies, I focused on infrasound and seismic signals generated by active basaltic volcanoes, such as Mt. Etna and Mt. Yasur. Indeed, the study of infrasound and volcano-seismicity, is well-known to provide important quantitative information on the shallow plumbing system, and on the dynamics of the multi-phase fluids within.

The willing to gain a better understanding of the shallow conduit dynamics has successively brought me to focus my research interests on the behaviour of analogue bubbly fluid under different decompression paths and/or physical properties (i.e. fluid viscosity, crystal content and/or shape). The applied research methodologies include the use of a properly developed shock tube in order to carry out decompression experiments on synthetic analogue material (silicon oil plus crystals). The decompression phase is realized at room temperature and high pressure conditions, and high speed videos are used to shed light on the degassing behaviour of decompressed analogue mixtures. Then, through scaling considerations, the quantitative analysis of the interdependence of each among the investigate parameters is referred to the natural case.

TWO KEY PUBLICATION REFERENCES:

Spina, L., Cannata, A., Privitera, E., Vergniolle, S., Ferlito, C., Gresta, S., Montalto, P., Sciotto, M., Insights into the Mt. Etna shallow plumbing system from the analysis of infrasound signals, August 2007-December 2009, Pure and Applied Geophysics, Vol. 172, Issue 2, pp 473-490, doi: 10.1007/s00024-014-0884-x, 2015.

Spina, L., Taddeucci, J., Cannata, A., Gresta, S., Lodato, L., Privitera, E., Scarlato, P., Gaeta, M., Gaudin, D., Palladino, D.M., Explosive volcanic activity at Mt. Yasur: A characterization of the acoustic events (9–12th July 2011), J. Volcanol. Geotherm. Res., Vol. 302, pp 24-32, http://dx.doi.org/10.1016/j.jvolgeores.2015.06.005, 2015.



NAME: Tatiana von Landesberger AFFILIATION: Technische Universität Darmstadt FIELD OF SCHOLARSHIP: Informatics

BIOGRAPHICAL NOTE:

Tatiana von Landesberger is the Head of Visual Search and Analysis Group at Technische Universität Darmstadt, Germany. She obtained a Ph.D. degree in Computer science at this university in 2010. After finishing her studies of financial mathematics in Bratislava, Slovakia in 2003, she worked for the European Central Bank. Since 2006, she conducts research in visual analytics and in the area of information retrieval.

Her main research interests are visual analytics of complex data and visual exploration of large data sets (networks, spatio-temporal data, multivariate data, etc.) in various application

areas incl. biology, transportation or finance.

DETAILS OF RESEARCH:

The research goals are to develop new visual-interactive techniques for data search and exploration and for data analysis in various areas. One research strain deals with visual analysis of networks from various application areas, such as social science, finance, biology, transportation, or software engineering. The new techniques support different analytical tasks such as understanding of the graph structure (social networks extracted from news articles), examination of network dynamics (traffic analysis), analysing dynamic processes on networks (e.g. financial contagion, molecular evolution), or comparison of graphs (e.g., comparison of phylogenetic trees). Another part of the research is the research of new visual analytics tools for the analysis of geolocated data such as person movements in evacuation, flows of people in a city (based on twitter or mobile phone usage locations), or group movements of animals. We research new visualization techniques for data search such as new modalities for query definition and visualization of research results for multivariate and time series datasets (e.g., natural science observations). Recent project presented new visual analytical methods for the evaluation of medical image segmentation results, especially comparison of segmentation algorithms.

KEY PUBLICATIONS:

Fraunhofer

Tatiana Von Landesberger, Arjan Kuijper, Tobias Schreck, Jörn Kohlhammer, Jarke J van Wijk, Jean-Daniel Fekete, Dieter W Fellner: Visual analysis of large graphs: state-of-the-art and future research challenges, Computer Graphics Forum, Vol. 30, No. 6, pp. 1719-1749, 2011

Sebastian Bremm, Tatiana von Landesberger, Martin Heß, Tobias Schreck, Philipp Weil, Kay Hamacher: Interactive visual comparison of multiple trees, Visual Analytics Science and Technology (VAST), pp. 31-40, 2011

The Trustees wish to thank all of the individual sponsors and Patrons of the 27th annual conference as follows:















27th annual conference programme sessions

Conference sessions Monday 7 September

Opening sessions was followed by a panel debate addressing the conference <u>theme</u> "Symbiosis - Synergy of Humans & Technology"

with: Prof. Dr. Karlheinz Langanke (Director GSI)

Juan Miro (ESA Head of Ground Systems Engineering) Prof. Dr. Hans Jürgen Prömel (President of TU Darmstadt)

Prof. Dr. Peter Propping (Member of Leopoldina Executive Committee)

Tuesday 8 September

Keynote Prof. Bernt Schiele (Max Planck Inst for Informatics, Saarbrücken)

Visual Scene Understanding

Scientific, Legal, as well as Ethical Aspects of ES/iPS Cells Research and Commercialization

Chair: Prof. Joseph Straus

(Max Planck Inst for Intellectual Property and Competition Law, Munich)

Speakers: Prof. Wolfram Zimmermann (University Medical Center Göttingen)

Prof. Christoph Rehmann-Sutter (IMGWF Univ. zu Lübeck) Prof. Jochen Taupitz (Univ. Heidelberg und Mannheim)

Roundtable: Of Men and Tools: In Shaping Group Identities in European History and Beyond

Chairs: Prof. Renate Pieper (University of Graz) Speakers: Prof. Pieter Emmer (Leiden Univ) Identities and Migration: Soldiers, Sailors and Slaves in the Early Modern World

Prof. Ryszard Stemplowsky (Akademia Ignatianum, Kraków)

Tools and Values in the 20th - 21st CC

Commentaries by

Prof. em. Horst Pietschmann (Universität Hamburg)

R&D Trends and Challenges in Life Sciences

Chair: Prof. **Georgios Sakas** (TU Darmstadt) Speakers: Prof. **Francesco Gianturco** (Univ Innsbruck) How it all Began: Synergy of Humans and Technology to Discover our Early Chemical History in the Universe

Dr. Markus Harz (Fraunhofer MEVIS, Bremen)

Cancer, Computers, and Complexity: Decision Making for the Patient

Dr. Klaus Urbahns (Merck Group)

Unleash the Beast! - Immunotherapies for Cancer

Publication Culture, Research Evaluation and Recognition of Excellence

Chair: Lynn Kamerlin (Uppsala University Prof. André Mischke (Utrecht University)

Speakers: **Lynn Kamerlin** (Uppsala University) *Hyper Competition in Biomedicine Research Evaluation*

André Mischke (Utrecht University)

How to Create a 5,000 Author Paper - Authorship Process in Experimental Particle Physics

Joerg Peltzer (University of Heidelberg)

The Single Author, Co-authorship and Collaborative Writing. Old and new Ways of Writing in the Humanities?

Sarah de Rijcke (Leiden University)

The Leiden Manifesto: Principles and Practices for Research Assessment

Keynote Prof. Arthur Konnerth (Technical University Munich)

Technology Meets Biomedicine: Analysis of Alzheimer's disease at Single Cell Resolution

Wednesday, September 9

Keynote Prof. Adrian Bejan (Duke University): The Human & Machine Species: Life and Evolution as Physics

R&D Trends and Challenges in Informatics

Chair: Prof. Jan Bergstra (Univ of Amsterdam) Speakers: Prof. Schahram Dustdar (TU Vienna)

Elastic Computing - Towards a new Paradigm for Computer Systems

Prof. Hermann Maurer (Graz Univ of Technology)

Some new Developments on the Web

Prof. **Wolfgang Reisig** (Humboldt Univ Berlin) Can a Formal Theory of Informatics be Based on "Theoretical Informatics"?

Construction and Reconstruction of Identities and Territorialities

Chairs: Prof. Antoine Bailly (Univ de Genève) Prof. Anne Buttimer (Univ College, Dublin)

Speakers: Prof. Antoine Bailly (Univ de Genève)

The New Regional Disorder

Prof. Michael Keating (Univ of Aberdeen)

Scotland after the Referendum

Prof. Yale Ferguson (Rutgers University-Newark)

Competing Identities and Turkey's Future

Prof. Anne Buttimer (Univ College, Dublin)

Words of Conclusion

Keynote Prof. Stefan W. Hell

(Max Planck Inst for Biophysical Chemistry, Nobel Laureate 2014 for Chemistry) Nanoscopy with Focused Light

The Posthuman as a Cross-Disciplinary Challenge

Chairs: Prof. Svend Erik Larsen (Aarhus Univ)

Assoc. Prof. Mads Rosendahl Thomsen (Aarhus Univ)

Speakers: Prof. **Søren Holm** (Univ of Manchester) Assoc. Prof. **Mads Rosendahl Thomsen** (Aarhus Univ)

R&D Trends and Challenges in Digital Humanities

Chair: Prof. **Hermann Maurer** (Graz Univ of Technology) Speakers: Prof. **Daniela Carpi** (Univ Verona) Bioethics and Biolaw Through Literature: a Literary Investigation into Ethics, Technology, and Law

Prof. Selma Rizvic (Univ Sarajevo)

How to Breathe Life into Cultural Heritage 3D Reconstruction

Other 'Non-Hub' events with Academia support/patronage and participation, held during the year.

HERCuLES group events: Reported by the Chair of the HERCuLES group - Professor Erik de Corte (Leiden)

On behalf of the Trustees, I would like to the Foundations and in particular Professor Britt-Marie Sjöberg, the Chief Executive for the continued support and sponsorship of the HERCuLES events by Foundations. The event was attended by approximately ninety delegates.



The 2015 theme covered a hot and increasingly controversial topic –

Emerging Models of Learning and Teaching in Higher Education: From Books to MOOCs?

Background of the symposium (taken from the programme documentation)

The use of technology in education has a long history. If we disregard tools like the blackboard, we can situate the start in the 1920s and the 1930s when the radio was welcomed as an innovative tool for classroom teaching. Later on programmed instruction and school television were predecessors of the computer. All these technological devices were expected to revolutionize education, but so far none of them was really successful. For instance, the high expectations for the potential of the computer to innovate classroom practices have largely not been materialized.

Broadly defined e-learning refers to the use of electronic media and ICT in education to create. Virtual Learning Environments involving a blend of classroom and online teaching. But e-learning has more and more become associated with online learning, i.e. forms and activities of learning based on the use of computer networks for interactive distribution of and communication over knowledge and skills. E-learning is considered as an appropriate way for distance learning, and has skyrocketed over the past decade by the advent of the so-called Open Educational Resources (OER). An interesting question is whether this new development in using ICT will indeed fundamentally change and improve education, and especially how it will impact policies and practices of teaching and learning in higher education. Open educational resources are digital learning tools that are offered freely and openly for educators, students, and self-learners to use and re-use for teaching, learning, and research. The movement originated in the late 1990s with the first major initiative coming from MIT. In 2002, MIT released 50 freely available courses through the Open Course-Ware initiative.

OER are considered as a vehicle towards more open and flexible higher education, especially through the emergence and fast development and distribution of the so-called Open Massive Online Courses. MOOCs do not only disseminate content knowledge, but involve also a pedagogical component, and thus aim at creating a real learning environment. The first MOOCs were launched in 2008; since then the MOOCs movement has expanded rapidly. For instance, in the fall of 2011 there were 160.000 students in 190 countries who participated in the MOOC of Stanford University on artificial intelligence. During the months thereafter MOOCs companies were founded such as Coursera, edX, and Udacity. These companies form partnerships with top universities and organizations in view of offering courses online for anyone to take for free.

Whereas the development and distribution of OER and MOOCs started in the USA, the movement has meanwhile also reached and evolved in Europe. In April 2013 OpenupEd was launched as a pan-European initiative around MOOCs and is coordinated by EADTU (European Association of Distance Teaching Universities). As we can expect that in the coming years the MOOCs movement will continue to develop and expand, it is high time for the Academia Europeae (AE) to get involved in the analysis of the current situation and the discussion of the future perspectives of Open Higher Education in Europe. Therefore, the HERCULES (Higher Education, Research, and Culture in European Society) expert group of the AE has planned this symposium with a focus on the MOOCs, but considering the MOOCs movement in the broader context of learning and teaching in European higher education. The symposium is organized in the series of similar events that has been arranged since the late 1990s in Stockholm in collaboration and with the support of the Wenner-Gren Foundations.

Organizing committee

Erik De Corte, Leuven, Chair, erik.decorte@ppw.kuleuven.be Lars Engwall, Uppsala, lars.engwall@fek.uu.se Ulrich Teichler, Kassel, teichler@incher.uni-kassel.de Denis Weaire, Dublin, dweaire@tcd.ie

Contents of the symposium

The symposium will be organized in Stockholm from May 21 till May 23, 2015. The event will start with an opening session in the evening of Thursday, May 21, and will continue through Friday and Saturday involving six thematic sessions and a concluding panel discussion. The six sessions will address the following themes:

- 1. MOOCS experiences so far
- 2. MOOCs and trends in higher education
- 3. Structural effects of MOOCs
- 4. Student learning and MOOCs
- 4. Economics of MOOCs
- 6. Future perspectives

1. MOOCs experiences so far

The first session will be devoted to the in-depth discussion of recent experiences and emerging developments in open and online education in Europe and worldwide, as well as market developments in this domain. This first session is also intended to provide a review of the state-of-the art of the research relating to OER and MOOCs. The major aim is thus to explore the scene and provide a better understanding of the logic behind the introduction of ICT and open online learning in higher education.

2. MOOCS and trends in higher education

The second session will provide evidence on trends and developments in relation to ICT and higher education. A particular aim is to relate higher education to the wider changes towards a networked society and the ambitions of governments to raise educational standards of their countries. Another topic relates to the trend toward opening education from a historical perspective. Another issue we like to focus on is a transnational perspective on the development, implementation and exploitation of OER, as well as institutional policy in online and distance education.

3. Structural effects of MOOCs

The third session will address structural effects that MOOCs and other systems of electronic teaching and learning are highly likely to have on higher education systems. A particular important issue concerns the development of cooperation and partnership between universities for online and flexible education. In this context it is especially important to focus on the role of national policy for the creation of collaborative digital campuses. Other issues concern the impact on assessment and evaluation of higher education systems, and the danger for a tendency toward centralized higher education hampering the freedom of individual academic teachers.

4. Student learning and MOOCs

A fundamental issue in relation to distance learning – be it through correspondence course, online teaching or MOOCs – is the tendency for students not to fulfill their studies. Examination figures in distance learning have therefore been relatively low. The fourth session will therefore focus on the risks as well the opportunities for student learning through MOOCs. Will teaching and research still be two sides of the same coin, or will the courses detach themselves from an academic environment in its research in disciplines and pedagogy? Will the dialogical structure of knowledge development and acquisition and its impact on personal developments be strengthened or weakened by the developments of digitized learning? A basic question is thus how future OER can handle motivation and examination. In terms of the former various educational models in different fields (the sciences vs. the humanities) can be discussed, while in terms of the latter it is particularly important to address the question how assessment and evaluation can be properly done in an electronic learning environment. In addition the session intends to shed light on the ethical issues in relation to MOOCs, since such teaching provides the opportunity to analyze big data sets about students.

5. Economics of MOOCs

In the fifth session we intend to address the economics of MOOCs. A basic question is here how educational institutions are compensated economically for their MOOCs. In systems with student fees it is apparently a problem that courses that are offered for free are not generating income. In this respect higher education is facing the same type of problems as the newspaper industry does today as a result of an inability to charge for on-line material. The same problem also occurs in government subsidized education systems as they are based on revenues on the basis of examination (which

tends to be low in distance learning). The session could therefore point to a possible development from MOOCs towards EPOCs - Exclusive Paid Online Courses - i.e. courses where institutions are offering expert knowledge, particularly for further specialist education. The session will also point to other economic problems and opportunities in relation to electronic educational systems.

6. Future perspectives

This last session of the symposium aims at providing perspectives for the future. A significant issue concerns the impact of MOOCs on the future academic job market, since there are fears that university leaders may see MOOCs or other electronic teaching models as a potential for rationalization. A prerogative of European teaching, learning and research is the immediate interaction between various languages and cultures. Will the new development homogenize this linguistic and cultural complexity within a monolingual Anglophone context or open for a new and challenging complexity? It is also interesting to shed light on the potential of the MOOCs for educational research, as well as the felt need by some observers to question the domination of behaviorist theory within MOOCs. Finally, the session will include a forecast for the development of ICT in higher education some fifteen-twenty years ahead as well as a discussion of ideas for future research.

Sessions:

State-of-the-art lecture on MOOCs: Diana Laurillard (Institute of Education, University College London) How will professors adapt to the changing digital education environment?

Theme 1: MOOCs experiences so far

Chair: Erik De Corte (Leuven)

Lori Breslow (Massachusetts Institute of Technology): The research to date, but, more importantly, what it could be Jeff Haywood (University of Edinburgh): Learning from MOOCs: lessons for the future Pierre Dillenbourg (Ecole Polytechnique Fédérale, Lausanne): MOOCs: 3 years later Devayani Tirthali (Brown University, Providence, USA): Review of MOOC research so far

Theme 2: MOOCs and trends in higher education

Chair: Svend Erik Larsen (Aarhus)

Fred Mulder (former UNESCO/ICDE Chair in Open Educational Resources at OUNL): Opening up education: true and false promises of MOOCs

Gerhard Fischer (University of Colorado, Boulder): Massively Open Online Courses (MOOCs) as components of rich landscapes of learning

Berit Kjeldstad (Norwegian University of Science and Technology, Trondheim): MOOCs for Norway

Theme 3: Structural effects of MOOCs

Chair: Jan Reedijk (Leiden University)

Paul Ruhl (Bavaria Virtual University):Beyond MOOCs - successful inter-university organisation of web-based teaching and learning

Tim Gore (University of London, Global Networks and Communities) : Structural implications of MOOCs - low grade tremors?

Theme 4: Student learning and MOOCs

Chair: Ulrich Teichler (Kassel

Gunnar Karlsson (Royal Institute of Technology, Stockholm): Lectures flop so flip the classroom **Pere Fabra** (Open University of Cataluyna): 20 years of virtual teaching and learning: rights and wrongs

Theme 5: Economics of MOOCs

Chair: Lars Engwall (Uppsala)

Michael Cusumano (Massachusetts Institute of Technology): The high cost of "free" online education: MOOCs revisited, with some policy suggestions

Devayani Tirthali (Brown University, Providence, USA): Are MOOCs sustainable?

Theme 6: Future perspectives

Chair: Milena Zic-Fuchs (Zagreb)

Andreia Inamorato dos Santos (Institute for Prospective Technological Studies, European Commission, Seville):

Opportunities and challenges for the future of MOOCs and open education in Europe

Robin Middlehurst (Kingston University): Looking to the edges: future perspectives

Mark Brown (Director, National Institute for Digitial Learning, Dublin City University): Scenarios for the future: reshaping the MOOC landscape

Final Panel Discussion

Chair: Piet Henderikx (University of Leuven)

Panel members:

Ton de Jong (Twente University)

Michael Cusumano (Massachusetts Institute of Technology)

Diane Luarillard (Institute of Education, University of London)

Academia Europaea outreach.

Over the year, the President and members of the Board and the Executive Secretary had discussions with the European Research Council and Commission, ALLEA and other European Academies and pan-European organisations, and with a number of Charitable Foundations. The Trustees wish to thank in particular members of the Board and Section Chairs, who represented the Academia at a wide range of events.

Individual members of the Board and Council represented the Academia at a number of conferences and other invited events. Bids were prepared to a number of Foundations, in line with the policy to broaden the basis of general financing of the Academy and to support specific developments in the programme of the Academia, including through the new Hubs. These are mentioned where appropriate in the finance sections of this report.

Members of the Young Academy were invited to participate in all events organised by the AE and the AE Hubs. Members of the Board of the YAE were also invited to participate in meetings of the Board of Trustees and Council. Much outreach effort was channelled through the Regional Hubs.

European research policy and advice

European Science Advisory Council (EASAC). formed by a number of European Academies, and supported by the Academia Europaea provides EU institutions and other pan-national bodies with fully independent advice on the scientific aspects of public policy.

The Academia was a founding member of this Council and collaborates with our sister Academies in making available our members' expertise where needed, for the many study



groups that are established. The Academia provides a financial contribution towards the running of the secretariat of EASAC, which is based at the German National Academy of Sciences (Leopoldina) in Halle. The Academia covers the costs of participation of the AE Council member and also AE experts participating in specific study panels [http://www.easac.eu/]. The AE supports a number of members who provide individual expertise to EASAC studies and/or are engaged in the standing committees of EASAC. In 2015 these members were:

Professor Don Dingwell (Trustee) AE delegate to the EASAC governing Council; Professor John Ludden - AE representative on the Energy standing panel; Professor Lars Walløe, Chair of the Environment Panel; Prof Peter Neumann AE nominated expert and chair of the Ecosystem services study; Professor Kirstin Vala Ragnasdottir AE nominated expert on the circular economy panel.

The President, on behalf of the Board, signed a co-operation agreement with the Presidents of ALLEA (All European Academies); FEAM (Federation of Academies of Medical Sciences); EuroCASE (The Engineering Academies' policy organisation) and EASAC. This new group developed a proposal for funding under the European Commission Horizon2020 funding scheme at the invitation of the Commission.

The Hubert Curien Initiatives Fund. Named in honour of the second President of the AE. The fund had its first open call in 2015. Applications came from members of the Academia and the Young Academy. Grants were made for new and collaborative events and activities. The emphasis was on interdisciplinarity and on activities relevant to the regional missions of the knowledge Hubs. The Board of Trustees assessed all applications.

The following initiatives received support from the fund in 2015:



Future Technologies, organised by Prof. Herman Maurer. Brussels. March 4-5

http://www.ae-info.org/ae/Acad_Main/Past_Events/2011reports and images at: present/Future%20Science

Slot 1: Wednesday, March 4,

"Energy and Computing in the Future"

Moderator: Hermann Maurer Convenor: Academia Europaea

Talk 1: Sierd Cloetingh, President of AE will start with an invited talk of 30 minutes with a general welcome, a very short presentation of AE and a talk: "Geothermal energy and the underlying geoscience base"

Talk 2: Sibylle Günter, Director, Max Planck Institute for Plasmaphysics, Garching/Greifswald:

"Fusion Energy - base load electricity for the second half of the century"

Talk 3: Oskar Mencer, CEO, Maxeler Supercomputer Technologies, UK:

"How to reduce the enormous energy consumption of future computer".

Talk 4: Rainer Blatt Professor, Institute for Quantum Optics and Quantum Information, Austrian Academy of Sciences: "The Quantum Way of Doing Computations"

Slot 2: Wednesday, March 4,

"100 Year Starship: the medical challenge"

Moderator: Declan Kirrane Convenor: Academia Europaea

Talk 1: George Church Professor of Genetics at Harvard Medical School and Director of PersonalGenomes.org:

"Big data driven medicine: Next generation sequencing and genome engineering"

Talk 2: Hans Lehrach Professor for molcular gentics at Max Planck Institute, Berlin:

Talk 3: Claudio Luchinat: "Metabolomics for preventive and personalized medicine" Talk 4: Christine Moissl-Eichinger: "The microbiome ecosystem"

Talk 5: Jan-Eric Litton, Professor at Karolinska Institute and Director Genaral of DG BBMRI-ERIC:

" Life Sciences Research Infrastructures"

Talk 6 :Kurt Zatloukal, MAE, Professor for Medicine, Graz Medical University: "Disruptive innovation in health care"

Slot 4: Thursday, March 5,

"How Research and Science are going to change with new Technologies"

Moderator: Hermann Maurer Covenor: Academia Europaea

Talk 1: Viktor Mayer-Schönberger, Professor at Oxford University: "Big Data and how it changes research"

Talk 2: Hans Sünkel, MAE, Past president and Professor, Graz University of Technology: "The Future of Research"

Talk 3: Wolf-Tilo Balke, MAE, Professor at U. of Braunschweig and Director, L3S, Hannover: "Crowdsourcing, societal and research implications"

Talk 4: Nara Kulathuramaiyer, Professor for Computer Science, UNIMAS, Malaysia: "How social networks will change research"

"Memory Frictions: Conflict-Negotiation-Politics". Organised by Professor Susan Onega (Zaragoza) May 6 – 8. INTERNATIONAL CONFERENCE ON CONTEMPORARY NARRATIVES IN ENGLISH

Programme

Keynote lecture 1Chair: Susana Onega

"The Powers of Vulnerability: Memory and the Restorative Uses of Elegy" Prof. Jean---Michel Ganteau (University Paul Valéry---Montpellier)

Session 1: Playing with Memory: Manipulation and Deception

Chair: Alan Gibbs

- "Life as a fake': Trust, Memory and Paranoia in the Contemporary Impostor Novel" (**Michael Greaney**, University of Lancaster)
- "'So this is a big preventive guilt trip': Naturalism and Traumatic Memory in Lionel Shriver's Big Brother" (**Alan Gibbs**, University College Cork)
- "Remembering as Rewriting: Deception and Artistic Power in Atonement" (Irena Księżopolska, University of Social Sciences and Humanities, Warsaw)

Session 2: Traumatic Wounds in African---American Contexts

Chair: Susana Onega

- "Race, Trauma and Natural Disaster in Richard Ford's 'Leaving for Kenosha' and 'Everything Could Be Worse'" (**Rubén Peinado Abarrio**, National University of Ireland, Galway)
- "Reimagining the Social Death: The Traumatic Outcome of Racist Stereotypes in Bernice L. McFadden's Gathering of Waters" (Vicent Cucarella Ramon, University of Valencia)
- "Narrative Form, Memory Frictions and the Revelation of Traumatic Secrets in Toni Morrison's Home" (**Susana Onega**, University of Zaragoza)

Session 3: Memories of the World Wars

Chair: José M. Yebra

- "Pat Barker's Regeneration: Revisiting First World War Memory and the Poetry of Owen and Sassoon" (**José M. Yebra**, University of Zaragoza)
- "Revisioning Cultural Memory: Alternative Narratives of 1940s Britain in Andrea Levy's
- Small Island" (Sonya Andermahr, University of Northampton)
- "Contrary to Popular Belief: Memory and Mythmaking of Wartime Britain in Contemporary Fiction" (Rachel Chin, University of Exeter)

Session 4: Constructing Diasporic Identities

Chair: Nieves Pascual

- "False Memories, False Foods: Eating, Cooking, Remembering in Tastes Like Cuba by Eduardo Machado" (**Nieves Pascual**, University of Jaén)
- "'Salida Definitiva': Ruth Behar's Autoethnographic Memory and the Nostalgic Impossibility of Return" (**Lisa Ortiz-**--Vilarelle, The College of New Jersey)
- "Negotiating Diaspora: Media Constructions of Cultural Difference and Mobility" (Chiara Battisti, University of Verona)

Session 6: Holocaust Memory and the Perpetrator's Perspective

Chair: Guido Vitiello

- "Martin Amis's The Zone of Interest, or Writing from the Viewpoint of the Perpetrators as a Way of Negotiating the Collective Trauma of the Holocaust" (**Anne---Laure Fortin**--- Tournès, University of Maine, Le Mans)
- "How Many Degrees of Separation? Reconfiguring the (Child) Witness in Recent Memory Work in Literature and Film" (Susanne Baackman, University of New Mexico)
- "Retrospective Voyeurism. The «Peephole Motif» in Contemporary Holocaust Cinema" (**Guido Vitiello**, University of Rome «La Sapienza»)

Session 7: Reconstructing Memory in Australian Fiction

Chair: Heinz Antor

- "Gough who? Memory and Legend from Australia's Coup" (Paul Sharrad, University of Wollongong)
- "Memory Frictions, Trauma and the Re---Construction of Female Immigrant Identity in Eva Sallis's Hiam" (**Heinz Antor**, University of Cologne)

Session 8: Memoir or Not Memoir, That is the Question

Chair: Ana Belén Martínez García

"Author Hoaxes and Collective Responsibility: The Case of Nasdijj" (Sheila Ghose, University of Södertörn)

"I Am Malala: Issues on Ethics and Politics of Self---Representation" (Ana Belén Martínez García, University of Navarre)

"'What if?': Counter---history and Pseudo---memoir in Philip Roth's The Plot against America" (**Ada Savin**, Versailles University)

Session 9: Depathologising Trauma: Enabling Stories, Enabling Emotions

Chair: Maite Escudero Alías

"'A Garden of Her Own': Towards a Wilful Politics of Hope in Shani Mootoo's Out on Main Street" (**Maite Escudero Alías**, University of Zaragoza)

"Of Love and Silence: Memory F(r)ictions and Emotional Survival in Contemporary Black British Fiction" (Irene Pérez---Fernández, University of Oviedo)

"Of Terrible Mothers and Wayward Sons: Resisting Diasporic Memory Trauma in Jeffrey Eugenides and Christos Tsiolkas" (Christina Dokou, The National and Kapodistrian University of Athens)

Session 10: The Individual and History: Memories and/of Conflict in Short---Story Collections Chair: Nathalie Vincent---Arnaud

"Settling the Score on the Victimisation Trope in the Works of Ronnie Govender" (**Felicity Hand**, Autonomous University of Barcelona)

"A Korean 'Apocryphal' Island: Once the Shore, by Paul Yoon" (Marc Amfreville, Paris--- Sorbonne University)

"Journey into the (Un)Selves: Memories of Conflict, Conflicting Memories in Molly Antopol's The UnAmericans (2014)" (Nathalie Vincent---Arnaud, University of Toulouse--- Jean Jaurès)

Keynote lecture 2 Chair: Silvia Pellicer---Ortín

"The Contemporary Novel, Reality Hunger and the Memory Boom" Prof. Bryan Cheyette (University of Reading)

Session 11: Holocaust Representation and the Jewish Question in Contemporary British Fiction Chair: Sue Vice

"Recollection in Anxiety: Howard Jacobson's The Finkler Question and J" (Peter Lawson, The Open University, London)

"'Not Nothing': Holocaust Representation and Memory in Contemporary British Jewish Literature" (Ruth Gilbert, University of Winchester)

"Memory Frictions in British Holocaust Novels" (Sue Vice, University of Sheffield)

Session 12: Collective Memory and Public Commemoration: Politics, Remembrance, Manipulation Chair: Bárbara Arizti

"Public Art and Communal Space: The Politics of Commemoration in Amy Waldman's The Submission" (**Paula Martín---Salván**. University of Córdoba)

"The Holocaust in the Eye of the Beholder: Memory in Carmel Bird's The Bluebird Café

(1990) (Bárbara Arizti, University of Zaragoza)

Meddling with Memory: Simulacrum of Cultural Identity in Julian Barnes' England, England (**Andrzej Księżopolski**, Institute of English Studies, Warsaw University)

Session 13: Gendered Memories

Chair: Lola Herrero

"Memory Frictions and Reconciliation: Neo---Victorian Gothic and Gender Violence in Katy Darby's The Whores' Asylum (2012)" (María Isabel Romero Ruiz, University of Málaga)

Rasslin' with ghosts' in Phyllis Alesia Perry's A Sunday In June: The (Im)Possible Negotiation of Family and Historical Traumatic Memories (Valérie Croisille**, University of Limoges)

"Wendy Law---Yone's The Road to Wanting: The (Im)Possibility and (Un)Willingness of Remembering the Way Back Home" (**Lola Herrero**, University of Zaragoza)

Session 14: Memory Spaces: Culture, Criticism, and Perception

Chair: Svend E. Larsen

"Cultural Mobility and Diaspora: The Case of Philip Roth's Operation Shylock" (**Daniela Carpi**, University of Verona) "Memory between Perception and Projection" (**Svend E. Larsen**, Aarhus University)

"'Memory Frictions': Negotiating Cosmopolitanism and Postcolonialism in Three Post--- Cold War Essays by Tomas Venclova" (Larissa Allwork, University of Northampton)

Session 15: Information Flows: Visitable Pasts, Technologised Presents, Imagined Futures Chair: Francisco Collado Rodríquez

"Traumatic Memory and Time Travel Science Fiction: John F. Kennedy's Assassination in Stephen King's Novel 11.22.63" (**Sonia Baelo Allué**, University of Zaragoza)

"Erasing Trauma as Information: Terrorism and the Web in Pynchon's Bleeding Edge" (**Francisco Collado Rodríguez**, University of Zaragoza)

"Organic vs. Digital Memory: Memory Representation in British TV Series Black Mirror (2011)" (Juanjo Bermúdez de Castro, Autonomous University of Madrid)

Session 16: Trauma, Memory, and Justice

Chair: Jessica Aliaga Lavrijsen

"Aminatta Forna's The Memory of Love: Trauma and the Impossibilities of Forgiveness in a Non---Western Context" (**Merve Sarikaya**, Baskent University, Ankara)

"Holocaust Memory and Social Justice in Joseph Kanon's Alibi" (Anthony Lake, Khalifa University, Abu Dhabi)

"Pan Am Flight 103: Trauma and the Crave for Justice in James Robertson's The Professor of Truth" (**Jessica Aliaga Lavrijsen**, University of Zaragoza)

Session 17: What the Dead Leave Behind

Chair: Marita Nadal

"Healing the Past in the Face of AIDS: Memories of Familial Suffering in Colm Tóibín's The Blackwater Lightship" (Mayron Estefan Cantillo Lucuara, University of Valencia)

"Childhood, Memory and the Gothic: Joyce C. Oates's 'Haunted'" (Marita Nadal, University of Zaragoza)

Keynote lecture 3: Chair: María Jesús Martínez

"Telos and Trauma" Prof. Robert Eaglestone (Royal Holloway London)

Session 18: Multidirectionality and Memory: (Hi)stories that Clash and Blend

Chair: Ana Beatriz Pérez Zapata

"Multidirectional Memory, Multi---ethnicity, Globalization, and Surviving 'The Troubles' in Colum McCann's TransAtlantic" (Sandra Singer, University of Guelph)

*Foreign Histories, Home Traumas: Réading Empire in Zadie Smith's 'The Embassy of Cambodia'" (**Ana Beatriz Pérez Zapata**, University of Zaragoza)

"'Worlds in Collision': The Representation of Multidirectional Memory in Gail Jones's Black Mirror (2002)" (María Pilar Royo Grasa, University of Zaragoza)

Session 19: Negotiating Memory: Ethnic Discourses, Ethnic Identities

Chair: Silvia Martínez Falquina

"Alternative Ways of Negotiating Trauma: White Man's Law and Native Justice in Louise Erdrich's The Round House" (**Aitor Ibarrola**, University of Deusto, Bilbao)

"Memory that Haunts and Memory that Saves –the Case of Louise Erdrich and Cristina García" (**Agnieszka Gondor---Wiercioch**, Jagiellonian University, Krakow)

"Re---Mapping the Trauma Paradigm: Native American Strategic Representations of Grief" (Silvia Martínez Falquina, University of Zaragoza)

Session 20: The Detective Work of Memory: Selves, Histories, and Counter--- Histories Chair: Beatriz Domínguez---García

"Memory and Identity in Atkinson's Jackson Brodie's Series" (Beatriz Domínguez---García, University of Huelva)

"'A Cluster of Conflicting Images': Investigating Counter---Narratives in Contemporary Irish Detective Fiction" (**Brandi Byrd**, University College Dublin)

"When the Personal and the Historical Collide: Re---imagining Memory in Penelope Lively's Making It Up" (Maricel Oró---Piqueras, University of Lleida)

Session 21: Re---creating the Holocaust: Words, Images, Commemoration Chair: María Ferrández San Miguel

"Drawn from Postmemory: Graphic Ethics in Joe Kubert's Yossel: April 19, 1943" (**Mercedes Peñalba**, University of Salamanca)

"Re---membering the Politics of Holocaust Commemoration" (María Jesús Fernández---Gil, University of Alcalá)

"'No Redress but Memory': Holocaust Representation and Memorialization in E.L. Doctorow's City of God" (María Ferrández San Miguel, University of Zaragoza)

Session 22: Reconfiguring Memory, Resisting Trauma

Chair: Isabel Fraile Murlanch

"Boundaries of Memory in Janette Turner Hospital's Fiction" (**Isabel Fraile Murlanch**, University of Zaragoza) "The End of Theory, The End of Trauma? Jeffrey Eugenides's The Marriage Plot and the Resistance to Trauma Aesthetic" (**Bilyana Kostova**, University of Zaragoza)

2015 HUBERT CURIEN INITIATIVES FUND AWARD HOLDER'S REPORT MEMORY FRICTIONS: CONFLICT-NEGOTIATION-POLITICS (International Conference on Contemporary Narratives inEnglish)

In accordance with the requirements established by the *Academia Europaea* to receive a 2015 Hubert Curien Initiative Fund, the award holder, Prof. Susana Onega, and the organisers of the Conference "Memory Frictions: Conflict-Negotiation-Politics" — Dr. Maria Jesus Martinez Alfaro and Dr. Silvia Pellicer Ortin -present a report to inform on the event and justify expenditures.

REPORT OF THEMAINACTIVITIES

The International Conference "Memory Frictions: Conflict-Negotiation-Politics" (6-8 May 2015) was organised by two members of the Department of English and German Philology of the University of Zaragoza, Maria Jesus Martinez Alfaro and Silvia Pellicer Ortin, with the collaboration of the other members of the research team "Contemporary Narratives in English" directed by Prof. Susana Onega. This event was part of the scientific activities carried out by the team within the national research project on "Trauma and Beyond: The Rhetoric and Politics of Suffering in Contemporary Narrative in English" (a project financed by the Spanish Ministry of Economy and Competitiveness, code FFI2012-32719).

The topic chosen for this conference has proved to be of great interest to those working in the field of literary studies. The scope was limited to narratives in English published from 1990 onwards. The aim of the conference was to illustrate the many and various sides of the so-called "memory boom" and its impact on the literary production of the last decades. In fact, as explained in the call for papers, the 1990s was the time when this "memory boom" turned memory into a central concern in contemporary culture and politics at a global scale. Some of the important contributing factors that were highlighted throughout the conference were the debates surrounding False Memory Syndrome; developments in the academic fields of Holocaust Studies and Postcolonial Studies; the spread of public historical consciousness; and the evolving dynamics of reparation politics and justice, among others. As the scholar Jay Winter points out, the contemporary obsession with memory has to do with multiple social, cultural, medical, and economic trends and developments of a miscellaneous but intersecting nature (2007). The effects of these intersections, as he argues, have not only been multiplicative as they have also made for friction areas, sites of clash, controversy, contradiction and questioning, which became the focus of this conference.

The interest in this field of research was attested by the large number of proposals, approximately one hundred, which were received after launching the call for papers. Once the selection process was over, sixty three participants were accepted to take part in the conference. In addition, there were three keynote speakers, invited by the organising committee on account of their relevant contribution to the field of contemporary literary

criticism, especially in what concerns Memory, Trauma and Holocaust Studies: Prof. Robert Eaglestone (Royal Holloway, University of London), Prof. Bryan Cheyette (University of Reading) and Prof. Jean-Michel Ganteau (Universite Paul Valery-Montpellier 3). There was a keynote lecture every morning, followed by substantial debates. The titles were the following: "The Powers of Vulnerability: Memory and the Restorative Uses of Elegy" (Prof. Jean-Michel Ganteau, May 6); "The Contemporary Novel, Reality Hunger and the Memory Boom" (Prof. Bryan Cheyette, May 7); and "Telos and Trauma" (Prof. Robert Eaglestone, May 8). As to the conference delegates, they came from a wide variety of countries: Spain, Ireland, UK, Italy, France, Portugal, Poland, Germany, Sweden, Denmark, Greece, Turkey, the United Arab Emirates, the USA, Canada and Australia. Counting on specialists from such different backgrounds made for a very fruitful exchange of ideas and an enriching diversity of perspectives from which to approach the topic chosen as our main object of study. These sixty three papers were grouped into twenty two thematic panels, scheduled during the three days of the conference in the form of parallel sessions:

Session 1: Playing with Memory: Manipulation and Deception Session 2: Traumatic Wounds in African-American Contexts Session 3: Memories of the World Wars

Session 4: Constructing Diasporic Identities

Session 5: Memory Fictions, Memory Frictions

Session 6: Holocaust Memory and the Perpetrator 'sPerspective Session 7: Reconstructing Memory in Australian Fiction Session 8: Memoir or Not Memoir, That is the Question

Session 9: Depathologising Trauma: Enabling Stories, Enabling Emotions

Session 10: The Individual and History: Memories andlof Coriflict in Short-Story Collections

Session 11: Holocaust Representation and the Jewish Question in Contemporary British Fiction

Session 12: Collective Memory and Public Commemoration: Politics, Remembrance, Manipulation

Session 13: Gendered Memories

Session 14: Memory Spaces: Culture, Criticism, and Perception

Session 15: Information Flows: Visitable Pasts, Technologised Presents, Imagined Futures

Session 16: Trauma, Memory, and Justice

Session 17: What the Dead Leave Behind

Session 18: Multidirectionality and Memory: (Hi)stories that Clash and Blend

Session 19: Negotiating Memory: Ethnic Discourses, Ethnic Identities

Session 20: The Detective Work of Memory: Selves, Histories, and Counter-Histories

Session 21: Re-creating the Holocaust: Words, Images, Commemoration

Session 22: Reconfiguring Memory, Resisting Trauma

The following links offer more detailed information on the programme and content of the keynote lectures and papers:

- Programme URL http://cne.literatureresearch.net/conference-programme

- Book of abstracts: http://cne.literatureresearch.net/conference-abstracts

In addition to delegates and plenary speakers, several lecturers and students attended the conference as the organisers and the members of the Research Group had invited them to do so without a need to register. Several announcements had also been previously disseminated through the *Academia Europaea* website, the *Text, Action and Space* (TAS) website, our University website, our research team's website, and mailing lists. Besides, we had with us two representatives of the *Academia Europaea*: Professor Svend E. Larsen (AEM), who delivered a paper, and Dr. Nuria Rad6, from the Barcelona Knowledge Hub.

The opening ceremony counted with the presence of the Dean of the Faculty of Arts and Humanities of the University of Zaragoza. Prof. Eliseo Serrano's introduction was followed by Dr. Martinez Alfaro's opening address, in which she highlighted the key themes and ideas that would be addressed in the papers to be presented during the conference. Dr. Pellicer Ortfn concluded by acknowledging the individuals and institutions that had made this conference possible. These acknowledgments remarked the support of the *Academia Europaea* for its endorsement of the conference and the economic snpport of the Academia Europaea 2015 Hubert Curien Fund. A special mention was made of two members of the *Academia Europaea*, Prof. Svend E. Larsen and Prof. Cinzia Ferrini, for their willingness to endorse this project and collaborate with it. Thanks were finally given to the Barcelona Knowledge Hub of the Academia for their

support and promotion of the conference. A similar speech was delivered by Dr. Pellicer *Ortin* at the conference closing, thanking all the participants for the good quality of their contributions and summarising the main points that had been discussed in the twenty two panelsessions.

The social activities that were part of the programme also contributed to creating a very friendly atmosphere in which people could share their projects and ideas. The coffee breaks allowed the participants to meet and discuss their research; a Welcome Reception was organised in Hotel Alfonso in the evening of the first day of the conference; and a gala dinner was held in the Restaurant El Principal on 7 May. Tourist information was provided to the participants in the delegate packs so that they could visit the main landmarks of Zaragoza during their free time and the organising committee was always available to help them te find their way in our city orto solve any query they could have.

IMPACT OF THE EVENT AND FOLLOW-ONACTIONS

As can be inferred from the description above, the scientific impact of the conference has been high due to the high number of proposals that were initially received and because of the presence of speakers from so many different countries, who were all willing to travel to Zaragoza and share their specialist knowledge and reflections on the issue of memory. The diverse papers they presented contributed to throwing light on a variety of areas of friction where individual and collective memories collide and which show that memory, to put it in Mieke Bal's terms, is a travelling concept.

The most relevant conclusions pointed at the interdisciplinary nature of the field of Memory Studies –a field where philosophy, psychology, sociology, history, politics, and literary criticism come together so as to unveil the palimpsestic and multidimensional dimensions of memory. Countries, nations, and individuals become thus connected in a common construction of a globalised world. News and data are part of an ongoing flux of exchange and relationality, but also memories play an important role in a transnational world; they move, they travel, and they connect human beings who have gone through similar experiences of pain, suffering and conflict.

A wide range of memories were addressed in the contributions to the conference: memories related to the two World Wars and the Holocaust; memories of African-American, Cuban, Australian, indigenous, Native-American and Caribbean individuals and collectivities affected by colonisation, migration and diaspora; gendered and queer memories; etc. All this contributed to defending our claim that literature needs to be (re)considered as a powerful tool for many social groups to claim for their own memories in the public sphere. The role of politics and the manipulative dangers of master narratives also came to the fore in discussing the formation of collective memories and identities, which led to reflection on the way our sense of history, memory and identity is mediated by external forces that escape our control. Moreover, with regard to the study of those literary forms that allow for the depiction of conflicting memories, most of the talks concluded that contemporary writers have crafted formal discourses that allow them tu address the unrepresentable nature trauma and the conflicts of memory. Thus, the field of aesthetics appeared as the main area where creative writers can metaphorise and give shape to the obsession with memory that our society seems to be going through. In conclusion, this conference showed that many frictions demand analysis in the political, sociological, psychological fields which we were dealing with during the conference. This event was also proof that frictions make people get together with the common aim to provide answers to some existential doubts on what it means to be human.

We would like to disseminate all these results and share ideas with a wider scientific community by publishing a collection of essays. For this, some guidelines have already been sent to all the participants in case they want to revise and enlarge the papers they presented at the conference. The manuscripts will go through a blind peer review process and a selection of the best will be published with an international publishing house. If enough essays are found to be high-quality work in the areas of literary, Memory and Trauma Studies, we would consider publishing two volumes of collectedessays.

To conclude, we would like to thank the *Academia Europaea* for making possible this meeting of scholars from so many different backgrounds. We are confident that this will contribute to future projects and collaborations in the context of international research networks. This will help our research team continue striving for cutting-edge research projects in the field of contemporary fictional narratives in English, as we have done in the last few decades.

LIGHT, FROM THE EARTH TO THE STARS (Lisbon, July 2-3, 2015) Coby the Barcelona Knowledge Hub (Ricard Guerrero) of the Academia and Ciência Viva (the Portuguese Agency for the Scientific and Technological Culture) this two-day Interdisciplinary Workshop gathered 30 an event **to commemorate the International Year of Light 2015**.



organised Europaea

speakers in

How did light give birth to life, how does nature communicate using bioluminescence, and what art forms are made with light were some of the topics that illuminated two days of open and lively debate. From the photon, the particle of light, to ESA's satellite Hipparcos which mapped more than 100 000 stars, to low cost solar panels and LED systems that will change the way we light up our homes and the living conditions in developing countries, researchers, artists, entrepreneurs and other experts discussed the importance of light and its links with art, science, technology, communication and history.

Speakers included MAE Denis Weaire, FRS, in representation of the president of the Academia Europaea, Álvaro de Rújula and Ricard Guerrero. The programme included the projection of two documentary films on light sponsored by the BKH: "Microbial Mats", shown in the lecture of R. Guerrero (5 minutes), and "Life from Light-Origin of photosynthesis" (15 minutes) especially made for the occasion. Both films has been directed by Rubén Duro, Barcelona.

Around 150 participants attended the Workshop, mostly people from universities and research centres in the Lisbon area, but there were also participants from the non-academic world.

Each participant received a copy of the Catalan edition of Ad vitellionem paralipomena, by Johannes Keppler, the first book on modern optics.

List of speakers

Speakers during the first day (July 2) included the following:

Rosalia Vargas (Ciência Viva), Ana Noronha (Ciência Viva), Álvaro de Rújula (CERN. Geneva) Pedro Russo (University of Leiden), André Moitinho (University of Lisbon), Carlos Fiolhais (University of Coimbra), António Sá da Costa (Apren – Associação Portuguesa das Energias Renováveis), Adélio Mendes (University of Porto), Guilherme Carrilho da Graça (University of Lisbon), Carlos Salema (Instituto de Telecomunicações, Lisboa), Miguel Castelo-Branco (Instituto de Ciências Nucleares Aplicadas à Saúde, Coimbra), Paulo André (Instituto de Telecomunicações, Lisboa), Luís Ferreira (Hbm Fibersensing, SA), and Ricardo Mendes (Tekever).

And during the second day (July 3):

Ricard Guerrero (Barcelona Knowledge Hub-AE), José Feijó (University of Maryland), José Matos (Portuguese Committee for IYL2015, Portuguese Association of Biologists and INIAV), Anna Omedes (Natural Sciences Museum of Barcelona), Rosalia Vargas (Ciência Viva), Rubén Duro (Centre for Microbiological Research, Barcelona), Mònica Rius (University of Barcelona), Catalão Alves (Ciência Viva), João Paulo André (University of Minho), Clara Azevedo (photographer), João Tiago Aguiar (architect), João Botelho (film director) and Pedro Cabrita Reis (plastic artist).

Conference follow-on actions

"Light, from the Earth to the Stars" has been the first of a series of activities that the BKH hopes to carry out in collaboration with Ciência Viva in Portugal.

Prof. Ricard Guerrero visited Lisbon immediately before (May 14-17) and after the Workshop (July 15-18) to talk to Rosalia Vargas (President of Ciência Viva), and Ana Noronha (Executive Director of Ciência Viva) about the organisation of the meeting and future joint projects, such as the translation to Portuguese of the book Germ Stories, by Arthur Kornberg. An homage to MAE and Ciência Viva founder **Prof. José Mariano Gago (1948-2015),** is also under preparation and expected to be held in Madrid in 2016, under the auspices of Fundación Ramón Areces.

The Workshop was recorded and a short video with an estimate duration of 12 minutes is currently under preparation. The video will be made available through Vimeo and the Barcelona Knowledge Hub website.

[URL: http://barcelona.acadeuro.org/bkhaction/vimeochannel/]

Reception by the Mayor of Lisbon

The Mayor of the city of Lisbon, Fernando Medina, was present and talked during the inaugural session of the Workshop (July 2, morning). In the evening of the same day, the Mayor and the City Council offered a reception for the speakers and attendants in the historical building of the Lisbon City Hall.

Ricard Guerrero, Barcelona

NorSAC 2015, 29 July – SUMMARY EXPLORING THE SHORELINES OF FUNDAMENTAL MATTER Lessons of the RNBT Collaboration after 25 years (1990-2015) – Held in Bergen Chair: L.P. Csernai (Bergen, MAE)

Reporters(V&Z): J.S.Vaagen (Bergen, MAE) & M.V. Zhukov (Göteborg/Moscow) [See this URL for full information: https://indico.cern.ch/event/372494/overview]

RNBT and the Borromean Paradigm

The letters RNB in the acronym RNBTheory have a dual interpretation: A Regional; Russian-Nordic-British and a Topical; Radioactive Nuclear Beam, - theory aimed at studies of the architecture of the nuclear stuff at the drip-lines where atomic nuclei dissolve.

The collaboration is associated with Borromean nuclei. It coined this name, chose the three

Borromean rings as logo and developed successful quantum theory for the architecture of exotic three-body halo nuclei at the shore-lines of fundamental matter. In physics the rings now represent a paradigm, an analogue model that helps understand formation of exotic structure of composite quantum matter. Annually numerous new references to the Borromean concept are made.

NorSAC portrayed a team of theorists. Theorists are no longer necessarily lonely wolves who expect a one way relation where the experimentalists come to them for advice.

The RNBT story could not have been told unless the experimentalists had become close partners. Neither could it without complementary insights and gifts in the theory team, including ability to communicate with the experimental community.

Learning how to collide nuclei, including radioactive secondary beams, in Big Science accelerators has, during the last decades, taught us how to manipulate the nuclear stuff, how to subject it to extreme conditions. Harvesting from the shore-lines of the nuclear territory has challenged and enriched our understanding of the nuclear stuff – and the venture is far from completed.

GENCO Award

In 2004 V&Z, the two now oldest living RNBT pioneers, were awarded The GSI Exotic Nuclear Community Membership Award in Darmstadt, for

"Basic Contributions to the Theory of Exotic Nuclei and the Realization of the Borromean Principle in the Organisation of the West-East Collaboration". How is the latter part to be understood?

RNB is a purpose directed collaboration (alliance) of three partners R&N&B based on complementary competence: Three Partners (Constituents) where each one needs the other two for reaching a certain overarching goal. Thus it is not favourable for any two to break away and form a binary alliance. The structure follows that of The Three Musketeers, One for all, all for one, i.e the Borromean binding principle: A stable 3C linked architecture of 3 Constituents (Clusters), without any binary (2C) stable links. Each Partner may contain a number of member institutions, free to move in and out as long as the overarching competence is maintained. This gives flexibility, and a mechanism for fertilizing the society with RNB ideas, with proper reference expected. Students and Young scientists in substantial numbers have got training within RNBT, free to later leave, even to serve competitors.

Such Partner rights simplify work with experimentalists and laboratories, which often have their own house theorists. The Borromean "democratic" principle was important in the formation of RNBT during the perestroika in Russia (Soviet Union).

Formation of RNBT in Turbulent Times

In 1987 RNBT pioneers Bang (Copenhagen) & Vaagen, wrote a letter to Gorbachev from the international centre JINR in Dubna, where they were guests researchers. The letter reminded Gorbachev of the glasnost in the early 1920s' when famous Russians like Landau and Kapitsa had research stays in Bohr's Copenhagen, and emphasized the advantages of returning to less restricted foreign travel as part of the perestroika. This would also ease the collaborate work of RNBT pioneers, who had already met frequently in Copenhagen and Dubna during the past decade.

The RNBT pioneers considered themselves mainly as quantum reaction theorists with few-body cluster competence. In 1985 the Tanihata group at Berkeley had discovered exotic light nuclei of gigantic size, produced in secondary radioactive beam experiments. The observation had only attracted attention from a small part of the theory community.

The structure was still not understood in 1987, when the idea that the Berkeley discovery was caused by a nuclear halo, was put forward by Jens Bang in a lunchroom conversation in Copenhagen with the experimentalists P. Gregers Hansen (Aarhus) and Björn Jonson (Göteborg, mae). Using a simple model, the two turned the idea into a Europhysics Letters, with proper reference to the discussion with Bang, and to Russian pioneering work by Migdal and Efimov.

Thus the name halo nuclei came into being, what remained was a proper quantum mechanical explanation, in particular for halos with two nucleons, which required a 3-body treatment, in general considered notoriously difficult. This became the homefield of RNBT, a self-organized structure of friends, that grew in size.

The name Borromean appeared in RNBT's most cited publication, Physics Reports 231(1993), having already been used internally in the team. In NorSAC 2015 Vaagen and Zhukov outlined the formation of RNBT and paradigmatic lessons, and gave hindsight on scientific highlights, all in a stile accessible for a wider audience. The youngest of the pioneers present, Sergey Ershov (Dubna), gave a perspective on running investigations of the Borromean continuum – open quantum systems.

Professors Eivind Osnes (Oslo, mae) and Renzo Leonardi (Trento) positioned RNBT in the Nordic theory context, the role of NORDITA, and in the creation of the European theory centre ECT* in Trento 1992/93. The great success of ECT* calls for a comprehensive historical hindsight.

Late RNBT pioneers Jens Bang (Copenhagen), Boris Danilin (Moscow), Fangil Gareev (Dubna), Valery Zagrebaev (Dubna, mae) and Konstantin Gridnev (St. Petersburg) were remembered.

Models and Dilletantes

The inner dynamics of the creative Copenhagen environment in Bohr's Mecca for quantum physics, and its open society philosophy, underpinned the formation and running of RNBT.

The physicist Thomas Bohr, grandson of Niels Bohr, emphasizes in a contribution to the article collection 'The atomic model 100 years' (2013), that his grandfather, inspired by the British science tradition, often liked to describe his own approach to science as that of a dilettante, derived from the Italian dilettare – to delight or amuse. The joy of nature and the fresh approach to the study of it – without too much erudition – was important to him. Niels Bohr placed himself as a connecting link between the systematic German school and the British. He wanted to base his science on fundamental principles, but if an issue was sufficiently important, one had to take it up and "do something" even though one may not yet know the ultimate principles. RNBT followed in Bohr's footsteps, now assisted by proper quantum mechanics.

The development of models and analogies became a crucial aspect of Bohr's theorizing, rooted in philosophical influence from very early in his life. The inventive dilettante goes, however, beyond simple copying. Bohr showed that when he layed the ground for his first quantum architecture for the atom. Bohr historian John Heilbron made in 1977 the point that in addition to choosing the right constituents, those of Rutherford, probably the chief driving force for young Bohr (1913) was that for atoms, known to be stable, the classical Saturnian atom model was mechanically unstable. At nuclear driplines RNBT showed that a Borromean quantum model provides binding for exotic halo nuclei.

Young Experts - Young Voices

Christian Boas (NBA,Copenhagen), Gaute Hagen (ORNL,US) and Dmitry Gridnev (FIAS, Frankfurt), the latter two with RNBT degrees from Bergen, linked the colloquium to history of science and creative environments, to ab initio calculations of many-body systems on super-computers and to the magic of few-body systems. They were voices for a young generation which takes the work further, in collaborative non-Borromen settings dictated by the realities of our times. YAE may provide a suitable framework for bringing them together.

Their contributions to NorSAC gave promises for a bright future.

RNBT has been blessed with having had a number of exceptional student, some strongly visible nowadays in the original field, some choosing their own way, in companies or like James Al'Khalili (Guildford), now a profiled BBC science communicator, and Danas Ridikas now at IAEA&Saclay, involved in energy questions and non-proliferation.

The Trans-Atlantic Connection

A substantial part of the RNBT related action has in recent years moved to the USA: The UK pioneer Ian Thompson to LLNL, and as already mentioned Hagen to ORNL hosting Nordic visitors. NorSAC was fortunate to have Professor D. Strottman from LANL as last speaker. His wide experience from theory leadership, and science work on matter under extreme conditions from low to high energies, provided the colloquium with a global outlook.

A two-day very successful tailpart to NorSAC, open for participants and organized by the Chair L.P. Csernai, gave up-to-date insight in the role of nuclear beams and radiation in our understanding of both the early and present Universe, including particle therapy (R. Leonardi) with the recent proton facility in Trento as example.

Vaagen started the NorSAC colloquium with Herbert Curien, French Minister of Science and Technology, arriving in Cambridge UK by helicopter in September 1988, to give the inaugural address in the Foundation Meeting for Academia Europaea. He drew attention to the close relations between Curien and D. Allan Bromley, White House Science Advisor for the George Bush Sr. administration (1989-93), Yale professor (and Vaagen's boss in the 70s'). Curien and Bromley shared concern about changing times for science, and for the outcome of the perestroika in Russia. The situation was better in Japan, which entered as a big player in dripline physics, in particular after Tanihata returned home. Thus RNBT had to address experimental results provided by Europe, US and Japan, and RNBT used the NorSAC opportunity to thank the experimentalist for the glasnost that made it possible to develop the field.

Northern Seas Alliances - past and future

Northern Seas alliances date more than 1000 years back. They were facilitated by the development of seafaring ships, for peace – trading routes, and for war. They linked Northern Seas and Russian rivers, and exchange with Mediterranean Europe and the Muslim world. The Northern Seas history is one of joint ventures, alliances involving young people and intermarriage, also to make alliances last.

In 1998 V&Z were made honorary professors at the University of St.Petersburg, created by Peter the Great 275 years earlier. In 1698 on his first trip West, the young tsar while in Amsterdam, head-hunted Cornelius Cruys to create and build a Russian fleet for Northern Seas. He gave him rank of vice-admiral. A copy of one of the frigates (1703), the "Shtandart" sails the seas today. Two weeks before the NorSAC event it visited Stavanger, Norway where Cruys was born and given the more modest name Niels Olufsen.

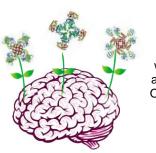
We V&Z, the oldest living of the RNBT pioneers, are proud to be linked to a city, which in spite of great sacrifices during its construction, bound Europe more tightly together: Also in academia by creating a Russian Academy of Sciences which started the development that made Russia an outstanding academic partner. Science is a tool for keeping an open world, for uniting – not deviding. A lesson emphasized by Bohr and repeated at NorSAC2015 and to be remembered in our again turbulent times.

NorSAC 2015 was attended by about 50, from Europe, America and Asia, the tail part by half that number.

Ion Channels Trimming the Brain: September 24 - 26.

A symposium organised at the Bogmoletz Institutue of Physiology, Kiev, Ukraine.

International Symposium "Ion channels trimming the brain" was held at Bogomoletz Institute of Physiology (Kiev, Ukraine) on September 24-26, 2015. The Symposium dedicated to several important dates: 40 years of intracellular perfusion, 35 years a discovery of proton receptor and 70th anniversary of Academia Europaea member Krishtal.



was after Oleg

Programme:

Friday, September 25, Conference Hall

Chair - Alexej Verkhratsky

Sierd Cloetingh (President of Academia Europaea): Challenges and opportunities for Science in Europe: perspectives from Academia Europaea and the European Research Council:

Jerzy Duszyński (President of the Polish Academy of Sciences): Recent challenges and opportunities for the Polish Academy of Sciences:

Eva Kondorosi (Chair of the Working Group on Widening European Participation of the European Research Council and member of the European Research Council, the US Academy of Science and the Hungarian Academy of Sciences): Towards widening of Pan-European participation in the research opportunities provided by the European Research Council

Chair - Dmitri Rusakov

Alexej Verkhratsky (Manchester University, Manchester, UK): Principles of Neurogliopathology

Ole Peterson (Cardiff University, Cardiff, Wales, UK): 35 years of giga-seal patch clamp current recording in non-neuronal cells

Alexey Boyarsky (EPFL, Lausanne, Switzerland): ScienceWISE - collaborative semantic environment for science

Chair - Martha Nowycky

Dmitri Rusakov (University College London, London, UK): Nanomolar Ca2+ landscapes in neurons and glia unveiled with time-resolved fluorescence microscopy

Shyam S. Chatterjee (Institute of Medical Engineering and Biophysics, Research Centre Karlsruhe, Karlsruhe, Germany): From covalent bonds to phyto-pharmacology via ion channels for trimming the brain

Evgeni Ponimaskin (Hannover Medical School, Hannover, Germany): Functional interplay between 5-HT7 receptor, MMP-9, and CD44 in the regulation of neuronal plasticity

Chair - Evgeni Ponimaskin

Georgy Bakalkin (Uppsala University, Uppsala, Sweden): Endogenous Opioid System in Spinal Cord Plasticity 17:00 – 17:30 – Boris Safronov (Institute for Molecular and Cell Biology, Porto, Portugal): Nociceptive processing in the superficial dorsal horn

Martha Nowycky (New Jersey Medical School, New Jersey, USA): TRPC4/5 channels in neurons

Emilio Carbone (University of Torino, Torino, Italy): Cav1.3, BK and SK channels as regulators of neuron-like firing in neurosecretory cells

Chair - Emilio Carbone

Aleksandr Zholos (Taras Shevchenko Kyev National University, Kyev, Ukraine): TRP channels in health and disease: their pharmacology, biophysics and species differences

Jacek Kuznicki (International Institute of Molecular and Cell Biology, Warsaw, Poland): SOCE in neurons in health and disease

Aleksandr Petrenko (Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Moscow, RF): pH sensing receptors in the nervous system: structure and function

Chair - Nana Voitenko

Platon Kostyuk Award 2015 Ceremony and young scientists' session.

Talk of the Kostyuk Awardee

Volodymir Krotov (Bogomoletz Institute of Physiology, Kiev, Ukraine): Pain-induced changes in synaptic drive and postsynaptic AMPARs in dorsal horn neurons.

Elena Isaeva (Bogomoletz Institute of Physiology. Kiev, Ukraine): Contribution of PAR1 in epileptogenesis

Volodymyr Cherkas (Bogomoletz Institute of Physiology, Kiev, Ukraine): Hippocalcin signaling in hippocampal neurons **Oleksii Grygogov** (Bogomoletz Institute of Physiology, Kiev, Ukraine): Role of K+ channels in firing hippocampal neurons

Oleksandr Maximyuk (Bogomoletz Institute of Physiology, Kiev, Ukraine): Novel antagonist of ASIC channels



During the meeting, the AE President (Cloetingh) together with Professor Alex Verkhratsky (MAE), Prof.Krishtal and Prof Eva Kondorosi (ERC) met with the Minister of Science of the Ukraine and they were also involved in several interviews for television. (see these links: 1. https://www.youtube.com/watch?v=-tJR2Srkxq4

http://24tv.ua/news/showNews.do?yevropa hoche investuvati v ukrayinsku nauku yevropeyskiy vcheniy&objectId=615063

- 2. https://www.youtube.com/watch?v=04bmpKlyzlo
- or http://24tv.ua/ukrayina/yes_zaproponuvav_uchenim_z_ukrayini_doluchitisya_do_naukovih_program/n615400

Language endangerment and revitalisation – Poznan, Poland September 17. Organised by Prof. Katarzyna Dziubalska-Kplaczyk.

Report:

A satellite session on "Language endangerment and revitalization" was held on 17 September 2015 during the 45th Poznań Linguistic Meeting under the patronage of the Linguistics Section of the Academia Europaea. The session was convened by Wolfgang U. Dressler (Austrian Academy of Sciences), Alain Peyraube (CNRS Paris) and Katarzyna Dziubalska-Kołaczyk (Adam Mickiewicz University, Poznań) with the support of the Academia Europaea 2015 Hubert Curien Fund, and in cooperation with the Wrocław Knowledge Hub.

The aim of the session was to bring together scholars involved in the research on "small" languages, i.e., languages with relatively few speakers as well as endangered or dying languages. Such languages present a challenge for linguistics in view of their distinct properties as well as the complex social, cultural and political context of their loss. Based on examples from Europe, Asia, Oceania and Mesoamerica, the papers provided a state-of-the-art view on such issues as language documentation of endangered languages, the implications of language ideology and attitudes for language shift and revitalization as well as the theoretical and practical strategies for the revitalization of endangered languages. More specifically, the papers dealt with three issues, i.e., a) the theory and processes involved in language death; b) the effects of language contact; and c) theoretical and methodological aspects of language revitalization. Drawing on examples from European languages, Wolfgang U. Dressler discussed the role of linguistic, political, socio-economic and psychological variables in his paper on "Independent, dependent and interdependent variables in language decay and language death". In turn, Gunter Senft (Max Planck Institute for Psycholinguistics, Nijmegen) focused on the cultural context of the ongoing loss of two varieties of Kilivila, an Austronesian language spoken by the Trobriand Islanders of Papua New Guinea, in "Culture change, language change: Missionaries and moribund varieties of Kilivila".

Two papers dealt with language contact phenomena. In his talk "On some endangered Sinitic languages spoken in Northwestern China: Tangwang, Gangou, Linxia", Alain Peyraube examined syntactic evidence for the presence of a language area including languages from four language families, i.e., Sinitic, Mongolic, Turkic and Tibeto-Burman. The effects of language contact on syntax and morphology were also considered by Elwira Sobkowiak (University of Warsaw) and Marcin Kilarski (Adam Mickiewicz University, Poznań) in their paper on "A 'small' language in contact with a 'big' one: The loss of alienability distinction in Teenek (Mayan) under Spanish influence".

The remaining papers documented the challenges involved in efforts to maintain and revitalize endangered languages. In "Purism, variation, change and 'authenticity': Ideological challenges for language revitalisation", Julia Sallabank (SOAS, University of London) examined the detrimental role of traditionalist attitudes towards language change and variation in Guernésiais/Giernesiei, spoken in Guernsey. Tomasz Wicherkiewicz (Adam Mickiewicz University, Poznań), Tymoteusz Król (Association Wilamowianie) and Justyna Olko (University of Warsaw) discussed the ongoing efforts towards the revitalization of Wymysorys, a West Germanic language spoken in southern Poland, in "Awakening the language and speakers' community of Wymysiöeryś". Another case study from Europe involved Breton (Celtic) and Kashubian (Slavic): in their paper on "Schools as agents of transmission: Language revitalization in Brittany and Kashubia", Michael Hornsby (Adam Mickiewicz University, Poznań) and Nicole Dołowy-Rybińska (Institute of Slavic Studies, Polish Academy of Sciences) evaluated the models of education in the two languages. And finally, Justyna Olko and John Sullivan (Instituto de Docencia e Investigación Etnológica de Zacatecas, Universidad Autónoma de Zacatecas, University of Warsaw) discussed theoretical and methodological assumptions behind the revitalization of Nahuatl in their paper "Bridging gaps and empowering speakers: An inclusive approach to Nahuatl research and revitalization".

The session provided an opportunity for the exchange of ideas among scholars intimately involved in research on endangered languages and also allowed other participants of the conference to appreciate the complexity of issues that need to be faced in view of the dramatic loss of languages around the world. Papers from the session will be published in the Yearbook of the Poznań Linguistic Meeting, an annual volume published by De Gruyter Open or in the journal of Academia Europaea, The European Review.

Session details

Satellite session at PLM 2015

Language endangerment and revitalization

Convened by

Wolfgang U. Dressler (Austrian Academy of Sciences), Alain Peyraube (CNRS Paris) and Katarzyna Dziubalska-Kołaczyk (Adam Mickiewicz University, Poznań)

The aim of this session is to bring together scholars involved in research on "small" and endangered languages of Europe, Mesoamerica and Oceania. In particular, we want to focus on the theoretical implications of cross-linguistic variation in linguistic structure, as studied in cognitive, cultural and social settings, as well as applied research on language maintenance and revitalization. Specific issues discussed as part of the session include:

- language documentation focusing on endangered languages
- surveys of genetically and typologically diverse languages aiming at the study of cross-linguistic differentiation in linguistic complexity, as determined by social and demographic factors as well as various forms of language contact
- implications of language ideology and attitudes for language shift and revitalization
- practical and theoretical strategies for the revitalization of endangered languages
- providing the rationale for language revitalization: psycholinguistic, cognitive, cultural and economic benefits

The speakers:

- 1. **Gunter Senft** (Max Planck Institute for Psycholinguistics, Nijmegen): Culture change language change: Missionaries and moribund varieties of Kilivila.
- 2. **Alain Peyraube** (CNRS Paris, AE): On some endangered Sinitic languages spoken in Northwestern China: Tangwang, Gangou, Linxia.
- 3. **Élwira Sobkowiak** (University of Warsaw) and Marcin Kilarski (Adam Mickiewicz University): A 'small' language in contact with a 'big' one: The loss of alienability distinction in Teenek (Mayan) under Spanish influence.
- 4. **Julia Sallabank** (SOAS London): Purism, variation, change and 'authenticity': ideological challenges for language revitalization.
- 5. **Justyna Olko** (University of Warsaw) and John Sullivan (Instituto de Docencia e Investigación Etnológica de Zacatecas, Universidad Autónoma de Zacatecas, University of Warsaw): Bridging Gaps and Empowering Speakers: An Inclusive Approach to Nahuatl Research and Revitalization.
- 6. **Tomasz Wicherkiewicz** (Adam Mickiewicz University, Poznań), Justyna Olko (University of Warsaw) and Tymoteusz Król (Association Wilamowianie) Awakening the language and speakers' community of Wymysiöeryś.
- 7. **Michael Hornsby** (Adam Mickiewicz University, Poznań) and Nicole Dołowy-Rybińska (Instytut Slawistyki PAN): Schools as agents of transmission: Language revitalization in Brittany and Kashubia.
- 8. Wolfgang U. Dressler (Austrian Academy of Sciences, AE): Independent, dependent and interdependent variables in language decay and language death.

Special guest: Tymoteusz Król (Association Wilamowianie)

[URL: https://international.amu.edu.pl/home/home/news/amu-news/17-19-september-2015.-the-pozna-linguistic-meeting-plm]

FEGALE CHAPT ACTION TO THE PRINCIPLE OF THE PRINCIPLE OF

Flexible Query Answering Systems, 2015. Cracow, Poland October 26 – 28 . AE Organiser, Professor Janusz Kacprzyk

URL: http://fqas2015.ibspan.waw.pl/

Report

1. Title and rationale for the conference

Flexible Query Answering Systems (FOAS) 2015: http://fqas2015.ibspan.waw.pl

Held on October 26-28, 2015 in Cracow, Poland.

The rapid growth of IT (information technology), or even ICT (information and telecommunication technology) has implied many changes which are urgently needed for existing solutions in all kinds of computer-based systems. One of the most important implications is that these technologies are now accessible to, and widely used by average users with a very limited computer literacy, in particular various domain experts. These people need tools and techniques which would be simple to use, and - in particular - based on the use of natural language which is the only fully natural means of articulation and communication of the human beings. Among most important challenges in this respect is a need to provide the human user with a capability that would make it possible to use imprecise terms and conditions in database queries, as opposed to the usual capability of using strict and specialized querying languages like the SQL which are too complicated for average users. This is extremely important yet a very difficult challenge due to the fact that it is a reflection of the so called "human - computer gap", and is the main rationale of the Conference.

2. Short report of the conference

The Flexible Query Answering Systems 2015 (FOAS-2015) conference was held on October 26-28,2015 in Cracow, Poland, in "Dom Polonii" on the Main Market Square. The location of the conference was highly appreciated by the participants due to its central location, an easy accessibility from the airport and railway station, and more than adequate conference facilities (rooms, audio-visual equipment, etc.). The Conference organizers, that is: the Systems Research Institute Polish Academy of Sciences, who acted as the main organizer, Department IV of Engineering Sciences, Polish Academy of Sciences, Cracow Branch, Polish Academy of Sciences, Academia Europaea (Informatics), Knowledge Hub - Wroclaw, and Ghent University, Belgium, has proved to be very effective and efficient.

The Conference has attracted a large number 60 of participants from all over the world: Eastern, Central and Western Europe, Asia, Africa, and Americas. An extremely important part of the Conference were the plenary talks The organizers invited some world best

specialists in the broadly perceived topics of the Conference: Professors Didier Dubois (France), Henri Prade (France), Gabriella Pasi (Italy), Javier Montero (Spain), and Krassimir Atanassov (Bulgaria). Moreover, Professor Marcin Detyniecki (France), one of chief researchers of AXA, presented an inspiring talk on applications in insurance and related areas.

A novel solution adopted for the FQAS-2015 Conference was its collocation with the IWIFSGN'2015 Fourteenth International Workshop on Intuitionistic Fuzzy Sets and Generalized Nets. This made it possible to attain a remarkable

cross-fertilization with various research communities, the one more involved in database querying and the one more involved with the representation and handling of uncertainty. This should result in joint works and research projects in the nearest future.

Moreover, an important event related to the FQAS-2015 Conference was a special stream of sessions of the International PhD Projects in Intelligent Computing operated by the Foundation for Polish Science (FNP) within the European Regional Development Fund under the Operational Programme Innovative Economy. These events made it possible for the young participants of this Project to present their work on a wide international forum, and to discuss their research works with top scientists from all over the world.



3. Impact of the event/Results

The results of the event were very positive, and from various points of view. First, from the purely scientific point of view, the Conference provided another opportunity to further advance developments in an extremely important problem of tools and techniques which would make it possible for an average user to fully take advantage of the rapidly developing information/communication technology, notably database technology and its related querying and retrieval. Second, the impact of the Conference was greatly amplified by the publication of a proceedings volume of the papers accepted after a strict review process. The volume appeared in Springer's Advances in Intelligent Systems and Computing Series and had been distributed world wide, and indexed in main scientific bases. Third, through a collocation with another conference, discussions between members of different research communities were initiated, and they had already led to joint works and project proposals. Fourth, The Conference provided a great opportunity to present works by young Ph.D. students and graduates, and provided for them an opportunity to contact top specialists in the areas related to the Conference. Besides its world wide impact, the conference contributed also to the integration of the research communities of the integration of the Eastern, Central and Western Europe . Finally, the success of the Conference provided another proof that Poland might be a proper venue for world class events, notably if sponsored or endorsed by prestigious institutions and agencies, notably the Academia Europaea through its Wroclaw Hub.

4. Any potential plans

The potential plans can be divided into the two ones. First, what concerns the FQAS-2015 Conference itself, the organizers - who have been actively involved in this area for years and belong to the most productive and prominent researchers in this area - plan to continue their involvement in the topics covered by the Conference, and can well expect - due to the success of the FQAS-2015 - a renewed application in some years to organize one of the next events in this series. They will be also involved in the organization of the next edition of the FQAS conference which will take place in UK in 2017. Second, the organizers plan to organize the much bigger EUSFLAT-2017 Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT) in September, 2017 in Warsaw, Poland. The request of the EUSFLAT Society to organize their 2017 conference in Poland was certainly implied by the success of the FQAS-2015. The organizers hope that a support of the Academia Europaea through its Wroclaw Hub would be possible as this would be crucial for the pan-European conference.

Visualising Law, 11 November 2015, Verona, Italy. AE organiser professor Daniela Carpi

Report : A large group of scholars from many universities and nations (England, Denmark, Sweden, Australia, USA, Italy, Switzerland) and from different disciplines met in Verona on November 11-13 to discuss about the following topic: "Visualizing Law". The interdisciplinary perspective of the conference was centred on the close connection between law

and images. Today very frequently video displays and digital images accompany lawyers' opening statements and closing arguments at trial. Animations, digital re-enactments and video documentaries are more and more often used so as to convey messages which - supposedly - can be more easily assimilated.

Another recent addition to this perspective is the connection between law and popular culture (through the use of digital images and otherwise). So the questions are:

- -How have technologies of visual representation reflected, illuminated, and constituted ideologies of law and legality particularly at moments of significant transition or transformation?
- -In what way do visual representations of law throughout the pre-modern, modern and contemporary periods illuminate and challenge our understanding of the changing relationship between law, aesthetics, and power?
- --In what ways can literature enter this media circus? What can literary-legal studies or Law and Humanities broadly conceived contribute on the plane of Law and (Popular) Culture issues?

The welcoming addresses to the conference, which was a great success, were also presented in the name of Academia Europaea.

VISUALIZING LAW

WEDNESDAY 11 NOVEMBER 2015

WELCOMING ADDRESSES

Nicola Sartor, Magnifico Rettore dell'Università degli Studi di Verona

Roberta Facchinetti, Direttore del Dipartimento di Lingue e Letterature Straniere

Donata Gottardi, Direttore del Dipartimento di Scienze

Immacolata Amodeo, Villa Vigoni, German-Italian Centre for European Excellence Daniela Carpi, Presidente AIDEL

CHAIR: Daniela Carpi (University of Verona)

- Richard Sherwin (New York Law School): What Authorizes the Image? The Visual Economy of 10.00 Post-Secular Jurisprudence.
- Gary Watt (Warwick School of Law): Hearing the 10.45 Evident
- COFFEE BREAK 11.15
- Svend Erik Larsen (Emeritus, Aarhus University): 11.45 The Court Room – A Visual Semantics
- 12.15
- 13.00 LUNCH

CHAIR: Yvonne Bezrucka (University of Verona)

- William MacNeil (Griffith Law School): Brokeback 14.30
- Mountain: Queering Lex Populi
 Daniela Carpi (University of Verona): How to
 Enforce the Law: Video-shocks for Road Security 15.00
- Andrew Majeske (John Jay College of Criminal 15.30 Justice, New York): The Medium Isn't the Message: Why We Have Less to Fear from Image-Driven Culture than Richard Sherwin Suggests
- 16.00 COFFEE BREAK
- Patrizia Nerozzi (Emeritus, IULM University): The 16.30 Many Faces of the Law: Ocular Demonstrations and Popular Satire in William Hogarth's Paintings and Engravings
- 17.00 Paolo Heritier (University of Torino): World O. A Vichian Perspective on 'Legal Visual Studies' and 'Law and Humanities'
- 17.30 Discussion

THURSDAY 12 NOVEMBER 2015

CHAIR: Chiara Battisti (University of Verona)

- Jessica Silbey (Northeastern University, School of Law): Picturing Moral Arguments in a Fraught Legal Arena: Fetuses, Phantoms and Ultrasounds
- Leif Dahlberg (Royal Institute of Technology, Stockholm): The In/visible Interpreter
- John Gooch (University of Texas at Dallas): Visualizing the Rhetoric of International Law in the Ukrainian Crisis
- COFFEE BREAK
- Cristina Costantini (University of Perugia): Legal Stigmata. Figuring the 'Praesthetic' Consistence of
- Max Liljefors (Lund University): Screening the Body: Biotechnology, Emotion, and Law in Contemporary Science Fiction Film
- 12,30 Discussion
- LUNCH 13.00
- 14.30 AIDEL ANNUAL MEETING

CHAIR: Sidia Fiorato (University of Verona)

- Annalisa Ciampi (University of Verona): Visual War or the Production / Destruction of International Law through Images
- Karen-Margrethe Simonsen (University of Aarhus): The Aesthetics and Politics of Atrocity Tales. On Joshua Oppenheimer's two Movies on the Indonesian Killings of 1965-66
- Filippo Sgubbi (University of Bologna): Symbolic Criminal Law and its Digital Visualization
- COFFEE BREAK 16,30
- Yvonne Bezrucka (University of Verona): Beehives Iconology in "The Fable of the Bees" by Bernard de Mandeville
- Pier Giuseppe Monateri (University of Torino): Mandersson and Klimt's Jurisprudence
- Discussion 18.00
- Official Dinner 20.00

FRIDAY 13 NOVEMBER 2015

CHAIR: Pier Giuseppe Monateri (University of Torino)

- Ian Ward (Newcastle School of Law): A Revenger's 9.30 Tragedy
- Doris Pichler (University of Graz): Re-negotiating Justice in Semifictional Legal Theatre: The Work of Milo Rau and Others
- Riccardo Baldissone (University of Kent): The Scales for the Woman, the Cross for the Man: Visualizing Justice and Her Execution in Western Painting and Sculpture
- COFFEE BREAK
- Mara Logaldo (IULM University, Milano): The Last Laugh': A Multimodal Analysis of Captions in 11.30 Photojournalism
- Roberto Flor (University of Verona): Visualizing Criminal Law in the Information Society
- Discussion 12.30
- LUNCH 13.00

CHAIR: Cristina Costantini (University of Perugia)

- Matteo Nicolini (University of Verona): From Hard-Copy to Digital Law, via "Illustrated Courtrooms": Visualising the History of Legal English
- Annalisa Zanola (University of Brescia): 'Informed Consent' in Visual Health Literacy
- COFFEE BREAK 15.30
- Steven Howe (University of Lucerne): Visions of 16.00 Violence: Film, Crime and Legal-Cultural Discourse in Weimar Germany
- Raffaele Cutolo (University of Brescia): Visualising Identity: The Legal Body and Biometrics Sidia Fiorato (University of Verona): Dystopian
- Images of Law in The Hunger Games
- CONCLUSIONS

200 years of Cracow Science, 9 - 10 December. Polish Academy of Arts and Sciences, Cracow

AE organisers: Professor dr Andrzej Bialas, President of the Polish Academy of Arts and Sciences and Prof. Janusz K. Kozlowski.

Report: The 200 years anniversary of the Cracow Scientific Society (CSS) Has been celebrated by, both, the exhibitions that aimed to acquaint the general public with the role of the Society, as well as the conference whose objective was to present the influence of the CSS on the development of science in Poland. In particular, attention was focused on the role of the CSS during the periods of partitions of Poland, the relations between the CSS and other academic societies notably in the territory of the Austro-Hungarian Empire, and, finally on the contribution of CSS to the establishment of the Academy of Arts and Sciences (now the Polish Academy of Arts and Sciences - PAAS) in the 70s of the XIX century.

The two exhibitions were concerned with the history of the CSS: the exhibition entitled "The votaries of Science" that consisted of 30 large-scale posters displayed in open-air (partially financed by Academia Europaea), opened in August 2015, and an exhibition 'presenting the role of the CSS in the formation of the Academy of Arts and Sciences, placed in the building of the PAAS and opened in December 2015.

The lecture, attended by the general public, by prof. F. Ziejka on the history of the CSS against the background of the history of Poland in the XIXth century appealed to a very large audience and inspired interesting discussion.

The session, which lasted two days, on the history and the role of the CSS in the advance of science in the XIXth century, included 24 lectures devoted to the researches and the publications of the CSS and their importance for the various scientific fields. A lecture by J.Zdrada dealt with the relations of the CSS and science in western and eastern Europe. Moreover, researchers from the Czech Republic lectured on the relations of the CSS with the academic circles of Prague and Vienna (M.Durcansky, J.Pavlicek).

4. Impact of the event/Results

... The celebration of the 200 years anniversary of the CSS have shown the role of this institution in the development of a number of scientific fields in the XIXth century and in the establishing of the Academy of Arts and Sciences (now PAAS). The lectures, discussions and exhibitions have stimulated interest in the history of science in Central and Eastern Europe.

5. Any potential plans

In 2016 the conference will be published in the series of the Polish Academy of Arts and Sciences. The lectures from the conference will be presented in other cities of Poland where Learned Societies are active.

Video Interview project. Organised by the Young Academy of Europe (Lynn Kamerlin) and Professor Anne Buttimer (Vice President of the AE), in collaboration with the Barcelona Knowledge Hub.

This project was approved and at the end of 2015 a number of structured video interviews had been conducted. Further interviews will take place in 2016. The intention is to create an archive of interviews available to the public and hosted o the AE website.

Project Summary and Expected Impact: As members of a Young Academy, we have all at some point in our careers benefited tremendously from lectures by leading senior colleagues, who have outlined not just their scientific achievements, but also discussed the personal and professional choices that led them to where they

are. However, such lectures are rare and reach very limited audiences - thus a lot of accumulated wisdom could be lost. To remedy that, and inspired by Prof. Anne Buttimer's Project" (http://igu-online.org/dialogue-project/), we propose to perform video interviews series of outstanding academics (the majority of whom are also members of the Europaea). The motivation of this project is that as successful senior col- leagues, the academics have a wealth of experience to share with the broader scientific community,

The second secon

"Dialogue with a Academia selected and it is important to make their voices heard. The interviews are expected to be ca. 45 minutes in length each, taking the format of an informal chat between colleagues, rather than a formal lecture. We will direct questions on academic achievements, as well as personal struggles. Additionally, we plan to seek guidance from both Profs.. Anne Buttimer and Maria Dolors Garcia Ramon for construction and execution of the interviews, using the successful "Dialogue Project" as a guide. Importantly, questions will be collected from the broader membership of the Young Academy of Europe (YAE), with interviews being conducted by selected YAE members. All video interviews will be made freely and publicly available and promoted broadly through both our web- site and various social media channels.

We firmly believe that these interviews will provide a valuable resource not just for academics to- day, but also for generations to come. They could be useful catalysts for communication across disciplinary, national and generational divides within fields of science and policy. They could also afford highly valuable input for courses in the history and philosophy of science, as well as in studies of creativity and context as Anne Buttimer has shown in her books "Geography and the Hu- man Spirit" and "Creativity and Context".

Planned Invitees: Prof. Gunnar von Heijne (Former Chairman, Chemistry Nobel Committee) 🗆 May Britt Moser (2014
Medicine Nobel Laureate) 🗆 Edvard Moser (2014 Medicine Nobel Laure- ate) 🗀 Cédric Villani (Fields Medalist) 🗀
Yola Verhasselt (Geography) 🗆 Harry Gray (Chemistry) 🗅 Gordana Vunjak-Novakovic (Applied and Translational
Biology) 🖂 Salvador Giner (Former Presi- dent, Institute for Catalan Studies, Sociology) 🖂 Genoveva Martí
(Philosophy) □□ Lourdes Beneria (Economics). Our aim is to start with five interviews from among the speakers listed
here, based on the response rate of interviewees. These initial five items could be completed within the span of late
2015 to the end of 2016, so that initial results could be presented at the AE Annual Confer- ence in 2017. Further
invitees will be discussed and selected with our AE partners and suggestions would also be welcome from the AE
Board. All but two interviewees (Gray and Beneria) are AE Members, however, the latter two have made sufficiently
distinguished contributions that we be- lieve they should be included among out list of interviewees. In general, we are
aiming to interview distinguished academics across a range of disciplines.

YAE Members Involved: The project will be managed by a task force comprising the following YAE members from different disciplines: Assoc. Prof. Lynn Kamerlin (Uppsala University), As- sist. Prof. Mangala Srinivas (Radboud University Medical Center), Prof. Marcel Swart (ICREA- University of Girona), Prof. Liesbet Geris (University of Liège) and Prof. Alexander Fidora (ICREA-Autonomous University of Barcelona). This task force will coordinate speaker invitations, interview planning (including gathering questions from YAE members), and synergy with the AE. In particular, the link to Profs. Guerrero, Garcia Ramon and Maurer will be very important for planning both the technical and practical aspects as well as further speaker selection.

Small grants from the 'President's fund'

A small sum was earmarked from the Curien Fund for the President's discretion. In 2015 the following activities received support:

- 1. A meeting of Serbian members with the President and reception as part of a 'Geologging' event.
- 2. A contribution to the TOPO-Europe 2015 meeting in Antibes (October 4-7).
- 3. Support for a meeting and reception of AE Hungarian members on 3 November, coinciding with the 2015 World Science Forum in Budapest.

Events under AE patronage in 2015

During the year AE also provided non-funding 'patronage' to a number of international events organised through AE members.

Publications 2015

Heinz Nixdorf Foundation - AE Erasmus Lecture 2013 – Norman Davies. "Centuries of Change: Wroclaw-Breslau-Vratislavia" The European Review, Vol. 23 (1) February 2015. pp1-11.

The European Review

Is published on behalf of the Academia Euroapeea by the Cambridge University Press. In 2015 (Volume 23) four regular issues were released. Including:

Volume 23 (2) May 2015, contained papers from the HERCuLES symposium held in collaboration with Tsinghua University, in Beijing

Vol. 23 (3) July 2015, contained papers from the Wroclaw Hub-Riksbankens Jubileumsfonds funded summer schools meeting on "Early Modern Print Culture in Europe" – a part of the Wroclaw Seminars series.



In addition a <u>Free Access Supplement (23, S1 May 2015)</u> was published entitled "Mobility and Migration in Science". It was edited by Professors A. Cavalli and U. Teichler. This was the output of the 2013 HERCuLES group symposium, held at the Accademia dei Lincei in Rome and was sponsored by the Compagnia di San Paolo. The supplement can be accessed from this link:

AE members have an online subscription to the journal.

The 'Free Access' issue can be found at:

Reports of the activity of the AE Knowledge Hubs

Knowledge Hub Cardiff

Introduction

The Academia Europaea (AE) Knowledge Hub has been open since August 2015, with a service available Monday-Friday between 09.30-16.30 at our new premises in the Hadyn Ellis Building at Cardiff University,

The formal collaboration agreement between Cardiff University and Academia Europaea was formally signed in November by the Presidents of the two organisations and will be valid for 4 years (from February 2016), renewable by mutual agreement.

This has been a momentous year for the Cardiff Knowledge Hub.

Govrnance

The following distinguished scientists and scholars were invited and kindly agreed to serve on the Cardiff Hub Steering Group: Yves Barde MAE (CU), Nora de Leeuw (PVC, CU), Dianne Edwards CBE FRS MAE (CU), Theo D'Haen MAE (KU Leuven), Donald Dingwell MAE (LM Univ. Munich), Stephen Holgate CBE FMedSci MAE (Univ. Southampton), Colin Riordan (VC, CU), Sir John Skehel FRS FMedSci MAE (Biol Sec, The Royal Society) and John Tucker MAE (Swansea Univ., Sec Gen Learned Society of Wales [LSW]).

Staffing



Ole Petersen was appointed Academic Director and the newly appointed full-time Executive Officer, Judith Lockett, starting working in the Hub's new office.

In December 2015, interviews for the appointment of a Hub Manager took place and we are delighted that Louise Edwards accepted this position, joining us on 1st February, 2016.

Marketing & Communications

The Hub's dedicated website <u>www.aecardiffknowledgehub.wales</u> went live on 2nd December 2015, promoting the Hub's activities.

Meetings & Events

January, 2015:

On 20th January 2015, visited Cardiff Opportunities for

During this visit, Vice-Chancellor of resulted in a decision University.

March, 2015:

To mark the decision Government at the Parc Thistle Challenges in the

The meeting was Academy of Medical Wales (LSW) and of distinguished useful overviews of the translation of basic



DISTINGUISHED LECTURE Tuesday 20th January 2015 at 5 pm

Professor Sierd Cloetingh

Utrecht University, The Netherlands

President of Academia Europaea

Vice-President of the European Research Council

Challenges and Opportunities for Science in Europe: Perspectives from the ERC and Academia Europaea

Physiology Lecture Theatre A
The Sir Martin Evans Building,
Cardiff School of Biosciences
Museum Avenue,
Cardiff CF10 3AX

the AE President, Professor Sierd Cloetingh, University and gave a lecture on 'Challenges and Science in Europe' to a capacity audience.

discussions took place between the President and Cardiff University, Professor Colin Riordan, which to establish the Academy's fourth hub at Cardiff

to establish the Cardiff hub, the Welsh generously funded a symposium, which was held Hotel in Cardiff in March 2015 on 'New Biomedical Sciences – see Appendix 1 below.

organized by AE in collaboration with the Sciences (AMS) and the Learned Society of attracted more than 100 participants. A stellar cast national and international speakers provided latest scientific developments in pathophysiology, immunology research into clinical benefit,

neurogenetics and the development, function and dysfunction of the cerebral cortex.

September, 2015:

On 14th/15th September a Ca²⁺ signalling workshop was organised at Cardiff University, highlighting potential collaborations between Cardiff University and KU Leuven, at which a Plenary Guest Lecture was given by Alex Verkhratsky – see Appendix 2.

October, 2015:

On 27th October 2015, in collaboration with the Academy of Medical Sciences, another well-attended one-day workshop on 'Building a research career in a changing environment' took place at the Hilton Cardiff. A distinguished cast of eminent medical scientists spoke at this event, which was chaired by Ole Petersen, and the keynote address was delivered by Christopher Pugh – see Appendix 3.

December, 2015:

Ole Petersen was joined by Judith Lockett at the AE Board Meeting that was held in Barcelona on 9th/10th December. At this meeting, the final programme for the AE 28th Annual Meeting was formally approved, making it possible for final details to be progressed by Cardiff, who will be the local organisers for the Annual Meeting held in Cardiff. The programme is near to being finalised and our organisational plans are on target. It is expected that Registration for the Conference will be open mid-February, 2016.

Appendix 1:

Symposium on New Challenges in the Biomedical Sciences

The Parc Hotel Cardiff, Wales, 25th and March 2015





THE LEARNED SOCIETY OF WALES CYMDEITHAS DDYSGEDIG CYMRU







Programme

WEDNESDAY 25 March Session I Pathophysiology: Mitochondria, Calcium and Inflammation

Opening remarks: Ole Petersen (Cardiff University)

Keynote Lecture I: **Tullio Pozzan** (University of Padua): The privileged signalling crosstalk between the endoplasmic reticulum and the mitochondria

Anant Parekh (University of Oxford): Distinct sub-cellular Ca²⁺ signals activate different transcription factor isoforms **Julia/Oleg Gerasimenko** (Cardiff University): Physiological and pathological Ca²⁺ signals in exocrine pancreatic cells: pathophysiology of pancreatitis

David Criddle (University of Liverpool): *Mitochondrial dysfunction in acute pancreatitis: strategies for prevention* **Daniela Riccardi** (Cardiff University): *Development of a novel therapeutic for inflammatory lung disorders*

Session II Translating Basic Immunology Research into Clinical Impact

Introductory remarks: Paul Morgan (Cardiff University):

Keynote Lecture II: Adrian Hill (University of Oxford): Ebola vaccines: a rapid response

Paul Lehner (University of Cambridge): Proteomic and genetic approaches to viral evasion

Tracy Hussell (University of Manchester): New concepts in the treatment of bacterial pneumonia: modulation of inflammatory tone

Simon Jones (Cardiff University): Evaluating cytokine control of different forms of synovitis in rheumatoid arthritis

Bernard Moser (Cardiff University): Correlates of skin-specific vaccination

Andrew Sewell (Cardiff University): A systems view of T-cell immunity offers multiple opportunities for therapeutic intervention during infection, autoimmunity and cancer

THURSDAY 26 March: Session III Neurogenetics

Opening remarks: Michael Owen (Cardiff University)

Keynote Lecture III: John Hardy (University College London): Genomic analysis of Neurodegeneration

Julie Williams (Cardiff University): Translating genetic findings in Alzheimer Disease

Thomas Bourgeron (Institut Pasteur, Paris): From Genetic architecture to synaptic plasticity in autism

Jeremy Hall (Cardiff University): *Translating genetic findings in psychiatry*

Session IV Cerebral Cortex: Development, Function and Dysfunction

Introductory remarks: Yves Barde (Cardiff University)

Keynote Lecture IV: Haruo Kasai (University of Tokyo): Dendritic spine dynamics underlying animal behaviours

Carl Petersen (EPFL Lausanne): Neural circuits for goal-directed sensorimotor processing

Isabel Martinez-Garay (Cardiff University): Critical steps in cortical lamination **Kevin Fox** (Cardiff University): An early critical period for adult cortical plasticity

Appendix 2

Programme

Cardiff-Leuven Calcium Signalling Workshop: Ca²⁺ signalling and dysfunction in disease: from macro 14TH/15TH SEPTEMBER, 2015







THE LEARNED SOCIETY OF WALES

CYMDEITHAS DDYSGEDIG CYMRU

to nano

Monday 14th September

The Sir Martin Evans Building





Welcome - Nora de Leeuw (Pro Vice-Chancellor [International and

Europe], Cardiff University)

Integrating Ca2+ signalling in systems Chair: Ole Petersen (Cardiff University)

Introduction - Tony Lai (Cardiff University)

Daniela Riccardi (Cardiff University): The extracellular calcium-sensing receptor as a novel therapeutic target for the treatment of asthma

Chris George (Cardiff University): New approaches to manipulating Ca²⁺ synchronization in heart cells

Llewelyn Roderick (KU Leuven): IP₃ signalling in cardiac Pathophysiology

Adam Errington (Cardiff University): The global spike: conserved dendritic properties enable unique Ca²⁺ spike generation in low threshold spiking neurons

Plenary Lecture: Alexei Verkhratsky (University of Manchester): Neuroglia as a fulcrum for morbid changes: Redefining cellular neuropathology

Ca²⁺ signalling in cells

Chair: Tony Campbell (Cardiff University)

Karl Swann (Cardiff University): Ca²⁺ oscillations and egg activation at Fertilization Julia Gerasimenko (Cardiff University): Physiological and pathological calcium signalling in exocrine pancreas Maurice Hallett (Cardiff University): Control of rapid and localised cell shape changes by Ca2+ signaling in neutrophilic phagocytes

Subcellular domain Ca2+ signalling

Chair: Oleg Gerasimenko (Cardiff University)

Demetrio Santiago (KU Leuven): Heterogeneity of ryanodine receptor regulation in ventricular myocytes: roles of calcium and reactive oxygen species

Spyros Zissimopoulos (Cardiff University): The role of ryanodine receptor oligomerisation in cardiac arrhythmia Geert Bultynck (KU Leuven): Bcl-2 targets in Ca2+ signaling: from molecular mechanisms to applications in health and disease

Tuesday 15th September Ca2+ signalling at molecular level

Chair: Alan Williams (Cardiff University)

Emyr Lloyd-Evans (Cardiff University): Role of the lysosomal Ca²⁺ channel TRPML1 in Alzheimer and related diseases Jan Parys (KU Leuven): Autophagy and Ca²⁺ signaling, a complex interaction

Lowri Thomas (Cardiff University): Mechanisms of Ca²⁺ release: The importance of single channel analysis

Michail Nomikos (Cardiff University): Novel molecular properties of sperm PLCz that mobilizes the Ca²⁺ signal at fertilization

Oliver Castell (Cardiff University): Optical Single Channel Recording In Droplet Interface Bilayers

Appendix 3

Hilton Cardiff Hotel Cardiff 27 October 2015





Building a research career in a changing environment

Welcome and Introduction

Professor Ole Petersen CBE FRS FMedSci, Cardiff School of Biosciences, Cardiff University

The research environment in Wales

Professor Julie Williams FMedSci, Chief Scientific Adviser for Wales

How to position yourself to attract funding

Each funder will provide a short introduction to their schemes. Two local trainees will interview the panel of funders.

Professor Jonathan Bisson, Director, Health and Care Research Wales

Dr Julia Dickinson, Programme Manager – Clinical Fellowships, Medical Research Council Dr

Rachel Macdonald, Head of Grants and Programmes, Academy of Medical Sciences

Effective support to further your career

The Academy of Medical Sciences mentoring scheme

Dr Sophie Papa, Clinical Lecturer, King's College London Professor Paul Morgan FMedSci, Professor of Immunology, Cardiff University Mentee from Wales



British Heart Foundation



School of Medicine



School of Biosciences

Small group discussions

Attendees rotate to different tables where senior academics are stationed to discuss particular issues in their career.

Group 1 - Combining research and clinical work Professor Paul Morgan FMedSci, Professor of Immunology, University of Cardiff

Group 2 – Health of the public in 2040 Dr Vittal Katikireddi, Clinical Lecturer, University of Glasgow; Member of the Academy's working group for this project.

Group 3 - Working with Industry

Professor Chris Hancock, Chair in the Medical Microwave Systems

Research Group, Bangor University

Group 4 - How to network effectively
Professor Jeremy Hall, Director, Neurosciences & Mental Health
Research Institute, University of
Cardiff
Keynote – My Career in Academic Medicine
Professor Christopher Pugh FMedSci, Professor of Renal
Medicine, University of Oxford

KNOWLEDGE HUB WROCŁAW 2015

REPORT

In 2015, the Academia Europaea Wrocław Knowledge Hub has been run by two Hub officers: Dr Aleksandra Nowak (Hub Manager) and Katarzyna Majkowska-Kołyszko (Project Coordinator). The office is open 8 a.m - 5 p.m. from Monday to Friday.

Hub's domain

The internet domain, purchased in 2012, and extended annually, enabled usage of 3 e-mail boxes:

- nowak@acadeuro.wroclaw.pl;
- majkowska@acadeuro.wroclaw.pl;
- info@acadeuro.wroclaw.pl.

On a basis of acadeuro.wroclaw.pl domain the Hub's website, created in 2013, was constantly updated and filled with text content throughout the year.

Internet websites

www.ae-info.org

In 2015 the Hub officers were updating the content of AE website; that included texts' edition, uploading news, creating and updating profiles of AE Members. The trainees that worked at AE Wrocław Knowledge Hub: **Anna Konarska**, **Joanna Mikisz** and **Karolina Kulik** were enabled to edit the website and trained by office workers and partially by Dana Kaiser from Graz Information Centre to use Wiki Syntax system. To sum up, during 2015 Wrocław staff updated **1246 subpages** and uploaded **742 documents**. www.acadeuro.wroclaw.pl

The Hub's website, dedicated to hub activities and events, was continuously updated with news, current undertakings and reports on the finished and ongoing projects. It also served as an efficient tool to publish news related to the upcoming events and conferences.

With reference to the last point, the Hub officers with the support of Dr David Coates decided to refresh the structure and overall view of the Wrocław Hub's website. The changes will allow to present the website content in a far better way, and to manage events' details in a better way. The new website will be financed from the Wrocław Seminars project,

since the main point of *restructuring* is to improve the content management and to introduce a more professional and intuitive way of presenting information, especially when it comes to the participants of seminars and conferences organised by the Academia Europaea Wrocław Knowledge Hub. The offer was obtained from ... companies, among which the Fugu Digital company offered the widest range of activities at the best price. The new website will be constructed and implemented during the first two months of 2016.

Academia Europaea Wikipedia subpage

On the request of General Secretary of Academia, Dr David Coates and President Sierd Cloetingh, Wrocław Knowledge Hub was responsible for updating the definition of Academia on the Wikipedia service. The content is updated in accordance with the AE needs – it represents the organisational structure of Academia, its mission, members and regional offices (Wrocław, Bergen, Barcelona, Graz Information Centre).

Administrative support to the Academia Europaea Sections and Classes

In the end of 2014 the Board of the Academia Europaea decided to implement structural changes to the organisational aspect of Academia Europaea Members division. The aim is not only to improve the overall image of AE, but also to uprate the nomination process.

The previous structure of 20 sections was reshaped into 4 classes:

- Class A1 Humanities (sections A1-A6)
- Class A2 Social and Related Sciences (sections A7-A10)
- Class B Exact Sciences (sections B1-B5)
- Class C Life Sciences (sections C1-C5)

The Board decided to organise the class meetings whenever the class finds them convenient and not before the annual general conference, as it has been practised so far. Moreover, the Wrocław office agreed to provide support to class A1 and A2, and the Barcelona office to sections B and C.

Class A1 meeting - 25 July 2015, Paris

The nominations meeting of the A1 class Humanities: Art and Letters took place on July 25, 2015 in Paris. The nomination committee consisted of: prof. Pieter Emmer (representing prof. Renate Pieper), prof. Harm Pinkster, prof. Alain Peyraube, prof. Svend Erik Larsen, prof. Philippe Vendrix, prof. Simo Knuuttila, and Katarzyna Majkowska-Kołyszko (from Wrocław Hub). Apart from the issue of nominations, another topics were discussed, such as underrepresented scientific disciplines within the sections, pros and cons of leaving the section-structure in favour of classes-structure, future activities of sections and recent ideas concerning rearrangement of the organisation of annual conferences.

The costs of travel and accommodation of Wrocław Hub's officer were covered by AE London office. In September, as a follow-up of the meeting in July, a new section within class A1 was established, namely *Film, media and visual studies*. A date of the next class meeting in 2016 has not been agreed upon yet.

Class A2 meeting -13-14 July 2015, Bonn

The nominations meeting of the A2 class: Social Sciences and Humanities took place on July 13-14, 2015 in Bonn. The nomination committee consisted of: prof. A. Buttimer, prof. P. Scott, prof. A.S. Bailly, prof. J. Straus, prof. K. F. Zimmermann and Dr Aleksandra Nowak (from Wrocław Hub). The discussion was concerned not only with the nomination issues, but also creation of the new section *Environment and Society* and organisation of a common panel during 2017 AE conference in Budapest. The suggested topic was: *Identities and Migration: Resilience and Sustainability*. The costs of travel and accommodation of Wrocław Hub's officer were covered by AE London office. After the meeting the class representatives were in touch with Dr Aleksandra Nowak, and the following issues have arisen:

- nominations in 2016,
- Erasmus Award (in 2016 class A2 is responsible for nominating a laureate of this prize),
- Panel "Migration and Identity" (suggested topics: "The role of the European Court of Justice and the crisis concerning refugees and asylum-seekers", "Patterns of academic migration" and "The European Refugee Crisis and the European Identity").

The next meeting has been planned to take place in Bonn, on May 30-31, 2016.

Cooperation with the Nobel Committee

Academia Europaea is a content partner of Nobel Committee from Sweden. For many years AE has been asked to indicate the best candidate for this prestigious award. This year the Wrocław Hub also prepared and sent the data (for the serial correspondence) of AE members from section "Medicine Physiology", "Cell Biology" and "Biochemistry and Molecular Biology".

Establishing new collaborations

In 2015 Academia Europaea focused on continuation of established partnerships and establishing new ones while conducting projects and organising events (lectures, seminars, workshops). A closer cooperation with Academy of Young Artists and Scholars was formed during the joint organisation of workshop entitled *Excellent Science Days*. Thanks to the new AE initiative – Hubert Curien Fund – Wrocław office was able to cooperate with Adam Mickiewicz University in Poznao, The Polish Academy of Arts and Sciences, National Academy of Sciences of Ukraine and the Academy of Young Scientists by the Polish Academy of Sciences. Dr Aleksandra Nowak, in order to organize a lecture of prof. Hermann Maurer on the Faculty of Computer Science and Management of Wrocław University of Technology, met prof. Przemysław Kazienko from the Department of Computational Intelligence. On the request of Maciej Makulski, the Director of Regional Center of International Debate and College of Eastern Europe, dr Aleksandra Nowak and dr Maciej Litwin had a meeting with participants of the *study tour* from Ukraine that took place on July 7, 2015. Among other things, the cooperation between the city and higher education institutions was discussed (statutory limits, the reality of the practical side of this cooperation and benefits resulting from this arrangement).

During Prof. Einar Hope's visit, the Wrocław office got in touch with prof. Rafał Weron from the Department of the Operations Research of the Wrocław University of Technology.

Hubert Curien Fund

The Wrocław Hub supported 4 initiatives during 2015:

- Language endangerment and revitalization Poznao Linguistic Meeting 2015 The aim of this session was to bring together scholars involved in research on "small" and endangered languages of Europe, Mesoamerica and Oceania. In particular, the organisers wanted to focus on the theoretical implications of cross-linguistic variation in linguistic structure, as studied in cognitive, cultural and social settings, as well as applied research on language maintenance and revitalization. Specific issues discussed as part of the session included: language documentation focusing on endangered languages; surveys of genetically and typologically diverse languages aiming at the study of cross-linguistic differentiation in linguistic complexity, as determined by social and demographic factors as well as various forms of language contact; implications of language ideology and attitudes for language shift and revitalization; practical and theoretical strategies for the revitalization of endangered
 - languages; providing the rationale for language revitalization: psycholinguistic, cognitive, cultural and economic benefits.
- More details can be found on the following AE website http://www.acadeuro.wroclaw.pl/index.php?mlt=35&act=14&idEvent=26

• Ion Channels Trimming the Brain

International Symposium "Ion channels trimming the brain" was held at Bogomoletz Institute of Physiology (Kiev, Ukraine) on September 24-26, 2015. The Symposium was dedicated to several important events: 40 years of intracellular perfusion, 35 years after a discovery of proton receptor and 70th anniversary of Academia Europaea member Oleg Krishtal.

The idea of the Seminar came from professor O. A. Krishtal and prof. A. Verkhratsky. More details are available here: http://usn.org.ua/conf15/ and http://www.ae-info.org/ae/Acad_Main/Events/Ion%20Channels%20Trimming%20the%20Brain

Flexible Query Answering Systems (FQAS) 2015

Flexible Query Answering Systems (FQAS) was a conference focusing on the key issue in the information society of providing easy, flexible, and intuitive access to information for everyone. The conference focused on several research areas, such as information retrieval, database management, information filtering, knowledge representation, soft computing, management of multimedia information, and human-computer

interaction. The conference provided a unique opportunity for researchers, developers and practitioners to explore new ideas and approaches in a multidisciplinary forum. The conference took place in Cracow, on October 26-28, 2015. Two AE Members were engaged in organisation of the event: prof. J. Kacprzyk and prof. R. Słowioski. More details are available here: http://fqas2015.ibspan.waw.pl/

"200 years of the Cracow Learned Society"

The conference not only renewed the Cracow Learned Society tradition but also aimed at broadening knowledge about its heritage: its committees (balneological, physiographic, anthropological, bibliographical, linguistic and historical, etc.), its archeological and conservatory interests, its publications (44 volumes of "Year Book", 8 volumes of "Medical Review", etc.), valuable archives and libraries (Scientific Libraries of the Polish Academy of Art and Sciences and the Polish Academy of Sciences in Cracow). Another field of its interest is focused on generosity of society in the name of science. The conference was addressed both to the world of science, as well as to the wider audience, particularly young people, as it is very important in terms of history of science and history of development of scientific research in Poland. The event was organised by the Polish Academy of Arts and Sciences, in collaboration with Jagiellonian University and Academia Europaea on December 9-10, 2015. Two AE Members were among the organizational committee members: prof. A. Białas and prof. J. Kozłowski. More details are available here: http://tnk.krakow.pl/jubileusz/

Welcome Packs for the New Members of Academia Europaea

Wrocław office is responsible for production and distribution of the welcome packs that are sent by post to all the New Members of the Academia. In 2015 232 welcome packs were created, each one containing welcome letters, membership certificates, pendrives (with AE reports, Directory, AE leaflet) and pins with the logo of AE.

Moreover, a database was created with the contact details of heads of the mother institutions of New Members, to whom letters informing about joining the Academy by their employees will be sent on the beginning of 2016. The costs of shipping the parcels were covered by London office.

Promotional materials - update and distribution

To keep the AE visual identification coherent, all the logos of hubs and offices were updated and produced in useful formats (6 versions of logo for every office). The Brand Book of AE was updated twice. 16 versions of AE business cards were created and printed for hubs, directors and members of the Board. 7 different e-mail footers were designed and implemented for the personal use of hub officers.

In 2015 it was agreed to stop printing the usual amount of Directories in favour of producing a pendrive that will contain the electronic version of this document, and because of that only 200 copies were printed (to be distributed during the Annual Conference). The remaining number of pendrives with AE logo and website address printed on them will be used for the promotional purposes. Directory was created on the basis of most updated database of AE Members and other information related to structure, rules and activities of Academia.

All the promotional materials, useful for AE Members (AE leaflets, folders, brochures and pendrives) were sent to Darmstadt before the annual conference. Materials which have been printed before the opening of new hubs and before the relocation of headquarters were updated with the stickers with correct contact details. Costs of update and shipping of the promotional materials were covered by the London office.

Newsletters

Throughout the year 2015, Wrocław office contributed to 5 general newsletters sent to AE Members that contained news from the Hub, its current and planned events and undertakings and the very detailed report on Wrocław activities.

CONFERENCES & MEETINGS:

Regional AE Members Meeting - March 19, 2015

On **March 19**, the Regional AE Members Meeting was held in Wrocław. The event brought together approximately 40 scholars: local and regional AE Members as well as local academic community. The aim of the meeting was to discuss the future of Academia Europaea and its further activities. The main point of the agenda was the official signing of an

agreement between the city of Wrocław, represented by Deputy Mayor **Adam Grehl**, and Academia Europaea, represented by the **President of AE, Sierd Cloetingh**. After discussions, **Professor Tadeusz Luty** - AE member and a Head of the Wrocław Academic Hub, agreed to become the Academic Director of the Hub.

The meeting had an interactive character, included several short presentations and was an opportunity to discuss the plans for the Hub with the Board of Trustees of Academia Europaea. It was extremely important now that phase two of the Hub has been reached, to start developing practical outreach with the wider region.

The meeting started with the reception and was followed by hot and substantial buffet. The event was fully financed by the London AE office.

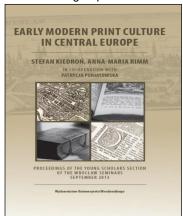


Tadeusz Luty, Adam Grehl, Sierd Cloetingh, Bonifacas Stundžia

Early Modern Print Culture in Central Europe - Post-conference book

The volume brings together twelve texts devoted to Early Modern print culture in Central Europe. The idea behind it was to discuss the development and complexities inherent in the printing of books

— an initially revolutionary way of building up international communication networks in this important region. An international group of researchers involved in the project took on board a wide array of subjects ranging from the first



books printed at the end of the 15th century in Central Europe, through the contacts between Western, Central and Eastern Europe thriving in the 16th and 17th centuries, to the books about newly emergent sciences in the 18th century. Bringing in their various interests and perspectives, the contributors illuminated the vast chronological scope and undeniable variety of print culture in Early Modern Central Europe.

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Literary Margins and Digital Media Seminar - April 15-17, 2015

The Wrocław Seminars is the initiative of Academia Europaea, University of Wrocław and Riksbankens Jubileumsfond, appointed as a three-year project including three international seminars. The project is mainly addressed to young researchers (before the doctoral defence or right after it) from Central and Eastern Europe. AE Board wants to transform this initiative into a multiannual program aiming at development of scientific and research bridges between Western Europe and Central and Eastern Europe.

The second seminar, *Literary Margins and Digital Media*, was devoted to cultural shifts caused by digital media. Traditional high culture is becoming increasingly marginalized, while forms of cultural expression which were seen as marginal, or which were located at the periphery of the cultural field, have been gaining a more prominent place. One could think in this context both about such popular genres as crime fiction, chick lit, or science fiction and how they have been influenced by digital media and about the explicit digital developments such as hypertext, digital poetry, fan fiction, weblogs, games and other digital forms of storytelling.

The programme consisted of 7 keynote lectures and 8 young scholars' sessions. The presentations of the first day concentrated on reading in the digital culture. The focus of the second day was recent developments in children's literature, while the third day was devoted to games and authorship in the digital era. There were also two special parts of the seminar:

- the literary meeting with Michael Joyce, Zuzana Husárová and L'ubomir Panak in the Wrocław Contemporary Museum. Michael Joyce and Zuzana Husárová are not only scholars, but also successful authors of different generations, different cultures and aesthetics, and yet there is a strong common trait in the works of both of them: it is based on revealing the archetypes of literary communication in a hybrid, post-medial landscape of genres and communicative roles. The meeting with Michael Joyce and Zuzana Husárová was an attempt to outline the history of relations between literature and new media, to ask questions about the future, and to define 'marginality' and the very position between the centre and its surroundings. The digital performance of Zuzana Husárová and L'ubomir Panak enabled the participants to have a live experience of the digital art.
- the New Media in Children's Literature Studies: Reflections and Insights panel with Board members of the International Research Society for Children's Literature. The panel consisted of five presentations by renowned children's literature scholars from the UK, the Netherlands, Taiwan, and Canada. The participants discussed the increasing importance of digital contexts in their own research even if they all acknowledged the abiding high status of the traditional book as a text and an object. A significant conclusion reached by the panellists was the imperative of focusing on real young readers and audiences as it is the young generation that is being especially affected by the rapidly developing digital environment. Both the panellists' presentations and the discussion afterwards proved to be a substantial contribution to the overall conference debate on the concept of digital media.

The venue was the conference room in Ossolinski National Institute, situated near the main building of Wrocław University. Media patronage over the conference was held by 'Korporacja Ha!Art', a foundation promoting new phenomena in literature and culture, and by *Techsty*, a Polish e-journal devoted to electronic literature and digital humanities. The information about the conference was disseminated through their Newsletters, social media and information at their websites. *Techsty* also prepared three podcasts, which are available on the website of Academia Europaea and on the websites of Ha!Art and *Techsty*. Two of them are interviews with the keynote speakers of the seminar and the third one is an interview with the organisers and participants of the conference. The interview with

Michael Joyce will also be published in the printed version of the journal Ha!Art in December 2015. The streaming of the conference, which is still available on You Tube, provided online access to the sessions and keynote lectures. The whole seminar was also incorporated into 'Wrocław European Capital of Culture 2016'.

1. Registration

The work on the forms of participation began in January 2014. The Seminar's Organising Committee decided to create two categories of participants: invited keynote speakers and young scholars selected in the Call for Papers process.

The Call for Papers and the Registration Form were prepared and published both on the Seminar's website and on the official website of the Academia Europaea. In addition, they were sent to more than a dozen European universities. In order to participate in the Seminar, candidates had to submit a completed application form (until October 5, 2014), a short abstract of their paper, and a CV with a list of publications. After receiving more than 40 applications, the Committee decided on inviting 18 young scholars (mainly from Poland, Hungary, Romania, UK, Serbia and the Republic of South Africa) to participate in the Seminar. On October 31, 2014, they were notified of that fact via electronic mail. It was substantially important for the participants to send a fragment (or the first version) of their papers until March 1, 2015 so that the other seminar participants could read them before the beginning of the conference.

The Committee invited nine senior scholars to participate in the seminar, e.g. Michael Joyce (USA), Boel Westin (Sweden), Dirk de Geest (Belgium), Junko Yokota (USA), Emiliya Ohar (Ukraine).

2. Air-tickets and travel reimbursement

Only senior scholars were entitled to the reimbursement of air transport costs from/to Wrocław. The procedure of ticket purchase included several stages. It started from contacting a given lecturer via electronic mail to establish the exact itinerary and time of travel. The choice of flights was often limited by time frames established by the speakers.

After the initial reservations were made, travel itineraries were finally approved by the conference speakers. Selected air tickets were purchased after the final approval. Most flights of the conference speakers were over the European territory. In addition, one intercontinental ticket was purchased (from Newark, USA).

According to the Call for Papers, the young scholars were reimbursed for travel costs only to some level (Western Europe – up to 100 EUR, Central and Eastern Europe – up to 150 EUR). Together with conference materials, they received expenses claim forms for the reimbursement of travel costs. The forms were prepared beforehand. Travelling by car was not reimbursed.

3. Accommodation

All speakers were provided with accommodation. Cooperation with 3* Patio Hotel, located in the very centre of Wrocław, was established for the duration of the Seminar. A series of organizational meetings was held before the Seminar. They aimed at establishing the organizational framework, the pool of available rooms and the way of reservation management. According to the decisions made by the Organising Committee, organizers covered costs of accommodation for up to four hotel nights.

4. Catering

The seminar organizers worked on preparing a complex order of catering services for all participants. The catering service included the following items: permanent coffee breaks and lunches on April 15- 17, 2015 and conference dinner on April 17, 2015.

The menu for particular event days took into account diet preferences, including food allergies, of all participants. All the information on that topic was obtained due to the conference registration system for the participants. It facilitated the menu selection for the conference guests, so that their individual needs could be catered for.

5. Local transportation

On April 15, 2015 the seminar organizers had at their disposal a bus rented from the local company Bus Travel. Those participants who wanted to attend the literary meeting with Michael Joyce and Zuzana Husarová were transported between Patio Hotel and Wrocław Contemporary Museum. The seminar itself took place in the building of the Ossolinski National Institute, located in the city centre, not far from Patio Hotel. Therefore, no transport was required on



April 16 and 17. In addition, on April 6, all seminar participants received the information page including all necessary information for people arriving in Wrocław.

6. Branding and The website (www.acadeuro.wroclaw.pl),

together with the visual identification system, was developed for the needs of *Wrocław Seminars* project in cooperation with A Vista News- informing sliders

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were

placed on the main page. In addition, the website included a film presenting Wrocław, the contact information of Wrocław AE office and the logos of all conference sponsors and partners. Each logo was also a link to the main page of each mentioned institution.

The website also included all necessary information on the very concept of *Wrocław Seminars*, its organizers, general terms and conditions of participation, and approximate dates of subsequent events. In addition, "Contact" tab contained all necessary contact data, which enabled all interested persons to access exhaustive information on the event. "Links" tab included links to various

scientific institutions (universities, academies of science, etc.). The fact that the website has been prepared for the three-year duration of the project constitutes its added value. The website can be easily modified and adjusted to the needs of the next seminar.

Details concerning *The Literary Margins and Digital Media* seminar were subsequently updated as the event was approaching. The information about the seminar's program and the speakers (invited senior scholars and young scholars appointed under the call for papers) was regularly published. Eventually, all profiles were created and published on the website. They included photos, short bios and abstracts of presentations.

As a result of the work of the Organising Committee, topics of particular sessions, their division, and duration have been established. The program was published (and regularly updated) in a draft version on the website and in the form of a PDF file to be downloaded and printed.

In addition, together with A Vista Group Sp. z o.o., the key visual of the *Literary Margins and Digital Media* seminar was developed. The conference materials (posters, folders, roll-ups, ecological bags, program, book of abstracts) were also prepared and printed. After the event, additional "Gallery" tab was created to lead to the page on which photos from the particular seminar days were published.



Gallery

7. Results

Judging from the interest in the conference and the diversity of approaches followed by the participants, one may wonder if the new developments in literature caused by the influence of new media are in fact marginal. On the other hand, the reflection on the traditional printed book remains significant - or rather: digital literature makes us reflect on the traditional book as a medium. Printed books are taken for granted, but digital media make us reflect more attentively upon the bookishness of the book. The issues which have been discussed most lively were as follows:

- firstly, the ways in which literature repositions itself with regard to contemporary technological and social developments. Of interest here was the question in what manner literature reacts to these developments and retains its significance either through a symbiosis with other modes of cultural expression or by generating new genres which will give rise to new poetic, rhetorical, and narrative possibilities.
- secondly, the degree to which technological media innovations involved in the production, distribution, and consumption of cultural texts have shaped the identity of literature.
- finally, the changing roles of authors and readers in the digital era. Digital literature challenges our notions regarding the reader-writer relationship. It encourages readers to intervene in the construction of meaning. The participants of the conference could experience this during the performance of Zuzana Husárová and L'ubomir Panak. The field of the reader's activity has been broadened in digital literature owing to its computer dimension and the relationship between the human and the non-human. Digital media may also generate new audiences. As we could hear during the conference, the current research on children's literature in digital environments and on teaching children's literature by using technology also reflects these developments. The presentations on children's texts revealed that this field is especially congenial to innovations.

Nevertheless, as the participants concluded, the role of the printed book as a medium is not diminishing so quickly as there is something about print that we cannot give up yet. So the future is yet to be written and it will be written by the children of today. This is why it was worth focusing at all the developments mentioned during the conference.

One of the goals of the organisers of the seminar was facilitating the dialogue across the generations of scholars and promoting (Central) European research. The seminar turned out to be a success, which was clearly proved during the lively discussions and sessions, as well as by the post-conference exchanges via email.

8. Plans

The preparations for the publication of the conference proceedings started in May 2015. The organising committee of Literary Margins and Digital Media have met to discuss the concept of the volume, to share the tasks, and to establish the timetable and a working plan. The editors in 2016 will contact several publishers to ask about the publication conditions. The general aim is to publish a peer reviewed volume by a reputed publishing house.

While the publication of the conference proceedings of the Seminar Literary Margins and Digital Media is the final task of the organising committee of the second seminar, the preparations for the third Wrocław Seminar have alreadt started. The organising committee for the conference on "Central Europe and Colonialism: Migrations, Knowledges, Perspectives, Commodities" have met on 12 December 2014 for the first time.

Central Europe and Colonialism: Migrations, Knowledges, Perspectives, Commodities Seminar -

September 21-23, 2016

Central Europe has not yet been an object of keener interest in (post)colonial studies. However, not only did large numbers of Central Europeans migrate to the (former) colonial world, but Central Europeans also provided personnel to occupy, administer and police colonial empires, and reflected on colonial experiences at the levels of high and popular culture. Even if largely excluded from colonial politics at an international level, Central Europeans played an important role in generating new discourses based on data gathered in the colonial contact zone.

The conference will cover three themes: migration from Central Europe to the colonies, the genesis of scientific and scholarly discourses that developed in Central Europe in relationship to the colonial world and the application of insights from (post)colonial studies to the study of history and culture of Central Europe.

The committee consists of Professor **Pieter Emmer** (Leiden), Professor **Siegfried Huigen** (Wrocław), Professor **Michael North** (Greifswald), Professor **Renate Pieper** (Graz), Professor **Dorota Praszalowicz** (Krakow) and dr **Dorota Kolodziejczyk** (Wrocław). The conference is planned for September 2016.

Annual Academia Europaea Conference 2016 - September 7-10 September, 2015, Darmstadt, Germany

AEKH-W team participated in the 27th AE conference in Darmstadt. Unfortunately, Professor Luty couldn't participate in the conference. He was replaced by Professor Siegfried Huigen, an active AE member. Dr Aleksandra Nowak prepared a report on the activities of AE in 2015 and plans for 2016. The report was presented during the Council meeting (September 6, 2015) and during Annual Business Meeting (September 7, 2015).

The Excellent Science Days - November 5-6, 2015

This two-day workshop was a completely new initiative of the Hub. The idea of organizing such meeting emerged after Professor Kondorosi's letter on unsuccessful attempts in getting ERC grants in

"new" Europe. The major objective of *The Excellent Science Days* (**November 5-6, 2015**) was to promote excellence across Europe, through strengthening the potential of young researchers from Central and Eastern Europe to become scientific competitors within European Research and Cooperation Programmes (i.e. ERC, COST, FET, Marie Curie), and enhance their capability to successfully submit the research manuscripts to top level journals in natural sciences.

The event comprised two parts:

- open event covering general information on EU research grant possibilities:
 - COST, rules, advantages, possibilities Artur Bednarkiewicz, Institute of Low Temperature and Structure Research, PAS; Wrocław Research Centre EIT+
 - COST- Targeted Network "SCI-Generation Nedjeljka Zagar, University of Ljubljana, YAE, Vice Chair
 of the COST Targeted Network "SCI-Generation"
 - Marie Sklodowska-Curie Actions Magdalena Rowioska Zyrek, Wrocław University, Poland
 - FET Open Maciej Łopatka, European Commission, Research Executive Agency
 - Inside Nature Liesbeth Venema. Senior Editor Nature
- closed workshop dedicated to "good scientific writing" provided by the editors of Nature,
 Liesbeth Venema and Pep Pamies



Professor Tadeusz Luty and Liesbeth Venema



Participants



Participants



Pep Pamies and the participants



Participants
Maciej Łopatka (European Commission)



The committee consisted of Artur Bednarkiewicz (EIT+, PAS), Sabina Górska (PAS), Magdalena Rowioska-Żyrek (University of Wrocław), Caroline Kamerlin (YAE, Uppsala University), Nedjeljka Zagar (COST, YAE), Andre Mischke (YAE, Utrecht University), Liesbeth Venema (*Nature*) and Aleksandra Nowak (AE Wrocław Knowledge Hub). The coorganizers, Young Academy of Europe, Academy of Young Scholars and Artists, Wrocław Research Center EIT+ and Wrocław Academic Hub expressed their will to organize a round 2.0 in 2016.

<u>Meeting of The Ambassadors of Wrocław Congresses and Polish Members of Academia Europaea – December 15, 2015</u>

The meeting of Wrocław Congress Ambassadors and Members of Academia Europaea was held on 15 December 2015, at the Art Hotel and was attended by 25 people. The event was organized by Convention Bureau and Academia

Europaea Wrocław Knowledge Hub. The meeting consisted of presentations on the current status of the meetings industry in Wrocław, its economic development and the role of the Academia Europaea and Wrocław Academic Hub in popularizing science and conferences.

Lectures

As in previous years, the Wrocław Hub arranged a series of lectures for local academic community. The purpose of these meetings is to bring distinguished researchers to Wrocław in order to enhance the quality of higher education and supplement various faculties of the universities.

The first visiting lecture was held at Faculty of Electrical Engineering of the Wrocław University of Technology, and was delivered by **Professor Einar Hope (Bergen)** on power market reforms taking place in Norway and on Nordic market. During the lecture Professor Hope also referred to ongoing developments towards European market expansion and integration.

The second lecture was organized in cooperation with Regional Office for Internation Debate, Academy of Young Scholars and Artists and Panato Cafe. **Professor Virginie Mamaoduh (Amsterdam)** focused her lecture *Globalizing city and the grassroots: Political geographies of urban movements and linguistic diversity* on the impact of European integration on national languages and the languages of social demonstrations.



the



Professor Virginie Mamadouh



Support

Last, but not least, Academia Europaea Wrocław Knowledge Hub supported other events, such as summer schools, student conferences and Hubert Curien Fund initiatives:





Summer School
 Nationalism and Populism as
 Challenges for European Unity
 September 13- 22, 2015

The main aim of the School to develop was intercultural communication and cooperation skills. The organisers hoped that through the participation in the presentations the students would take an interest in multiculturalism and

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understanding of political and cultural diversity. Summer school was composed of presentations of the PhD candidates and speeches given by the scholars. This summer school was financed by the CEEPUS-Network

- The Cooperation Forum Poland Romania The Republic of Moldova September 17, 2015 The goal of the Forum was to show how important the partnership of Warsaw, Bucharest and Chişinău is for the Central and Eastern Europe. The Forum presented the opportunities of cooperation among Poland, Romania and The Republic of Moldova on the levels of politics, business and culture.
 - Poland, Germany, Ukraine and the migration crisis in Europe November 27, 2015

Thi s debate was held during the second edition of the Polish-German-Ukrainian School of Bohdan Osadchuk. The participants:

- Kazimierz Wóycicki (European Academy Krzyżowa),
- Przemysław Roguski (Jagiellonian University),
 - Adam Balcer (Central of Eastern European Studies, University of Warsaw), were talking about Polish and German attitude on the migration crisis and the Ukrainian view on that topic.
 - The debate was moderated by **Adam Reichardt** (New Eastern Europe). The Academia Europaea Knowledge Hub Wrocław was a partner of this event.
- IX International Student Conference Politics & Society in Central and Eastern Europe December 15, 2015

The Wroclaw AE office was asked to support and to foster the IX International Student Conference. The conference was designed to present the research results of international and Polish students, interested in current developments in Central and Eastern European politics and societies. The program consisted of plenary and panel sessions. The best presentations were awarded with the books that were sent by the London office.

Students internships

Thanks to the bilateral agreement signed between Academia Europaea and the University of Wrocław, the Wrocław Hub is open for students. In 2015 three students were pursuing their traineeships at AE Office: **Anna Konarska** (MA Student from the Faculty of English, University of Wrocław), **Karolina Kulik** (MA Student from the Faculty of English, University of Wrocław) and **Joanna Mikisz** (BA Student from the Faculty of English, University of Wrocław).

The basic duties of the interns were, among other things:

- getting to know the structure and operations within the AE,
- editing the AE website (text structure, text selection, editing, formatting) and working with Wiki syntax,
- help with co-organizing lectures and conferences,
- translation, verification, writing and proofreading of documents and texts.

Dr Ola NowakMrs Katarzyna Majkowska-Kołyszko

KNOWLEDGE HUB BARCELONA

In 2012, the Catalan Government (Generalitat de Catalunya), the Barcelona City Council (Ajuntament de Barcelona) and the "la Caixa" Foundation launched the Southern European and Mediterranean Office of the Academia Europaea, the Barcelona Knowledge Hub, with the support of the Fundació Catalana per a la Recerca i la Innovació (FCRI) and the Institute for Catalan Studies (IEC).





PARTNERS:

Located in the building of the IEC and operational since January 2013, the BKH focuses on the promotion of activities of interest for the members of the Academy and the scientific community in general, with special emphasis on multidisciplinary activities that include the perspective of the social sciences and the humanities.

Cloister of the Institut d'Estudis Catalans, where the office is located

Office: Since August 2014, Ricard Guerrero replaced Genoveva Martí as Academic Director of the BHK-AE. In September 2015, Núria Radó finished her contract with the hub. In October 2015, Anna Wasmer replaced Ariadna Barcelona and Núria Radó in the BKH-AE office. The administrative and technical support of the IEC is excellent and an essential part in the efficient every-day running of the Barcelona hub. The BKH-AE provides administrative support to the YAE since 2013

International Advisory Committee

On April 17, 2015, José Mariano Gago, Member of the IAC, died in his home in Lisbon. From July, Rosalia Vargas, president of *Ciência Viva*, the Portuguese Agency for the Scientific and Technological Culture, incorporated to the IAC.

The members of the IAC are currently as follows:

Enric Banda, Barcelona, Spain, enric.banda@gmail.com

Pedro García-Barreno, Royal Academy of the Language (RAE), and Royal Academy of Medicine, RAMed (Madrid, Spain), pgbarreno@gmail.com

M. Dolors Garcia-Ramon, AutonomousUniverstiy of Barcelona (Bellaterra, Spain), mariadolors.garcia.ramon@uab.cat

Ramon Gomis, Institute of Biomedical Research Agustí Pi Sunyer, IDIBAPS (Barcelona, Spain) ramon.gomis@idibaps.org

Sergiu Hart, The Hebrew University of Jerusalem (Jerusalem, Israel), hart@huji.ac.il

Yvon Le Maho, National Centre for Scientific Research, CNRS (Strasburg, France) vvon.lemaho@iphc.cnrs.fr

Genoveva Martí, ICREA and University of Barcelona (Spain), genoveva.marti@gmail.com

Marc Mayer, University of Barcelona (Spain), mayerolive@yahoo.es

Maria Paradiso, University of Sannio (Benevento, Italy), paradiso@unisannio.it

Regina Revilla, Merck Sharp & Dohme Spain (Madrid, Spain), regina_revilla@merck.com

Rosalia Vargas, Ciência Viva (Lisbon, Portugal), rvargas@cienciaviva.pt

Activities 2015

JANUARY 2015

1. Meetings with José Mariano Gago (Lisbon)

Ricard Guerrero on January, 2-3, went to Lisbon to meet José Mariano Gago (deceased on April 17, 2015), to prepare the commemoration of the International Year of Light 2015 (IYL), to be held in Lisbon, in July.

On 20 December 2013, the UN General Assembly 68th Session proclaimed 2015 as the "International Year of Light and Light-based Technologies" (IYL 2015). The UN stated: "In proclaiming an International Year focusing on the topic of light science and its applications, the UN has recognized the importance of raising global awareness about how light-based technologies promote sustainable development and provide solutions to global challenges in energy, education, agriculture and health. Light plays a vital role in our daily lives and is an imperative cross-cutting discipline of science in the 21st century. It has revolutionized medicine, opened up international communication via the Internet, and continues to be central to linking cultural, economic and political aspects of the global society."

Each country constituted a National Committee of the IYL 2015. The president of the Spanish Committee was María José Izuel, Professor of Optics, Autonomous University of Barcelona, Emerita. The BHK-AE in agreement with this perspective, decided, along with José Mariano Gago and <u>Ciência Viva</u>, to celebrate the IYL with an International Symposium in July in Lisbon.





Prof. José Mariano Gago (1948-2015) died on April 17. His collaboration with the organization of the IYL in Lisbon, planned for July 2-3 (see p. 14, this Report) was continued by Rosalia Vargas, director of *Ciência Viva*, the Portuguese Agency for Scientific and Technological Culture.

2. European Training Network - Preparation of the ETN Diaphora Project

The BHK-AE has committed to participate as a partner organisation in the Innovative European Training Network <u>DIAPHORA</u>, which is being proposed under the H2020-MSCA-ITN-2015 call (modality: ETN). The project being already granted on May 2015, the BHK-AE shall provide 3 Early Stage Researchers (PhD students) recruited by the Network



Philosophical Problems, Resilience and Persistent Disagreement with secondment opportunities of at least 3 months each at some point during their 36 month recruitment (October 2016 - September 2019). To apply, the BHK-AE needed to obtain a Participant Identification Code (PIC).

3. Support of the YAE from the BHK-AE

In 2012, the Young Academy of Europe (YAE) and the Academia Europaea agreed to establish a close affiliation to stimulate operational coordination and collaboration through the BHK-AE, according to this, the Barcelona hub will be

in charge of providing support to the activities of the YAE since 2013.

The BHK-AE is responsible for giving the necessary administrative support to the YAE. The initial tasks were: a) Implementation of the Database of members of the YAE. b) Building and maintaining the database of the YAE. And c) Support of the YAE Interview Project, organising and holding the interviews (see the activities of October-December; see p. 15, this Report).



4. YAE Open Letter to the European Parliament

On January 30, 2015 the YAE sent an open letter to the European Parliament opposing budget cuts to frontier science. The BHK-AE has elaborated the press release concerning the Open Letter members of the YAE and has distributed it to national and international media. http://www.yacadeuro.org/news/YAE_MEPopenletter_2015-01.pdf

FEBRUARY, 2015

1. Obtaining a Digital Signature for documents

This signature will allow the BHK-AE to apply for projects in Spain and the EC.

2. Lecture of John Tolan, MAE, University of Nantes, at the IUC (Barcelona)

On February the 4th at the International University of Catalonia, in the framework of the Law Conference Institucions del nostredret, organized by the Catalan Society of Law Studies and the Barcelona Bar Association, John Tolan, MAE, with the BHK-AE support, offered the main lecture, called La políticareiali la conversiódels Jueus al cristianisme el segle XIII a Europa: Jaume I d'AragóiEnric III d'Anglaterra.

3. Meeting with Ilan Chet, Deputy Secretary General for Higher Education and Research Secretariat of the Union for the Mediterranean (Barcelona)

On February the 24th.As the Barcelona Knowledge Hub is the hub for the countries of Southern Europe and the Mediterranean, its Academic Director, Ricard Guerrero, met llanChet (UfM) in order to programme a series of activities involving Mediterranean countries. Several activities planned in Mediterranean cities, such as a Meeting in the New Library of Alexandria or in Tunisia, connected to the celebration of the 700th anniversary of the death of RaimundusLullius, a Mediterranean intellectual that epitomizes the integration of science and the humanities, have had to be postponed, due to the difficult political situation of some countries. We expect to restart these activities once the conflicts are less dangerous. Other activities with the UfM are being prepared.

MARCH, 2015

1. Organisation of the BHK-AE WOMEN'S WEEK 2015 (Barcelona, March 4-6)

The Barcelona Knowledge Hub of the Academia Europaea joined the celebration of the International Women's Day 2015 organising several activities in Barcelona on 4th, 5th and 6th of March. Those activities were:

Wednesday, March 4, from 5 to 8.30 pm, at Pi iSunyer Room, Institute for Catalan Studies (IEC, Carme 47, Barcelona)

InterSection Workshop: "Women and the academic ladder"

Several talks were offered by women at different positions of the scientific and academic scale: Clara Corbella (UPC, Barcelona), Margaret Luppino (Mt Holyoke, MA, USA; Barcelona), Maryam Ghafouri (Teheran; Madrid), M. Dolors Garcia-Ramon (UAB, Barcelona) and Lourdes Beneria (Cornell; Barcelona). He convenor was Lynn Kamerlin (Uppsala Univ., YAE).

Thursday, March 5, from 6 to 7.30 pm, at Pi iSunyer Room, IEC

Projection of "In Search of Truth. In memory of Lynn Margulis", a short film in remembrance of biologist Lynn Margulis (Chicago, IL, 5th March 1938 - Amherst, MA, 22nd Nov. 2011). The projection included comments by director, CarmePuche.



International Women's Day 2015 Lecture: "Empowerment of women in the academic world" by Lynn Kamerlin, Uppsala University, Chair of the Young Academy of Europe. Convenor: Anna Alberni (ICREA, UB).

Thursday, March 5, from 7.30 to 9 pm. At the Royal Academy of Medicine of Catalonia (RAMC, Carme 47, Barcelona)

Women's Sephardic Songs in concert

The historical Anatomical Amphitheatre at the 18th Century building of the RAMC embraced a concert of "Women's Sephardic Songs" by Olga Miracle, soprano, accompanied by Noemí M. Agell and Pere Olivé, string and percussion instruments.

Friday, March 6, from 10 am to 12.30 pm. At theEdificiForum, an outstanding building by Herzog & de Meuron (Leonardo Da Vinci 4, Barcelona)





<u>The MuseuBlau</u> is a new cultural icon for Barcelona. The exhibitions of the museum propose a journey through the evolution of our planet Earth and the richness of natural world. The visit wase directed by Marta Punseti, from the Museum of Natural Sciences of Barcelona.

From 1 to 3.30 pm. At the Cercle del Liceu (La Rambla 65, Barcelona)





Visit to the CercledelLiceupinacotheque

The BHK-AEoffered a lunch in honour of the MAE and members of the YAE.

2. Collaboration with "Neuroscience and..." Lectures and colloquia with the CGR, UPF (Barcelona)

Date & Place: 17-20 March 2015 - 19h - Institute for Catalan Studies

Within the framework of the <u>2015 World Brain Week</u>, the Centre for Genomic Regulation organized a set of debates surrounding neuroscience. The events, had the collaboration of the Barcelona Knowledge Hub, and were distributed during three days:

- a) Ethics of discoveries in neuroscience. March 17. 19-21 h. IEC Building, Pere i Joan Coromines Room. "Cómo los descubrimientos en Neurociencia cambian nuestras concepciones éticas" Lectureby José Ramón Amor, Universidade de A Coruña.
- b) Role of women in science: going forward or backward? March 19, 19-21 h. IEC, Nicolaud'Olwer Room. "Mujeres en Ciencia: ¿avanzando o retrocediendo?" Lectureby Mara Dierssen, fromthe Centre de Regulació Genòmica de Barcelona.
- c) Human Brain Project: lights and shadows of big projects. "El Human Brain Project: luces y sombras de los mega-proyectos", lectureby Javier de Felipe (CSIC- TechnicalUniversity of Madrid. UPM-CSIC (Centro de Tecnología Biomédica, Campus de



Montegancedo, UPM). March 20, 19-21h. IEC Building, Pere i Joan Coromines Room.

APRIL, 2015

1. Collaboration with a lecture by Rodger Bybee: "The 5E (USA) instructional model", at the CCCB (Barcelona)

Rodger W. Bybee, an international authority on science education, designed the 5E model of instruction, which offers a constructivist perspective on science education focused on inquiry-based learning, experience, knowledge building, and discovery make it the perfect tool to improve the quality science education. As the model is now being implemented in Catalonia, the BHK-AE co- organised with Héctor Ruiz, from <u>Science Bits a lecture of Rodger Bybee</u>, at the Contemporary Culture Centre of Barcelona(CCCB, Montalegre, 5, 08001 Barcelona).

MAY, 2015

1. Collaboration with "Memory Frictions: Conflict-Negotiation-Politics. International Conference on Contemporary Narratives in English" (Zaragoza).

The BHK-AE co-organised with Susana Onega (MAE) and Silvia Pellicer (Burgen Scholar of the AE, 2014) on 6–8 May 2015, a conference focused on friction areas related to memory and its literary representation, to bring fresh perspectives which can be added to or set against previous developments in the field.

http://cne.literatureresearch.net/conferences/upcoming-conference

2. Meeting with the authorities of the Union for the Mediterranean

On 27 May, the Academic Director of the BHK-AE had a meeting with Anna Terron, Special Representative and Spokesperson for the Secretariat of the Union for the Mediterranean, in order to broaden the scope of relations and activities of the BHK-AE.

3. Preparation of the IYL 2015 (Lisbon).

The BKH-AE Academic Director, Prof. Ricard Guerrero attended a meeting to continue with the preparation of the activity planned in Lisbon for the IYL 2015.

JUNE, 2015

1. Collaboration with the UNU-GCM Conference on "Female Socio-cultural Change" (Barcelona)

On June 11-12, 2015 at the Sant Pau Art Nouveau Site. The Barcelona <u>UNU-GCM</u> hosted a conference on <u>"Female Agency, Mobility and Socio-cultural Change"</u> in which Maria Paradiso, member of the International Advisory Committee of the Barcelona Knowledge Hub, gave a lecture. The conference examined topics such as female agency, diasporas and transnationalism, labour and decent work, processes of identity construction, the sociocultural reconstruction of home, work and urban spaces and policy responses to female mobility.





2. Collaboration with the IEEC Asteroid Day, "Assessing the nature of asteroid impact hazard to transform it into technological opportunity", June 30 (Bellaterra)

Within the framework of the International Asteroid Day, the Institute for Space Sciences and the Barcelona Knowledge Hub organized a conference on June 30, at the Institute for Spatial Studies of Catalonia (IEEC), in Bellaterra (Barcelona), entitled "Assessing the nature of asteroid impact hazard to transform it into technological opportunity", in which participated Josep M. Trigo-Rodríguez (CSIC-IEEC), Jordi Llorca (UPC), M. Moreno-Ibáñez (CSIC-IEEC) and Mar Tapia (LEGEF-IEC).

3. Nominations of new Members of the Academia Europaea (Munich and London)

On June 22-23, the BHK-AE took part in the nomination process of Classes B and C. Tasks mainly included administration support before the nominations' meeting, attendance to nominations' meetings in Munich (Núria Radó) and London (Ricard Guerrero), and drafting of the minutes of both meetings.

The BHK-AE prepared the dossiers and full list of candidates for the Class Sections, which were available on a stick/cd in advance of the meeting, and asked Section chairs for the summary assessment reports and rankings of the candidates. The staff wrote the minutes of the meeting, showing discussions and any specific recommendations, rejections, deferrals and reasons etc.

JULY, 2015

1. Organization of the BHK-AE & CIÊNCIA VIVA INTERNATIONAL SYMPOSIUM "LIGHT, FROM THE EARTH TO THE STARS" (Lisbon, July 2-3)

The Barcelona Knowledge Hub of the Academia Europaea commemorated the International Year of Light on July 2-3, 2015. The event was held in the <u>Pavilhão do Conhecimento</u> (Lisbon). The activity was developed in collaboration with Rosalia Vargas, director of *Ciência Viva*, the Portuguese Agency for Scientific and Technological Culture.

The Symposium was inaugurated by a lecture of Prof. Dennis Weaire, in representation of the Academia Europaea, and of its president, Prof. Sierd Cloetingh, who was not able to attend the meeting in person.

2. Preparation of the International Conference in Honour of J.M. Gago, for November (at Lisbon)

On July 15-18, Ricard Guerrero, Academic Director of the BKH-AE held different sessions in Lisbon to prepare an International Conferences in honour of J.M. Gago, former Minister of Science of Portugal (deceased on April 17, 2015) for November, to be developed in the Pavilhao do Conhecimento.

SEPTEMBER, 2015

1. Participation in the EPTA Annual Meeting (Paris, September 23-24)

European Parliamentary Technology Assessment

On September 23-24, Ricard Guerrero, Academic Director of the BKH-AE attended the 2015 EPTA Council meeting, hosted by the French National Assembly. The meeting was held in Paris, in the premises of the Assemblée National, 101 rue de la Université. EPTA is the <u>European Parliamentary Technology Assessment</u>, a body integrated by different committees assessing their respective Parliaments on matter related to science and technology. Prof. Guerrero was invited in his quality of member of the CAPCIT (the Advisory Branch for Science and Technology of the Catalan Parliament).

The 2015 EPTA meeting was devoted to the "Innovation and climate change: the role of scientific and technological assessment". The main topics discussed were: "Innovation for energy efficiency of buildings", "Innovation to feed the world whilst reducing greenhouse gas emissions", "Innovation for transportation and sustainable mobility" and "Citizens' involvement in the use of smart technologies".

At the end of the meeting was presented and discussed a 104 pages EPTA's green paper on the topic of the meeting.

OCTOBER, 2015

1. Starting the BarceloNEWS, the BKH-AE Digital Newsletter

The BHK-AE started the publication of a digital newsletter, under the name of BarceloNEWS. See on the link below the issues published in 2015 (four: October 19, November 3, December 1, and December 15).

http://barcelona.acadeuro.org/newsletter/

2. Collaboration with the YAE Interviews Project (Barcelona, October 28-30, and Stockholm. December 10)

The BHK-AE collaborated with technical aid and locations in three interviews made in Barcelona: Lourdes Beneria, at the Library of Catalonia, formerly Hospital of the Saint Cross, Genoveva Martí, Royal Chapel of St. Agatha, and Salvador Giner, Institute for Catalan Studies.

NOVEMBER, 2015

1. Collaboration with the International Symposium "Visualising Law. Visual Jurisprudence and Literature" (Verona, November 11-13)

In accordance with the terms of the 2015 AE Hubert Curien Fund, the BHK-AE gave administration support to "<u>Visualising Law. Visual Jurisprudence and Literature</u>", an International conference held in Verona on 11–13 November 2015, organised by AE member Prof. Daniela Carpi.

2. International Conference in Honour of José Mariano Gago "Science Today Knowledge as Our Common Future" (Lisbon, November 20).

Daniela Carpi

and

On the 20th of November the Academic Director of the BHK-AE, Ricard Guerrero went to Lisbon to the <u>International Conference in Honour of José Mariano Gago.SCIENCE Today and Knowledge as Our Common Future</u>. He attended on behalf of the *Academia Europaea* delegated by the President, Prof. Sierd Cloetingh.

Declaration: Knowledge as Our Common Future

The meeting was useful for the BHK-AE as well, as it reinforced the relations between the BHK-AE and <u>Ciência Viva</u>, the Portuguese National Agency for Scientific and Technological Culture, focused on the communication of science to the society (through projects on schools, national campaigns of science outreach, and a net of interactive museums of science and technology).

The meeting was organised by Manuel Heitor, who was made Minister of Science in early December 2015, by the new Government of Portugal.

3. Meetings in Fundación Ramón Areces to prepare a symposium in honour of J.M. Gago (Madrid)

From the 24th to the 26th of November the Academic Director of the BHK-AE, Ricard Guerrero met in Madrid with Federico Mayor, Director of the *Ramón Areces Foundation* (a foundation related to scientific patronage, by means of the promotion and diffusion of science), to prepare an International Symposium together the Foundation and the *AE*, which is planned to take place during the first semester of 2016.

DECEMBER, 2015

1. Organisation of the BHK-AE DISPUTATIO WEEK 2015 (Barcelona, December 9-11)

For the Third Modern-Day <u>Disputatio</u> of <u>Barcelona</u>, which was celebrated from 9th to 10th of December, the BHK-AE proposed a discussion around the topic "Natural vs. Artificial Intelligence", in which the two scholars will debate about the challenges humanity has nowadays, and which could be the possible changes in our behaviour, and sociological relationships due to the present technological progresses in computer science, information technology, Big Data, brain mapping, etc.

This year's *Disputatio* had as *disputantes*, Ms Núria Sebastián, Professor and Researcher at the Universitat Pompeu Fabra (Barcelona) and Vice-President of the Scientific Council of the European Research Council (ERC), and Mr Ulises Cortés, Professor and researcher at the Computational Sciences Dept. of the Technical University of Catalonia (UPC).

Several activities took place:

a. Disputatio of Barcelona: Natural vs. Artificial Intelligence

December 9, 18-20h (Royal Chapel of St. Agatha, viewing the famous Epiphany altarpiece by JaumeHuguet, 1412-1492)

Speakers: Núria Sebastián, UPF ("Human intelligence: Language to begin with"), and Ulises Cortés, UPC ("Artificial Intelligence: What's in a name?"). Convenor: Genoveva Martí (ICREA, UB, MAE, IAC).







20.00 h – 21.30 h Concert of Lidia Pujol: "Around the music and concepts of Ramon Llull (1232- 1316)." (Royal Chapel of St. Agatha)

Song: El testament d'Amèlia

b. InterSection Workshop on "The panoptic vision of the world: The influence of technology and humanities on society"

December 11 09.00 h - 17.00 h (IEC, Nicolaud'Olwer).

<u>Speakers</u>: AnneButtimer, Amadeu Viana, Maria Paradiso, Víctor González Galera, Naba Barkakati, Xavier Maymó, Salvador Giner.

Convenors: Rosalia Vargas, Genoveva Martí, Maria Paradiso.

Homage to José Mariano Gago (1948- 2015): Rosalia Vargas, Enric Banda, Ricard Guerrero.

c. Visit to the Super Computing Centre, "Mare Nostrum".

Talk by Alexander Fidora (YAE) Ramon Llull, proto- European, and protofounder of computational sciences.

2. AE Board Annual Meeting (Barcelona, December 9-10)

Date & Place: 9-10 December, IEC Building, PuigiCadafalch Room.

Within the framework of the Disputatio 2015, the Annual Academia Europaea Board Meeting was held in Barcelona.

3. IAC Annual Meeting (Barcelona, December 10)

Date & Place: 10 December IEC Building, PuigiCadafalch Room.

Meeting of the International Advisory Committee, in which main objectives and guidelines for 2016 were determined.

4. Proposal of nominations for different prizes:

October: Jorge Allende (Chile) for the José Martí Prize (UNESCO).

November: <u>James E. Lovelock (UK)</u>for the <u>Catalonia International Prize (</u>Government of Catalonia) December: <u>Salvador Giner for the Ferran Soldevila Prize (</u>Fundació Congrés de Cultura Catalana)

KNOWLEDGE HUB BERGEN

The Hub office in the premises of Business Region Bergen (BRB) opened for Hub business 4 March 2014, and has operated regularly after the official Hub inauguration 30 May 2014.

AEkhRB - MISSION STATEMENT (short version)















AEkhRB will act as the AE branch in The Nordic, Northeastern and Arctic regions, fostering scientific knowledge and research, especially, but not exclusively, develop, and run activities focussing upon the Northern Seas and Arctic Region.

Specifically the Hub will concentrate upon Northern Seas related European resources and opportunities, in particular:

- (i) energy, seafood and maritime logistics, and also threats associated with the fragile northern margins;
- (ii) all related sciences and the social sciences and humanities aspects of issues identified; also
- (iii) the 'hub' will provide access to facilities, equipment and personnel for use by the AE and [subject to any separate agreements] with the Young Academy of Europe (hereinafter, YAE), to enable the development

of this association's structured its startmission statement.

Considering also food as energy, ENERGY CULTURE. Survival and surprisingly habitable Northern early times depended on energy used, the concept energy being



), to enable the development activities. The Hub has up work according to the

the Hub's focus is on development in the parts of Europe has since although other words were coined in recent centuries. Knowledge about and ability to use natural resources with wisdom, combined with awareness of the tracks of humanity in the landscape, are central in our times. Energy and power is a unifying element – our culture is an Energy Culture, also in our health services where beams of various kind for scanning and therapy are employed.

L.P. Csernai is the Hub's energy project director, and is together with Professor John Ludden (UK) the AE members of EASAC's Energy Steering Panel.

REGULAR EVENTS ORGANIZED BY AEKhRB

BHAG Meetings: The Hub's advisory group BHAG had 3 regular meetings in 2015.

Hub Topical Talks (TT) - were given in all 3 BHAG meetings in 2015. These talks open for MAE, MYAE and Hub associates (not necessarily MAE), have been important for trying out project ideas, and for forming the Hub team. The talks were as follows:

- Bergen 25 February: "Topical Talk for MAE and Energy Forum, Prof. Jarle Berntsen Department for Mathematics UiB: "Ocean Power" / "Havkraft".
- Bergen 9 November: ""Thematic talk" from 1630-1730: "Accidental explosions in process industries a real threat?" by Prof. Rolf K. Eckhoff, IFT/UiB (MAE).
- Bergen 15 December "Thematic talk" from 1630-1730: "Fermi's paradox: Extra-terrestrial life?" by Ph.D. Student Jesper Tveit, Institute for Physics and Technology, UiB and BKK

Hub Public Topical Talks (PTT) — often in joint venture with other organizations. An extended (two or more hours, more than 1 speaker) version of the regular (max 1 hour, normally 1 speaker) Topical Talk(s) (TT) * attended by MAE, YAE and Associates of the Hub, in conjunction with regular BHAG meetings. (*The 'Forum' for the TT, rooted in Bergen history, is referred to as QuodLibet- AE, ((ask) whatever you like), reflecting the open atmosphere).

Bergen 25 November 2015 A. Erdal (UiB), D. Röhrich (UiB MAE), J.S. Vaagen (UiB, MAE) « Da Bergen fikk
materiens byggesteiner til å fly» («When Bergen got the constituents of matter to fly»). Arranged in collaboration
with Bergens Geofysikeres Forening and IFT University of Bergen, at Geophysics' Institute and the Van de Graaff
(BEAM) laboratory.

OUTREACH TOOLS: CONSENSUS and NorSAC

28 November 2014: BHAG decided in its meeting to organize in the future two new types of regular annual events (Summer programme):

CONSENSUS (annual, early summer) – Public discussion (2 hours) in the spirit of the Nordic Model - analogue to Barcelona's DISPUTATIO.

NorSAC (annual, late summer) – **Nor**thern **S**eas **A**chievement **C**olloquium: Colloquium (Symposium) to highlight Hubmission related scientific achievement or achievement related to strengthening interplay between Northern Seas countries.

THEMES AND PROJECTS

The Workplan of AEkhRB is divided in Themes (T) reflecting the mission statement, and related projects (P) running, or to be initiated. Milestones reached or to be reached will be reported later. Themes and projects have emerged since start up in 2014, and suggestions scrutinized by BHAG, giving the list below, and a number of candidates for future consideration. A selection criterion at start-up was links to ongoing BR activities, relations to the Hub Partners, i.e. mechanisms to help a fast start-up, while at the same time keeping in mind relevance for the wider Northern Seas region. Thus, contacts with AE Sections have been useful to guarantee interest for the projects. Feedback from the London office has also been very useful. The Hub has already been/become partner in joint ventures, also guest on Nordic visits, and a future role as mentor seems to be an appreciated and a realistic ambition. The Hub has made preparations (SWOT analysis) for possible future participation in AE's contribution to the EC Scientific Advice Mechanism (EC- SAM).

The list of themes and projects may be ordered as follows, where [acronym] indicates collaborators:

T1 ENERGY AND SOCIETY – HISTORY and HERITAGE

[HFK, UNESCO - UiB]

T1-P1 Energy in the development of Northern Seas

T1-P2 Energy, Environment and Cultural Heritage of Northern Seas



T1-P3 Exploration and harvesting in Northern Seas; Reconstructing a Viking Age Energy culture

T2 ENERGY AND FOOD PRODUCTION [UNIS]

T2-P1 CSHQ (Cold Seas - Hot Questions), see Regional Members Meeting (RMM)

T3 ENERGY IN SCIENCE [BKK, UiB]

T3-P1 BEAM – Bergen Energy and Accelerator Museum, being upgraded to become candidate for European historical (Van de Graaff) laboratory and tailored for visitors. (See PTT 25 November)

UiB EIA Forvaltningsplan 10312 "Kjernefysisk Laboratorium". (See also T4-P2).

T3-P2 Exploring the shores of fundamental matter

T3-P3 Fluid calculation: From Fermi Sea to Northern Sea (see Summer Programme 2015 - NorSAC 2015- T3-P2&P3)

T4 ENERGY AND HEALTH [UiB, Helse Bergen]

T4-P1 BEAMED – Linked to BEAM and the upcoming Bergen Particle Therapy centre and other present and future Northern Seas facilities. Promoting a joint venture culture between physical sciences/technology and medicine. See Summer Programme 2015 (IIA Leonardi) and PTT 25 November.

T4-P2 ROLF WIDERØE (Norwegian) – Progenitor of particle accelerators "BESATT AV EN DRØM – Historien om Rolf Widerøe", (Driven by a Dream – The History of Rolf Widerøe), Aashild Sørheim, 2015 Forlaget Historie & Kultur AS(730p), ISBN:978-82-8323-000-0.

Widerøe made constituents of matter fly, designing accelerators, atom smashers and devices for particle therapy like betatrons. Hub AcaDir Vaagen and Hub Associate Finn Aaserud (NBA, Copenhagen) have been associated with the book project since its origin. A less comprehensive Widerøe biography was published by Pedro Waloschek in German (Vierweg 1993). English and Russian translations are now also available.

T5 ENERGY AND POWER PRODUCION [UiB, EnergyForum]

T5-P1 Competance transfer between fossil and non-fossil production T5-P2 A (near) future for CCS and Mongstad?

T5-P3 HOPE – Hydro and Ocean Power and Energy (EASAC partner project?) See TT 25 February & TT 9 November

THE NORDIC MODEL IN A CHANGING WORLD [UIB, NHH]

T6-P1 Assessing dependence of NORDIC MODEL on energy/technology resources

See Summer Programme 2015- CONSENSUS (below)

T7-P1 TASIII- Text, Action and Space (Literature) [UiB, AAU]

In addition: The Hub Academic Director - Vaagen has had numerous meetings with collaborators and working teams linked to the projects, and participated in relevant conferences, in particular in the Niels Bohr Archive / Carlsberg . Vaagen followed by Csernai have served as AE representatives on the **EASAC** Energy Panel, thus integrating the Hub energy work with the joint European work..

Summer 2015 Programme of events.

Bergen 17 June: REGIONAL MEMBERS' MEETING AND "CONSENSUS"

Venue: Grand Selskapslokaler, Spisesalen (Bergen Chamber of Commerce and Industry)

Presentation of Hub Themes for comments and suggestions:

J.S. Vaagen (Hub Aca Dir. MAE),

Short presentations of selected Projects:

K. Ytre-Hauge (UiB), O.A. Misund (MAE), S.E. Larsen (MAE),

Special Theme- The Arctic Dimension:

Energy; L.P. Csernai (UiB MAE), Environment; E. Jansen (UiB MAE), Law; (E. Nordtveit, UiB)

CONSENSUS 2015 - Public discussion in the spirit of the Nordic Model - analogue to Barcelona's DISPUTATIO

Theme and Question: The Nordic Model is generally understood as a social system blending a market economy with a robust welfare system. **Is the Nordic model fading – outdated?** What do we learn from Piketty?

Chair: S. Cloetingh (AE President):

Convener (Co): K. Moene (UiO, MAE): Profiling Theme and Question (20 minutes).

CONSENSUS Panel: Moderator=Convener, (F.H. Aarebrot, UiB), Y (R. Hannesson, NHH).

Contributor: Alf Erling Risa (UiB) Contributor: Eirik Schrøder Amundsen (UiB)

Short narrative (Summary) by Acad. Dir. Vaagen.

Offshore Northern Seas activities have underpinned Nordic Model Practice in Northern Europe. A year after a drastic drop in oil price, addressing the CONSENSUS question "Is the Nordic Model fading – outdated?" was very timely, with new lessons learned.

The site of the event was the Bergen Chamber of Commerce. The convener

K. Moene (UiO, MAE) and the main debaters F. Aarebrot (UiB) and R. Hannesson (NHH), born in Iceland, are all well-known; From science - linked to the Nordic Model; from leading Norwegian newspapers and from TV. They created an exciting atmosphere and exchange of viewpoints.

A consensus was reached that in times that are a' changin' (Bob Dylan), the Nordic model provides a standard for better understanding what is going on.

With the AE board and former AE president Lars Walløe present, and contributors to the associated three-day programme, CONSENSUS 2015 became an informative scientific colloquium, still accessible to a wider audience. Invited contributors among the audience helped to sharpen the questions. So did the contributions from members of YA

Bergen 29 July - NorSAC 2015

NorSAC2015 – Northern Seas Achievement Colloquium – Colloquium to highlight Hub mission-related scientific achievement or achievement related to strengthening interplay between Northern Seas countries.

EXPLORING THE SHORELINES OF FUNDAMENTAL MATTER Lessons of the RNBT Collaboration after 25 years (1990-2015) IFT UIB

Perspectives

AE has become increasingly visible via its involvement in projects; an example is its role in the creation and operation of EASAC (European Academies'Science Advisory Council) and its topical (Energy, Environment, Biosciences) Steering Panels. Members of the Hub have served/serve on these panels and in Council. This with success has linked Academia closer to Europe's decision making. Europe is known for its BIG SCIENCE "factory" CERN, European scientists have, however, also joined up in smaller teams and created competitive multinational intra-European collaborations with success on the catwalk of science. So also in the Northern Seas region. This has also helped to get the Hub started; it has strengthened the European Idea, and ties between the nations, providing in a sense a science diplomacy. It has focused European technology investments, and development of conceptual tools has guided European research.

Academic research has the last few generations increasingly underpinned the successful development in this part of Europe, where The Nordic Model has been widely implemented (hence the name) and lessons learned, relevant for understanding Piketty's recent book *Capital in the Twenty-first Century*. Driven by findings of resources, in particular in the energy sector, also the Nordic welfare states now face changing times and new challenges, requiring insight that is ever more scientific. Members of YAE will find many important and interesting tasks lying ahead, keeping Europe competitive. The vision of the AEkhRB is to be mentor in this transformative venture.

ASSOCIATED PROGRAMMES

June 15-18 COLLOQUIA

16 June: Joint YAE/AE symposium on clean energy and climate modeling

Lynn Kamerlin (Uppsala U.): Welcome and introduction to YAE, and recent activities:

Inga Berre (U. Bergen): Geothermal Energy

Sveinung Hagen (Statoil); Carbon capture and storage Break

Nedjlejka Zagar (U. Ljubljana): Atmospheric energy distribution and climate models

Bjørn Olav Brandsdal (U. Tromsø): Hunt for living gold, Enzymes, extreme environments

Jonatan Klaminder (Umeå U.): Fishy behavior

Lynn Kamerlin (Uppsala U): Research reward, recognition and excellence: The example of Biomedicine

Joeren van der Sluijs (U. of Bergen): Decades of climate research, lessons for science.

André Mischke (Utrecht University): Matter of the early universe.

Eldar Heide (University of Bergen): Textual Information on Viking Age Maritime Technology

17 June: EASAC/JRC meeting on Nuclear Energy and Management of Spent Fuel

Jan S. Vaagen (Academic Director, AE Bergen Hub) Introduction & welcome by host:

Ole Didrik Lærum (EASAC Scientific Council) Presentation of EASAC

Dóra Dudás (Project Officer, JRC-EC, Brussels) Presentation of JRC,

Ákos Horváth (EASAC & dir. Center for Energy Research, Hungary) Nuclear Energy in Europe

Gunnar Buckau (EC) Presentation of the Council Directive (2011/Euratom) Community framework for the responsible and safe management of spent fuel and radioactive waste

Pierre Kockerols, Senior Expert - Nuclear Safety and Security, Joint Research Centre, European Commission) Presentation of the joint report of EASAC and JRC on the "Management of the Spent Nuclear Fuel and its Waste"

Round table discussion

Chair: Laszlo P. Csernai (AE Council)

Øivind Berg (Senior Advisor, Institute for Energy Technology, Halden reactor, Norway)

Gunnar Buckau (Inst. for Trans uranium Elements, Joint Research Center - European Commission)

Selected talks are available at the http://acadeuro.b.uib.no/activities/meetings/ website.

Bergen 29 July

NorSAC2015 – **Northern Seas Achievement Colloquium** – Colloquium to highlight Hub mission-related scientific achievement or achievement related to strengthening interplay between Northern Seas countries.

EXPLORING THE SHORELINES OF FUNDAMENTAL MATTER

Lessons of the RNBT Collaboration after 25 years (1990-2015) IFT UIB

Programme

Chair: L.P. Csernai (Bergen MAE)

Øyvind FRETTE, Chair of Department: Welcome address

J.S. Vaagen (Bergen) MAE: Forming RNBT-Paradigmatic Lessons, Shore (Drip)-line Architecture

M.V. Zhukov (Gøteborg, Kurchatov): Hindsight on RNBT Scientific Highlights

D. Gridnev (FIAS, Frankfurt am Main): Magic of Few-Body Systems

Chair: Strottman

E. Osnes (Oslo) MAE: Nordic Nuclear Theory in Retrospect

Chair: Röhrich

C. Joas (Copenhagen): Many-Body Physics in the 1950s and 1960s.

R. Leonardi (Trento): European Visions and Birth of ECT in Trento

S. Ershov (JINR, Dubna): Excursion into Borromean Continuum

Chair: Cheng

G. Hagen (Oak Ridge Nat. Lab.): Advances in Coupled-Cluster Computations of Nuclei

D.D. Strottman (Fellow, Los Alamos Nat. Lab.): Perspectives of Nuclear Theory from Los Alamos

L.P. Csernai (Bergen) MAE: What will the Future Contain?

Chair: Vaagen

Selected talks are available at the http://acadeuro.b.uib.no/activities/meetings/ website

Narrative (Summary)

Reporters (V&Z): J.S.Vaagen (Bergen, mae) & M.V. Zhukov (Göteborg/Moscow) RNBT and the Borromean Paradigm

The letters **RNB** in the acronym RNBTheory have a dual interpretation: A Regional; *Russian-Nordic-British* and a Topical; *Radioactive Nuclear Beam*, - theory aimed at studies of the architecture of the nuclear stuff at the drip-lines where atomic nuclei dissolve.

The collaboration is associated with Borromean nuclei. It coined this name, chose the three

Borromean rings as logo and developed successful quantum theory for the architecture of exotic three-body halo nuclei at the shore-lines of fundamental matter. In physics, the rings now represent a **paradigm**, an analogue model that helps understand formation of exotic structure of composite quantum matter. Annually numerous new references to the Borromean concept are made.

NorSAC portrayed a team of **theorists**. Theorists are no longer necessarily lonely wolves who expect a one-way relation where the experimentalists come to them for advice.

The RNBT story could not have been told unless the **experimentalists** had become close partners. Neither could it without complementary insights and gifts in the theory team, including ability to communicate with the experimental community.

Learning how to collide nuclei in Big Science accelerators, in particular the art of using radioactive secondary beams, has during the last decades taught us how to manipulate the nuclear stuff, how to subject it to extreme conditions. Harvesting from the shore-lines of the nuclear territory has challenged and enriched our understanding of the nuclear stuff – and the venture is far from completed.

GENCO Award

In 2004 V&Z, the two now oldest living RNBT pioneers, were awarded The **GSI Exotic Nuclear Community Membership Award** in Darmstadt, for "Basic Contributions to the Theory of Exotic Nuclei and the Realization of the Borromean Principle in the Organisation of the West-East Collaboration". How is the latter part to be understood? RNB is a purpose directed collaboration (alliance) of three partners R&N&B based on complementary competence: Three Partners (Constituents) where each one needs the other two for reaching a certain overarching goal. Thus it is not favourable for any two to break away and form a binary alliance. The structure follows that of The Three Musketeers, One for all, all for one, i.e. the **Borromean binding principle**: A stable 3C linked architecture of 3 Constituents (Clusters), without any binary (2C) stable links. Each Partner may contain a number of member institutions, free to move in and out as long as the overarching competence is maintained. This gives flexibility, and a mechanism for fertilizing the society with RNB ideas, with proper reference expected. Students and Young scientists in substantial numbers have got training within RNBT, free to later leave, even to serve competitors.

Such Partner rights simplify work with experimentalists and laboratories, which often have their own house theorists. The Borromean "democratic" principle was important in the formation of RNBT during the **perestroika** in Russia (Soviet Union).

Formation of RNBT in Turbulent Times

In 1987 RNBT pioneers **Bang** (Copenhagen) & **Vaagen**, wrote a letter to Gorbachev from the international centre JINR in Dubna, where they were guest researchers. The letter reminded Gorbachev of the glasnost in the early 1920s when famous Russians like Landau and Kapitsa had research stays in Bohr's Copenhagen, and emphasized the advantages of returning to less restricted foreign travel as part of the perestroika. This would also ease the collaborative work of RNBT pioneers, who had already met frequently in Copenhagen and Dubna during the past decade.

The RNBT pioneers considered themselves mainly as quantum reaction theorists with few-body cluster competence. In 1985, the **Tanihata** group at Berkeley had discovered exotic light nuclei of gigantic size, produced in secondary radioactive beam experiments. The observation had only attracted attention from a small part of the theory community. The structure was still not understood in 1987, when the idea that the Berkeley discovery was caused by a **nuclear halo**, was put forward by Jens **Bang** in a lunchroom conversation in Copenhagen with the experimentalists

P. Gregers **Hansen** (Aarhus) and Björn **Jonson** (Göteborg, mae). Using a simple model, the two turned the idea into a Europhysics Letters, with proper reference to the discussion with Bang, and to Russian pioneering work by Migdal and Efimov. Thus the name halo nuclei came into being, what remained was a proper quantum mechanical explanation, in particular for halos with two nucleons, which required a 3-body treatment, in general considered notoriously difficult. This became the homefield of RNBT, a self-organized structure of friends, that grew in size. The name **Borromean** appeared in RNBT's most cited publication, **Physics Reports 231(1993)**, having already been used internally in the team. In NorSAC 2015 **Vaagen** and **Zhukov** outlined the formation of RNBT and paradigmatic lessons, and gave hindsight on scientific highlights, all in a style accessible for a wider audience. The youngest of the pioneers present, Sergey **Ershov** (Dubna), gave a perspective on running investigations of the Borromean continuum – open quantum systems.

Professors Eivind **Osnes** (Oslo, mae) and Renzo **Leonardi** (Trento) positioned RNBT in the Nordic theory context, the role of NORDITA, and in the creation of the European theory centre ECT* in Trento 1992/93. The great success of ECT* calls for a comprehensive historical hindsight.

Late RNBT pioneers Jens Bang (Copenhagen), Boris Danilin (Moscow), Fangil Gareev (Dubna), Valery Zagrebaev (Dubna, mae) and Konstantin Gridnev (St. Petersburg) were remembered.

Models and Dilettantes

The inner dynamics of the creative Copenhagen environment in Bohr's Mecca for quantum physics, and its open society philosophy, underpinned the formation and running of RNBT.

The physicist **Thomas Bohr**, grandson of Niels Bohr, emphasizes in a contribution to the article collection 'The atomic model 100 years' (2013), that his grandfather, inspired by the British science tradition, often liked to describe his own approach to science as that of a dilettante, derived from the Italian dilettare – to delight or amuse. The joy of nature and the fresh approach to the study of it – without too much erudition – was important to him. Niels Bohr placed himself as a connecting link between the systematic German school and the British. He wanted to base his science on fundamental principles, but if an issue was sufficiently important, one had to take it up and "do something" even though one may not yet know the ultimate principles. RNBT followed in Bohr's footsteps, now assisted by proper quantum mechanics.

The development of models and analogies became a crucial aspect of Bohr's theorizing, rooted in philosophical influence from very early in his life. The inventive dilettante goes, however, beyond simple copying. Bohr showed that, when he laid the ground for his first quantum architecture for the atom. Bohr historian John **Heilbron** made in 1977 the point that in addition to choosing the right constituents, those of Rutherford, probably the chief driving force for young Bohr (1913) was to provide binding for atoms known to be stable, knowing that the classical Saturnian atom model was mechanically unstable. At nuclear driplines RNBT showed that a Borromean quantum model provides binding for exotic halo nuclei which exhibit emergent cluster degrees of freedom.

Young Experts - Young Voices

Christian **Boas** (NBA, Copenhagen), Gaute **Hagen** (ORNL,US) and Dmitry **Gridnev** (FIAS, Frankfurt), the latter two with RNBT degrees from Bergen, linked the colloquium to history of science and creative environments, to ab- initio calculations of many-body systems on super-computers and to the magic of few-body systems. They were voices for a young generation which takes the work further, in collaborative non-Borromean settings dictated by the realities of our times. YAE may provide a suitable framework for bringing them together.

Their contributions to NorSAC gave promises for a bright future.

RNBT has been blessed with having had a number of exceptional students, some strongly visible nowadays in the original field, some choosing their own way, in companies or like James **Al'Khalili** (Guildford), now a profiled BBC science communicator, and Danas **Ridikas** now at IAEA & Saclay, involved in energy questions and non-proliferation.

The Trans-Atlantic Connection

A substantial part of the RNBT related action has in recent years moved to the USA: The UK pioneer lan **Thompson** to LLNL, and as already mentioned Hagen to ORNL hosting Nordic visitors. NorSAC was fortunate to have Professor D. **Strottman** from LANL as last speaker. His wide experience from theory leadership, and science work on matter under extreme conditions from low to high energies, provided the colloquium with a global outlook.

A two-day very successful tail-part to NorSAC, open for participants and organized by the Chair L.P. **Csernai**, gave upto-date insight in the role of nuclear beams and radiation in our understanding of both the early and present Universe, including particle therapy (R. **Leonardi**) with the recent proton facility in Trento as example.

Vaagen started the NorSAC colloquium by telling the story of **Herbert Curien**, French Minister of Science and Technology, arriving in Cambridge UK by helicopter in September 1988, to give the inaugural address in the Foundation Meeting for Academia Europaea. Vaagen drew attention to the close relations between Curien and **D. Allan Bromley**, White House Science Advisor for the George Bush Sr. administration (1989-93), Yale professor (and Vaagen's boss in the 70s'). Curien and Bromley shared concern about changing times for science, and for the outcome of the perestroika in Russia. The situation was better in Japan, which entered as a big player in dripline physics, in particular after Tanihata returned home. Thus RNBT had to address experimental results provided by Europe, US and Japan, and RNBT used the NorSAC opportunity to thank the experimentalists for the glasnost that made it possible to develop the field.

Northern Seas Alliances - past and future

Northern Seas alliances date more than 1000 years back. They were facilitated by the development of seafaring ships, for peace - trading routes, and for war. They linked Northern Seas and Russian rivers, and exchange with

Mediterranean Europe and the Muslim world. The Northern Seas history is one of joint ventures, alliances involving young people and intermarriage, also to make alliances last.

In 1998 Vaagen and Zhukov were made honorary professors at the University of St. Petersburg, created by **Peter the Great** 275 years earlier. In 1698 on his first trip West, the young tsar while in Amsterdam, head-hunted Cornelius Cruys to create and build a Russian fleet for Northern Seas. He gave him rank of vice-admiral. A copy of one of the frigates (1703), the "Shtandart" sails the seas today. Two weeks before the NorSAC event it visited Stavanger, Norway where Cruys was born and given the more modest name Niels Olufsen.

We V&Z, the oldest living of the RNBT pioneers, are proud to be linked to a city, which in spite of great sacrifices during its construction, bound Europe more tightly together: Also in academia by creating a Russian Academy of Sciences which started the development that made Russia an outstanding academic partner. Science is a tool for keeping an open world, for uniting – not dividing. A lesson emphasized by Bohr and repeated at NorSAC2015 and to be remembered in our again turbulent times.

NorSAC 2015 was attended by about 50 participants, from Europe, America and Asia, and the tail-part by about half that number. From these there were 32 registered scientists, and several other dignitaries. About a dozen Members of AE participated. The meeting included two social dinners and a joint excursion to the Hardanger fjord.

ASSOCIATED PROGRAMMES

July 30-31 COLLOQUIA linked to NorSAC 2015

Thursday 30 July 2015

Chair: Bravina, Larisa MAE (University of Oslo (NO))

STROTTMAN, Daniel - The Three-Dimensional Relativistic Hydro PIC Code I

CHENG, Yun - Hybrid models for relativistic Heavy Ion Reactions Morning: LEONARDI, Renzo (ECT*) - Hadron Therapy

Chair: WANG. DuJuan

BARNAFOLDI, Gergely: The Soft+hard Model-an Application Non-extensive Statistics ZABRODIN, Evgeny: Elliptic and triangular flows in Pb+Pb collisions at LHC Lunch Break

Chair: Barnaföldi, Gergely

VELLE, Sindre - Two particle correlations

XIE, Yilong - Lambda Polarization in an exact rotating and expanding model for peripheral heavy ion reactions KOPELIOVICH, Boris: Charmonium suppression in a cold medium

Friday 31 July 2015

Chair: Zabrodin, Evgeny (University of Oslo (NO))

BRAVINA, Larisa - The Hyjet++ model of heavy ion reactions

WANG, Dujuan - Rotation, Flow vorticity and Lambda polarization in pHIC Morning: CSERNAI, Laszlo - Collective dynamics, in relativistic heavy ion collisions Break

Chair: Kopeliovich, Boris

PAPP, Istvan - Inertial Confinement Fusion - Radiation Dominated Implosion Lunch Break

Chair: Csernai, Laszlo

STROTTMAN, Daniel - The Three-Dimensional Relativistic Hydro PIC Code II.

KOPELIOVICH, Boris: Charmonium suppression in a hot medium

Selected talks are available at the http://acadeuro.b.uib.no/activities/meetings/ website.

Prof. Jan S. Vaagen, Hub Academic Director Vidar Totland, Hub Business Coordinator

2015 New members

2015 was the first year of operation of the Class structure of the AE. There are four Classes as follows:

Class A1 – Humanities and Arts – Sections A1-A6 [Chair Professor Svend Erik Larsen (Trustee)]

Class A2 – Social and related Sciences – Sections A7 – A10 [Chair Professor Anne Buttimer (Vice President and Trustee)]

Class B – Exact Sciences – Sections B1 –B5 [Professor Don Dingwell (Trustee)]

Class C – Life Sciences – Sections C1 – C5 [Professor Ole Petersen (Trustee)]

Following the normal nominations process and assessments by individual Section committees, the Sections within each Class met to de discuss in detail the priority/ranked lists of candidates. Each agreed Class list was then tabled at the Council meeting (6 September) where new members were formally elected. In the following weeks, individual new members were contacted and invited to accept membership. **The list of those invited into membership for each class were**:

CLASS A1 Humanities	Sect.	Full name	Country	
	<u>A1</u>	Section - History & Archaeology	Section chair: Renate Pieper	
	A1	Csanád Bálint	Hungary	
	A1	Thomas Bartlett	Ireland	
	A1	Gregory Claeys	United Kingdom	
	A1	Penelope Corfield	United Kingdom	
	A1	Brendan Dooley	Ireland	
	A1	David Fitzpatrick	Ireland	
	A1	Robert Gerwarth	Ireland	
	A1	François Hartog	France	
	A1	Gabriele Haug- Moritz	Austria	
	A1	Poul Holm	Ireland	
	A1	Alvin Jackson	United Kingdom	
	A1	Bernhard Palme	Austria	
	A1	Amélia Polónia	Portugal	
	A1	Sir Richard Evans	United Kingdom	
	A1	Barbara Stollberg- Rilinger	Germany	
	<u>A2</u>	Section - Classics & Oriental Studies	Section chair: Harm Pinkster	
	A2	Gianfranco Agosti	Italy	
	A2	Gian Biagio Conte	Italy	

A2	Patrick Finglass	United Kingdom	
A2	Gian Luca Gregori	Italy	
A2	Holger Gzella	The Netherlands	
A2	Krzysztof Nawotka	Poland	
A2	Jonathan Powell	United Kingdom	
A2	Olli Salomies	Finland	
A2	Alexander Vovin	France	
<u>A3</u>	Section - Linguistic Studies	Section chair: Alain Peyraube	
A3	Helge Dyvik	Norway	
A3	Bernd Heine	Germany	
A3	Harriet Jisa	France	
A3	Ekkehard Koenig	Germany	
A3	Johanna Laakso	Austria	
A3	Frans Plank	Germany	
A3	Paolo Ramat	Italy	
A3	Andrew John Spencer	United Kingdom	
А3	Johan van der Auwera	Belgium	
<u>A4</u>	Section - Literary & Theatrical Studies	Section chair: Svend Erik Larsen	
A4	Paul Allain	United Kingdom	New media Section
A4	Heitor Alvelos	Portugal	media
A4	David Arnold	United Kingdom	media
A4	Aleida Assmann	Germany	
A4	Ros Ballaster	United Kingdom	
A4	Daniel Biltereyst	Belgium	media
A4	Göran Bolin	Sweden	media
A4	Bruce Brown	United Kingdom	media
A4	Michael Cronin	Ireland	
A4	Sean Cubitt	United Kingdom	media
A4	Maria Delgado	United Kingdom	media
A4	Johan Fornäs	Sweden	media
A4	Christopher Frayling	United Kingdom	media
A4	Jean-Michel Ganteau	France	
A4			

A4	Richard Harper	United Kingdom	media
A4	Uwe Hasebrink	Germany	media
A4	N. Katherine Hayles	USA	FOREIGN
A4	Chengzhou He	China	FOREIGN
A4	Anne Jerslev	Denmark	media
A4	Liu Kang	China	FOREIGN media
A4	Paul Michael Luetzeler	USA	FOREIGN
A4	Colin MacCabe	USA	FOREIGN media
A4	Serge Margel	Switzerland	media
A4	Glenn Most	Italy	
A4	Hannu Riikonen	Finland	
A4	Gisèle Sapiro	France	
A4	Dominic Thomas	USA	FOREIGN
A4	Patricia Waugh	United Kingdom	
A4	Jan Ziolkowski	USA	FOREIGN
A 5	Section - Musicology & History of Art & Architecture	Section chair: Philippe Vendrix	
A5	Michele Bacci	Switzerland	
A5	Georgina E. M. Born	United Kingdom	
A5	Xavier Costa	USA	FOREIGN
A5	Jonathan Cross	United Kingdom	
A5	Kathrin Golda- Pongratz	Germany	
A5	Arnold Jacobshagen	Germany	
A5	Ladislav Kesner	Czech Republic	
A5	Neil Leach	USA	FOREIGN
A5	Sergiusz Michalski	Germany	
A5	Nerdinger Winfried	Germany	
A5			
_	Katelijne Schiltz	Germany	
A5	Katelijne Schiltz Harry White	Germany Ireland	
	Harry White	-	
A5	Harry White Section - Philosophy, Theology & Religious Studies	Section chair: Simo Knuuttila	
A6 A6	Harry White Section - Philosophy, Theology & Religious Studies Claude Debru	Section chair: Simo Knuuttila France	
A5	Harry White Section - Philosophy, Theology & Religious Studies	Section chair: Simo Knuuttila	

A6	Stathis Psillos	Greece	
A6	Toni Rønnow- Rasmussen	Sweden	
A6	Risto Saarinen	Finland	
A6	Wolfgang Spohn	Germany	
A6	Szabolcs Szuromi	Hungary	

CLASS A2: Social and related Sciences	Sect.	Full name	Country	
	A7	Section - Behavioural Sciences	Section chair: Peter Scott	
	A7	Ghislaine Dehaene- Lambertz	France	
	A7	Carles Escera	Spain	
	A7	Karl Friston	UK	
	A7	Jürgen Margraf	Germany	
	A7	Anna Christina Nobre	UK	
	A7	Roy Patterson	UK	
	A7	Ernst Pöppel	Germany	
	A7	Erich Schröger	Germany	
	A7	Nuria Sebastian Galles	Spain	
	A7	István Winkler	Hungary	
	<u>A8</u>	Section - Social Sciences	Section Chair: Antoine Bailly	
	A8	Sophie Body-Gendrot	France	
	A8	Jean-Marc Coicaud	USA	Foreign
	A8	Rita Gardner	UK	
	A8	Frank Geels	UK	
	A8	John Goddard	UK	
	A8	David Hulme	UK	
	A8	Corneliu latu	Romania	

	T	
A8	Michael Jones	Norway
A8	Judith Schlehe	Germany
A8	Peter Scheepers	Netherlands
A8	Roger Kain	UK
A8	Izhak Schnell	Israel
A8	Erik Swyngedouw	UK
A8	Helen Wallace	UK
A9	<u>Law</u>	Section Chair: Joseph Straus
A9	Rosa Greaves	UK
A9	Burkhard Hess	Luxemburg
A9	Peter-Christian Müller- Graff	Germany
A9	Jochen Taupitz	Germany
A9	Rik Torfs	Belgium
A9	Luigi Carlo Ubertazzi	Italy
A10	Section - Economics, Business and Management Sciences	Section Chair: Klaus Zimmermann
A10	Business and	
	Business and Management Sciences	Klaus Zimmermann
A10	Business and Management Sciences Torben M. Andersen	Maus Zimmermann Denmark
A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi	Maus Zimmermann Denmark Italy
A10 A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc	Maus Zimmermann Denmark Italy France
A10 A10 A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton	Maus Zimmermann Denmark Italy France UK
A10 A10 A10 A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith	Maus Zimmermann Denmark Italy France UK UK
A10 A10 A10 A10 A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith Katarina Juselius	Klaus Zimmermann Denmark Italy France UK UK Denmark
A10 A10 A10 A10 A10 A10 A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith Katarina Juselius Botond Kőszegi	Klaus Zimmermann Denmark Italy France UK UK Denmark Hungary
A10 A10 A10 A10 A10 A10 A10 A10 A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith Katarina Juselius Botond Kőszegi Karine Nyborg	Klaus Zimmermann Denmark Italy France UK UK Denmark Hungary Norway
A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith Katarina Juselius Botond Kőszegi Karine Nyborg Claudia Senik	Klaus Zimmermann Denmark Italy France UK UK Denmark Hungary Norway France
A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith Katarina Juselius Botond Kőszegi Karine Nyborg Claudia Senik Nina Smith	Klaus Zimmermann Denmark Italy France UK UK Denmark Hungary Norway France Denmark
A10	Business and Management Sciences Torben M. Andersen Graziella Bertocchi Pierre Cahuc Peter Dolton Rachel Griffith Katarina Juselius Botond Kőszegi Karine Nyborg Claudia Senik Nina Smith Mirjam van Praag	Klaus Zimmermann Denmark Italy France UK UK Denmark Hungary Norway France Denmark Denmark

CLASS B. Exact & natural Sciences	Section	Full name	Country	
	B1	Section - Mathematics	Section Chair: Jurg Kramer	
	B1	Nalini Anantharaman	France	
	B1	André Yves	France	
	B1	Fabrizio Catanese	Germany	
	B1	Ingrid Daubechies	United States	FOREIGN
	B1	Corrado De Concini	Italy	
	B1	Laszlo Erdos	Austria	
	B1	Timothy Gowers	UK	
	B1	Andrew Granville	UK	
	B1	Martin Hairer	UK	
	B1	Gil Kalai	Israel	
	B1	Ib Madsen	Denmark	
	B1	Stefan Müller	Germany	
	B1	Werner Müller	Germany	
	B1	Felix Otto	Germany	
	B1	Claudio Procesi	Italy	
	B1	Laure Saint-Raymond	France	
	B1	Anatoly Moiseevich Vershik	Russian Federation	
	B1	Andrew Wiles	UK	
	B1	Enrique Zuazua	Spain	
	<u>B2</u>	Informatics (14)	c. Jan Bergstra	
	B2	Marco Ajmone Marsan	Italy	
	B2	Craig Gotsman	Israel	
	B2	Leif Kobbelt	Germany	
	B2	Jeffrey Kramer	UK	
	B2	Leonid Libkin	UK	
	B2	Zoran Obradovic	Serbia	
	B2	Michel Raynal	France	
	B2	Gene Tsudik	United States	FOREIGN
	B2	Yi Wang	Sweden	
	B2	Michael Wooldridge	UK	

B2	Daniel Dolev	Israel	
В3	Section - Physics & Engineering Sciences	Section Chair: Muhsin Harakeh	
B3	Federico Capasso	United States	FOREIGN
B3	Eugenio Coccia	Italy	
B3	Dan Frangopol	United States	FOREIGN
B3	Sibylle Guenter	Germany	
B3	Hans Irschik	Austria	
B3	Michael Peter Kennedy	Ireland	
B3	Krzysztof J. Kurzydlowski	Poland	
B3	Herbert Mang	Austria	
B3	Eugenio Nappi	Italy	
B3	Konstantin Novoselov	UK	
B3	Kostya (Ken) Ostrikov	Australia	FOREIGN
B3	Takaharu Otsuka	Japan	FOREIGN
B3	Ernő Rubik	Hungary	
B3	Sauro Succi	Italy	
B3	Friedrich K Thielemann	Switzerland	
B3	Jochen Wambach	Germany	
B3	Robert Young	UK	
В3	Fabio Zwirner	Italy	
B4	Section - Chemical Sciences	Section chair: Lynn Gladden	
B4	Doron Aurbach	Israel	
B4	Klaus Bock	Denmark	
B4	Silvia Bordiga	Italy	
B4	Richard Guy Compton	UK	
B4	Krijn de Jong	Netherlands	
B4	Roger Guilard	France	
B4	David Leigh	UK	
B4	Jacques Livage	France	
B4	Bernard Meunier	France	
B4	Maurizio Prato	Italy	
B4	Vivian Wing-Wah Yam	China	FOREIGN
В5	Section - Earth & Cosmic Sciences	Section Chair: Donald Dingwell	
B5	Pascale Braconnot	France	

B5	Martin H.H. Gerzabek	Austria	
B5	Bilal Haq	United States	FOREIGN
B5	Reinhard Genzel	Germany	
B5	Gregory A. Houseman	UK	
B5	Mioara Mandea	France	
B5	Ülo Mander	Estonia	
B5	Klaus Mezger	Switzerland	
B5	Dimitrios Sokoutis	Netherlands	
B5	Sean Douglas Willett	Switzerland	

CLASS C Life Sciences	Sect.	Full name	Country	
	C1	Section - Biochemistry & Molecular Biology	Chair: Witold Filipowicz	
	C1	Roberto Bassi	Italy	
	C1	Axel Behrens	UK	
	C1	Fabrizio Chiti	Italy	
	C1	G. Marius Clore	United States	FOREIGN
	C1	Marileen Dogterom	Netherlands	
	C1	László Fésüs	Hungary	
	C1	Ferenc Nagy	Hungary	
	C1	Mart Saarma	Finland	
	C1	Helen Saibil	UK	
	C1	John Schwabe	UK	
	C1	Maarten van Lohuizen	Netherlands	
	C1	Imre Vass	Hungary	
	C1	Reiner Albert Veitia	France	
	C2	Section - Cell Biology	Section Chair: Margaret Buckingham	
	C2	Ivan Dikic	Germany	
	C2	Michel Labouesse	France	
	C2	Christine Mummery	Netherlands	
	C2	Ruggero Pardi	Italy	
	C2	Elly Tanaka	Germany	

C3	Section – Physiology & Medicine	Chair: Dmitri Rusakov	
C3	László Acsády	Hungary	
C3	Thomas Bourgeron	France	
C3	Alain Chédotal	France	
C3	Daniel Choquet	France	
C3	László Csiba	Hungary	
C3	Kelvin Davies	United States	
C3	Barbara Franke	Netherlands	
C3	Steven Goldman	Denmark	
C3	Christopher Griffiths	UK	
СЗ	Anders Hamsten	Sweden	
C3	Christian Johannes Herold	Austria	
C3	Reinhard Jahn	Germany	
C3	Peter Jonas	Austria	
C3	Krešimir Krnjević	Canada	FOREIGN
C3	Beat Lutz	Germany	
C3	Richard Marais	UK	
C3	Chantal Mathieu	Belgium	
C3	Paul Matthews	UK	
C3	Bryan Paul Morgan	UK	
C3	Werner Muller	UK	
C3	Mihai Netea	Netherlands	
C3	John O'Keefe	UK	
C3	Carl Petersen	Switzerland	
C3	James Rothman	UK	
C3	Philip Scheltens	Netherlands	
C3	Luca Steardo	Italy	
C3	Greet Van den Berghe	Belgium	
C3	Boris Zhivotovsky	Sweden	
C3	Berislav Zlokovic	United States	FOREIGN
C4	Organismic & Evolutionary Biology	Section Chair: Yvon Le Maho	
C4	Richard Bardgett	UK	
C4	Paul Hart	UK	

C5	Section - Applied & Translational Biology	Section chair: Anne Gro Salvanes
C5	Felice Cervone	Italy
C5	Giulia De Lorenzo	Italy
C5	Svein Sundby	Norway
C5	Leif Asbjørn Vøllestad	Norway

Communications

During the year an A-Z membership directory for 2015 was published, in time for Darmstadt AGM.

As a subscribing member of the European Academies Science Advisory Council (EASAC), the AE has continued to contribute to the expert reviews and reports published by that body and circulated these to appropriate sections of the membership and through the Electronic newsletters and links on our website.

During the year, officers and Board members establish a regular discussion forums with other European organisations, notably ALLEA (All European Academies), FEAM, euroCASE and EASAC for the development of future collaborative projects and coordinated policy advice activities.

A number of statements and collaborative opinions were published.

Meetings held in 2015

The Trustees, Council and their subcommittees

The Board of Trustees met on 19-20 March, Wroclaw; 17–18 June, Bergen; 7 September, Darmstadt; 9–10 December Barcelona. All meetings were quorate. The Council met in Darmstadt on 6 September. There was an informal Class Chairs meeting also on 6 September.

Annual Business Meeting 2015

The 2015 AGM took place at the Technical University, Darmstadt on 7 September. The President was in the Chair. There were 60 members present. The minutes of the 2014 AGM were approved and signed. In accordance with the regulations: Members present elected Professor Peter Scott as Honorary Treasurer for a three-year term. The members noted the retirement during the year of Professor Roger Elliott (as Treasurer). The AGM approved the co-option of Professors D'Haen and Petersen until 2017. The members received reports from the Treasurer and adopted the 2014 consolidated activity report and accounts and approved motions to appoint the auditors. The AGM approved a motion to set the 2015 recommended member donation level at 120 Euros per member and to continue with the current policy of exemptions. The AGM approved motions from the Board to amend the Regulations to allow for the appointment of Vice President(s) ex officio. The AGM received reports from the Class Chairs and the Editor-in-chief of the European Review (Prof. D'Haen); the manager of the Wroclaw Hub (Dr Nowak) and a representative of the Young Academy. Professor Csernai presented information about the Bergen Hub. Professor Gulyas reported that the Council had agreed to award the 2016 Erasmus Medal to Prof. Martin Rees (Cosmic Sciences). Professor Petersen gave a short presentation about the 2016 Annual conference at Cardiff (in June 2016) and Professor Gulyas announced that the 2017 Annual conference would take place in Budapest. The AGM of members approved the establishing of two new Sections: In Class A1, a Section of 'Film, Media and Visual Studies' and in Class C, a Section of 'Clinical and Veterinary Medicine'. The Membership also approved a change of name for Section C2, to 'Cell and Developmental Biology' and for Section C3 to Physiology and Neurosciences.

Section reports

In 2007, Council adopted a policy setting out the procedures for the governance and management of Sections and their committees. All Section chairs are expected to provide a short report to the Annual Business meeting of members and for inclusion into the annual report. The following Sections have submitted a report for 2015:

Film, Media and Visual Studies Section

2015 marks the establishment of the section which was officially approved by the General Council in September 2015, inc. election of section chair. Section activities have been focused on section formation and selection of members. Both processes were facilitated by a taskforce as follows:

Kirsten Drotner (MAE), Patrizia Lombardo (MAE), Gabriel Gianacchi (MAE) and supported by Prof. Bruce Brown, Brighton University. Out of 19 candidates identified, 16 were elected by the AE General Council, and 14 accepted AE membership. In addition, four existing members have transferred to the section. Moreover, a first Section Committee has been set up with the following members: Daniël Biltereyst, Ghent University, Göran Bolin, Södertörn University and Patrizia Lombardo, University of Geneva, in addition to the section chair.

Kirsten Drotner

History and Archaeology

In 2015 the History and Archaeology Section elected 15 new members.

During the annual meeting of the Academia Europaea in Darmstadt, members of the History and Archaeology Section contributed to the program with four presentations on "Of Men and Tools: Shaping group identities in European history and beyond". Participants were Piet Emmer (Leiden), Nikita Harwich Valenilla (Paris), Renate Pieper (Graz), Horst Pietschmann (Hamburg). In addition three papers from the Roundtable of the History and Archaeology Section on the History of Barcelona (AGM 2014) were prepared for publication in the European Review. Besides the history of Barcelona (Flocel Sabaté, Lleida), the history of Barcelona in Venezuela (Nikita Harwich Valenilla) and the history of Cataluña (Horst Pietschmann, Hamburg) were addressed. "

Renate Pieper

Social Sciences

The Social Sciences Section, together with the Behavioural Sciences, Law and Economics, Business and Management Sciences, is working on an overarching theme in collaborative efforts on Migrations and Identity.. We held a series of well attended presentations in Darmstadt, and a new one in Cardiff (2016), before one on sustainability and resilience in Budapest (2017). We are proposing great names for the Erasmus Medal so that Social Sciences can be presented at their best in 2017. We are also part of the AE task force for a new science policy, new fields in the research programme of the EU.

Professor Antoine Bailly,

Law Section

In 2015 the Law Section was responsible for organizing the first plenary session at the Annual Conference in Darmstadt on September 8. As the title "Scientific, Legal, as well as Ethical Aspects of Embryonic and Induced Human Pluripotent Stem Cells Research and Commercialization" indicates, this highly relevant and important, but at the same time very controversially discussed issue has been addressed from three different angles. Prof. Wolfgang Zimmermann from the Medical Center of the University of Göttingen, who specializes in modification and application of human embryonic pluripotent heart stem cells for the repair of damaged heart tissues, reported on the present status of his research and the research in the area of human stem cells in general. Prof. Zimmermann spoke about the prospects and realistic expectations as regards stem cell research and also about the differences, which exist in using human embryonic stem cells on the one hand, and the so-called induced pluripotent stem cells on the other. He has also addressed regulatory problems, with which researchers are faced in their daily work and which have also an impact on international cooperation. The second talk was delivered by Prof. Jochen Taupitz from the Universities of Heidelberg and Mannheim. Prof. Taupitz, who is also Vice-President of the German Ethics Council, offered a detailed review of the widely differing rules regulating embryonic research and the generation and importation as well as use of human pluripotent stem cells of embryonic origin in different Member States of the European Union. Prof. Taupitz has analyzed reasons for the differences in approaches chosen by various EU Members. Whereas he emphasized that different legal positions, which

have to be understood as an expression of national sovereignty, were no sufficient reason to change the own legislation, especially no reason for a race to the bottom. Prof. Taupitz at the same time pointed out that legislators were well advised to observe the foreign experiences very carefully and take care that the legal system is free of contradictions. The third speaker was Prof. Christoph Rehmann-Sutter, Director of the Institute for History of Medicine and Science Studies of the University of Lübeck. The starting point of his deliberations were the difficulties which exist in defining in moral terms what the pre-implantation embryo in the blastocyst stage is. According to Professor Rehmann-Sutter, basically three different views exist in this regard: Some see in the embryo at that stage just an organized conglomerate of biologically very active cells and nothing more - an embryo according to that view was essentially a "thing". Others argue that the embryo has a full set of genes, making it an early stage of human life, fully capable to develop into a fetus and a child - thus, essentially a "person". Finally, a third view is an intermediary one, according to which an embryo is unique: A very early stage of human development and should therefore be treated with at least some dignity, not as a person, but also not just as an assembly of material - the model, the embryo as an "object of respect". Only the treatment of an embryo as "a thing" or as an "object of respect" were compatible with a rule that allows sourcing of human embryonic stem cells from donated spare embryos from in-vitro-fertilization. Apart from the sensitive issue of sourcing of human embryonic stem cells (hES), Prof. Rehmann-Sutter has in particular addressed the issue of patenting, the limitation on acceptability of medicinal risks of stem cells therapies for the patient, the exploitation of despair by commercial clinics who sell unproven stem cell therapies to patients as last chance and the good development of donorpatient relationship. The session was moderated by the outgoing Chair of the Law Section, Prof. Joseph Straus, who at the end of the session also more specifically addressed the patenting issue. He first recalled that a patent does not constitute a license to use but only to prohibit the unauthorized use of the patented invention by third parties. Therefore also the patentee can use the invention only in accordance with regulatory provisions, which depend on scientific findings related to safety, etc. and, last but not least, on public acceptance. Professor Straus briefly referred to the basic rules as set forth in the EU Directive on the Legal Protection of Biotechnological Inventions of 1998, i.e. a time at which the generation and use of human embryonic pluripotent stem cells was not known, and critically reflected on the judgments of the Court of Justice of the European Union in the Brüstle v. Greenpeace case of 2011 and the International Stem Cells Corp. v. UK Comptroller General of Patents of 2014, and questioned their compatibility with EU obligations under the WTO International Agreement on Trade Related Aspects of Intellectual Property (TRIPS). Prof. Straus deplored that as a consequence of this case law, which basically excluded from patent protection all inventions using human pluripotent stem cells, no matter how legally they were generated from destructed human embryos, these inventions can be freely copied in Europe. Prof. Straus reminded judiciary and politicians of their responsibility for tomorrow and beyond and in his concluding remarks emphasized that it was difficult to accept that a society, by and large, accepts abortion, health care financed in-vitro-fertilization, thus also destruction of supernumerary embryos, that it further accepts generation of pluripotent stem cells from destroyed human embryos, but ethically stigmatizes patents, i.e. tools which are used as incentives for research and for securing investment in R&D for products badly needed for the treatment of patients.

II.

In 2015 the Law Section welcomed six new Members: Prof. Rosa Greaves from the University of Glasgow School of Law, who is specialized in competition law, maritime law and issues related to the Court of Justice of the European Union, Prof. Burkhard Hess, Director at the Max Planck Institute Luxembourg for international, European and Regulatory Procedural Law with special focus on European and comparative civil procedural law and arbitration, as well as alternative dispute resolution, Prof. Peter-Christian Müller-Graff from the University of Heidelberg, a highly regarded specialist in European Union law, business and commercial law, Prof. Jochen Taupitz from the Universities of Heidelberg and Mannheim, Vice-President of the German Ethics Council, a leading expert in medical law, public health law and constitutional law, Prof. Rick Torfs, Rector of the Catholic University of Leuven, Faculty of Canon Law, specializing in canon law and civil law with a special focus on the relationship between "state and church" and "church and society" in Europe, and Prof. Luigi Carlo Ubertazzi, from the University of Pavia, Department of Law, whose specialization areas are intellectual property and competition law in the broadest sense. The new members, who cover a broad range of legal disciplines and come from five countries, will certainly enrich the work of the Academy in many respects.

Joseph Straus (retiring AGM 2015).

Mathematics

In 2015, the Section as a whole was very active in proposing candidates for nominations. This spirit will be kept for the nomination process in 2016. This was a very valuable support for the work of the Section Committee.

The following new members have been elected to the Section: Nalini Anantharaman (U Paris 6, France)

Yves André (U Paris 6, France) Fabrizio Catanese (U Bavreuth, Germany) Ingrid Daubechies (Duke U, USA) Corrado De Concini (U Roma 1, Italy) László Erdös (IST, Austria) Timothy Gowers (U Cambridge, UK) Andrew Granville (UC London, UK) Martin Hairer (U Warwick, UK) Gil Kalai (Hebrew U, Israel) Ib Madsen (U Copenhagen, Denmark) Stefan Müller (U Bonn, Germany) Werner Müller (U Bonn, Germany) Felix Otto (MPI Leipzig, Germany) Claudio Procesi (U Roma 1, Italy) Laure Saint-Raymond (U Paris 6, France) Anatoly Vershik (Steklov St. Petersburg, Russia) Andrew Wiles (U Oxford, UK) Enrique Zuazua (BCAM Bilbao, Basque Country/Spain)

Among them, there are the two Fields Medalists; Timothy Gowers and Martin Hairer, as well as Andrew Wiles who proved Fermat's celebrated Conjecture.

J. Kramer

Physics and Engineering (P&E) Section

1- The Physics and Engineering (P&E) Section members submitted 24 nominations by April 30, 2015. This is substantially less than nominations in previous years. Unfortunately, only one of the candidates was female. This is indeed a worrying trend. Despite encouragement of Section members to nominate more females no progress on this issue has been made.

The P&E Section Committee (SC) did not have a meeting after the nomination deadline but ranked these nominations in a transparent procedure through exchanged e-mails. In the class meeting of Class-B (Exact Sciences) in Munich on 22-23 June, the Section Chairs (Class-B Committee) considered all nominees and discussed the recommendations of the SCs of Sections B1 to B5. Except for a few cases, the recommendations of the SCs were adopted. For the P&E Section the Class-B Committee designated 18 out of the 24 candidates in category 1, i.e. "Should be elected now". This exercise paved the way for a speedy decision on the elections during the Council meeting in Darmstadt on 6 September, in which the selections made by the Class Committees, including the 18 candidates of the P&E Section, were approved.

- 2- The P&E Section Chair, M.N. Harakeh, was re-elected for a second and last term. The AE Council approved the renewal of the term in its meeting in Darmstadt.
- 3- The P&E SC took advantage of the 27th Academia Europaea (AE) congress, which was held at TU Darmstadt in the period 7-10 September 2015, and met on Monday, 7 September at 9:00 a.m. at the Maritim Rhein-Main Hotel in Darmstadt. The SC meeting followed the meeting of AE Council, which took place at 15:00 on Sunday, 6 September. The Chair, M.N. Harakeh, reported on this Council meeting, which discussed and decided on several important issues. During the meeting, Laszlo Csernai gave a report on the activities of the Academia Europaea knowledge hub Region Bergen (AEkhRB), with which the P&E Section has a close relationship. On June 17, AEkhRB organised in Bergen a Regional Members' Meeting and Consensus in which aspects of Energy, Environment and Law as well as social and economy aspects were discussed. On 29 July, The Northern Seas Achievement Colloquium (NorSAC2015) was organised in Bergen on development of nuclear physics theory, followed by associated programmes on 30-31 July on different aspects of theory and applications in nuclear techniques in proton and hadron therapy.

At the end of the SC meeting, it was pointed out that a face-to-face SC meeting to evaluate and discuss the nominations is useful and desirable. Tamás Csörgő offered to host the SC meeting end of March - early April 2016, i.e. following the deadline for nominations, at his institute in Budapest for evaluation of the submitted nominations.

Muhsin Harakeh

Section of Biochemistry and Molecular Biology

1. Statutory Participation in Selection of new AE Members,

including soliciting of opinion on the nominated candidates form all members of the Committee and participation in the Class C meeting in London in the Royal Society

- 2. Participation of a Chairman in the Erasmus Award Committee
- 3. Participation in the Annual Meeting in Darmstadt and the AE Council meeting
- 4. The chairman volunteered to be part of the Committee discussing new AE-sponsored prizes or lectures (this committee has not yet met together)
- 5. Help to Joseph Straus (formed chair of Law Section) in identification of speakers and organization of the 2015 AE Darmstadt Meeting session on Medical, Ethical and Legal Issues associated with the use of Stem Cells.

Withold Filipowicz

Section Committee of Classics and Oriental Studies

Met in Amsterdam, May 8 and 9, 2015, to discuss the nominations of new members. During the meeting in Darmstadt I organized a lunch with the few members present.

Harm Pinkster

Emeritus hoogleraar Latijn UvA

Section of Physiology and Neuroscience.

In 2015, AE Section of Physiology and Medicine was transformed into the Section of Physiology and Neuroscience. The Section had 37 membership nominations, 29 new members were elected. The Section Committee was partly renewed: two members stepped down, one new member elected. The Section took part in organising and attending International Symposium "Ion channels trimming the brain" held at Bogomoletz Institute of Physiology (Kiev, Ukraine) on September 24-26, 2015 (reported in full, above).

Dmitri Rusakov

Section for Linguistic Studies

The Section and especially the Section Committee were active in proposing nominations of new members. Ten nominations were received from members of the Section and backed up by a second nominator, whereas those proposed only by one nominator were not further considered. All the ten nominees were considered of good quality and supported by the Section Committee whose members graded them and ranked them. Nine of them were elected at the 27th Annual meeting of the AE held in Darmstadt in September 2015. The only one not elected was considered as having a grade too low, their position being at an insufficiently high enough rung in the final ranking in order to be retained.

A satellite session on "Language endangerment and revitalization" was held on 17 September 2015 during the 45th Poznań Linguistic Meeting under the patronage of the Linguistics Section of the Academia Europaea. The session was convened by the Section Committee members Katarzyna Dziubalska-Kołaczyk (Adam Mickiewicz University, Poznań), Wolfgang U. Dressler (Austrian Academy of Sciences), Alain Peyraube (CNRS Paris) and with the support of the Academia Europaea 2015 Hubert Curien Fund, and in cooperation with the Wrocław Knowledge Hub.

The aim of the session was to bring together scholars involved in the research on "small" languages, i.e., languages with relatively few speakers as well as endangered or dying languages. Such languages present a challenge for linguistics in view of their distinct properties as well as the complex social, cultural and political context of their loss. Based on examples from Europe, Asia, Oceania and Mesoamerica, the papers provided a state-of-the-art view on such issues as language documentation of endangered languages, the implications of language ideology and attitudes for language shift and revitalization as well as the theoretical and practical strategies for the revitalization of endangered languages. More specifically, the papers dealt with three issues, i.e., a) the theory and processes involved in language death; b) the effects of language contact; and c) theoretical and methodological aspects of language revitalization.

Papers from the session have been submitted for publication to the *European Review*, the interdisciplinary journal of the AF

AC.	
Alain Peyraube, Chair of the Section Committee	

Statement of Trustees' Responsibilities

The Trustees (who are also the directors of The Academia Europaea for the purposes of company law) are responsible for preparing the Trustees' Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice). Company law requires the trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- o observe the methods and principles in the Charities SORP;
- o make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.

The Trustees are responsible for keeping accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

In so far as the Trustees are aware:

- o there is no relevant audit information of which the charitable company's auditor is unaware; and
- o the trustees have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.

The Trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Risk assessment

The Trustees have assessed the major risks to which the charity is exposed, in particular those relating to the operations and finances of the charity and are satisfied that systems are in place to mitigate our exposure to these risks. However, the situation will be kept under constant review.

Financial Report

The Trustees confirm that suitable accounting policies have been used and applied consistently and that reasonable and prudent judgements and estimates have been made in the preparation of the financial statements for the period 1 January 2015 - 31 December 2015. The Trustees also confirm that applicable accounting standards have been followed and that the financial statements have been prepared on the going concern basis. The assets are available and adequate to fulfil obligations on a fund - by - fund basis.

The Academia is required by UK law to present its accounts in sterling. A version expressed in Euros could be prepared by converting the figures at the exchange rate for a particular date, but this would not be accurate since transactions are spread across the financial year, during which a range of exchange rates have existed. Any significant foreign exchange impacts are described in the notes to the accounts. The full accounts have been published separately to the activity report.

Reserves Policy

The total funds for the year ended 31 December 2015 was £101,132 [YE 31 December 2014, £148,064 (re-stated)], out of which the restricted fund was £80,502 (31 December 2014, £55,892 (re-stated) and the accumulated fund was £20,630 pounds [31 December 2014, £97,172 (re-stated)]. It is the policy of the Trustees to maintain sufficient reserves for the Academia Europaea to continue its charitable activities and in view of this, the Trustees aim to achieve reserves equal to approximately six months of operations

Income and expenditure for the period ended 31 December 2015

The year was one of slow progress towards stability. Our total income for the year was £289,624. The balance brought forward to 2016 was £101,132. Our reserves are not yet at the recommended level. The Charity operates at an effective zero balance budget. Members' subscription income was at (net) £119,614 and life membership payments totalled £20,000. But, the combined member donation total was down on that expected and the Trustees wish to stress to all members the importance of supporting the Academia by making a donation every year, preferably at the recommended level. Without more members making a payment, the AE will not be able to grow the range and type of activity and support for member initiatives that we all hope for. A voluntary scheme is preferable to imposing a compulsory subscription system. Sponsorship continued to be successful. The third and final year of the Riksbankens Jubileumsfond senior summer schools grant for the Humanities (also operated out of Wroclaw) and the continuing sponsorship of HERCULES events in Higher Education by the Wenner Gren Foundations both enhanced opportunity for member engagement. The Board continued to recognise the difficulty in obtaining core financial support from public and many private institutions. However, during the year, negotiations for a fourth regional hub in Cardiff were completed. This will further enhance the reach of the AE.

Signed on June 2016 at Cardiff by:

Professor Sierd Cloetingh (President)

Professor Ole Petersen (Treasurer)

Annex 1a Trustees, Council, Nominations sub Committee and Section Committee composition as at 31st December 2015

At the AGM in September 2015, the Regulations were amended to allow the appointment by the Board of a variable number of Vice Presidents (ex officio) to provide flexibility to the President. These changes are within the overall limits set for the Trustees in the Articles of Incorporation and do not impact on the role or seniority of the elected officers. The Articles prescribe a Board made up of not less than 3 and NOT MORE than 15 members. The Articles describe a Board made up of elected officers (President, Vice Presidents and the Treasurer - all elected by the general meeting); a number of members (elected by the Council) and a number of co-opted (by the Board) members. The subsidiary Regulations are used to determine numbers and balance up to the limit of 15. The current formula is: President, Vice presidents (2 were approved by AGM in 2012); Treasurer. Three members from the Council. A maximum of 4 co-opted members. In 2015 there were 3 co-opted members.

In December the Board approved the designation of existing Trustees as Vice Presidents ex officio to reflect new portfolios. These were Professor Dingwell (Class Chair); Professor Svend Erilk Larsen (Class Chair) and Professor Ole Petersen (Class Chair). Professor Maurer retired at 31 December.

Members of the Board of Trustees (at 31st December 2015)
The President – Prof. Sierd Cloetingh (Utrecht) from July 2014 The Treasurer - Prof. Peter Scott (London) from AGM 2015

The Vice President - Prof. Anne Buttimer (Dublin) until 2018

Ole Petersen, (UK) (Vice President (ex officio) co-opted); Theo D'Haen, (B) (Editor-in-chief - European Review - coopted); 2014, Professor Hermann Maurer (co-opted until 31 December 2015), Svend Erik Larsen (DK) (from Council Vice President ex officio), Don Dingwell (D) (from Council Vice President ex officio), Balazs Gulyas (HUN) (from Council independent)

Academia Europaea - Composition of the Advisory Council (at 31 December 2015)

All terms of office are three years, with the possibility of renewal for one further period of three years. Positions on subcommittees are not time-limited. Since September 2006 Chairs of Sections are all full members of the Council. From 1st January, 2008 all Section chairs serve a three year term (renewable once) on Council. The first date of retirement for them was 31 December 2010. The Trustees (Officers) are de facto members of the Advisory Council.

President* Vice-President(s)* Treasurer*	Sectn.	First appoint.	Reappoint	Retire
Independent Council Members ele	cted by A	<u>kGM</u>		
Laszlo Csernai, Bergen Marie Farge, Paris Balazs Gulyas, Stockholm*,	B3 B3 C3	Sept 2013 Sept 2013 Sept 2010	2016 2016 2013	2016

Plus all the Chairs of Sections (as follows).

Academia Europaea Section Committees Chairpersons and Committee Members¹ At 14 January 2015

CLASS A1

A1 History & Archaeology

Chairperson2: Renate Pieper (to 2016 renewable) 4

Renate.pieper@uni-graz.at

Dept. History. Karl-Franzens University, Attempasse 8, 8010 Graz, Austria

Members of the Board (of Management)

Committee3:Graeme Barker (first term ends AGM 2016), Pieter Emmer (first term ends AGM 2016), Nicholas Canny (First term ends AGM 2016), Michaeal North (first term ends AGM 2016), Ryszard Stemplowski (first term ends AGM 2016)

A2 Classics & Oriental Studies

Chairperson: Harm Pinkster (until AGM 2016)

h.pinkster@uva.nl

Herengracht 102G, 1015 BS Amsterdam, THE NETHERLANDS

Committee: Carmela Baffioni, Irene de Jong, I. Hijiya-Kirschnereit, Tonio Hölscher, Juha Janhunen,

Heikki Solin

A3 Linguistic Studies

Chairperson: Alain Peyraube (until AGM. 2016)

peyraube@ehess.fr

Ecole des Hautes Etudes en Sciences Sociales, 54 Bvd. Raspail, 75006, Paris

Committee: Bernard Comrie (till AGM 2017), Maria Koptjevskaja –Tamm (first term ends AGM 2016), Greville Corbett (till AGM 2017), Wolfgang Dressler (till AGM 2016), Pier Marco Bertinetto (first term ends AGM 2017), Katarzyna Dzoibalska-Kolaczyk (first term till AGM 2017)

A4 Literary & Theatrical Studies

Chairpeson: Vladimir Biti (to end of 2018, renewable)

vladimir.biti@univie.ac.at http://www.ae-info.org/ae/User/Biti Vladimir

Institute of Aesthetic Studies, Dept. of Comparative Literature, Aarhus University, Langelandsgade 139,

DK 8000 Aarhus C, Denmark

Committee: César Dominguez, Ottmar Ette, Marko Juvan (to end 2017), Lucia Boldrini (to end 2017, renewable), Susana Onega (to end 2017, renewable)

A5 Musicology & History of Art & Architecture

Chairperson: Philippe Vendrix (until AGM 2016)

vendrix@univ-tours.f r http://cesr.cnrs.fr/chercheurs/philippe-vendrix

11, Rue de Parçay, 37100, Tours, FRANCE

Committee: David Hiley (till December 2017), Christian Leitmeir, Laurenz Lütteken, Lynda Nead, Raphael Rosenberg, Victor Stoichita, Valeska von Rosen (all till December 2017, renewable)

A6 Philosophy, Theology & Religious Studies

Chairperson: Tim Crane (Sept 2015 - AGM 2018, renewable)

<u>cranetim@mac.com</u> <u>http://www.timcrane.com/</u>

Faculty of Philosophy, University of Cambridge, Sidgwick Avenue. Cambridge CB3 9DA. UK.

Committee: Genoveva Marti (Barcelona); Claudine Tievcelin (Paris); Wlodek Rabinowicz (Lund) all until Council of 2018, all renewable

A7 Film, Media and Visual Studies (created at the AGM of September 2015) Chairperson: Kirsten Drotner (from AGM 2015 – AGM 2018, renewable)

drotner@sdu.dk

Inst. For the study of Culture-Media Studies. Univ. Southern Denmark.

Committee: Daniël Biltereyst, Göran Bolin, Patrizia Lombardo (to AGM of 2018, renewable)

CLASS A2

A8 Behavioural Sciences

Chairperson: Peter Scott (2016/2019):

p.scott@ioe.ac.uk https://www.ioe.ac.uk/staff/51229.html

University of London, Institute of Education. 20, Bedford Way, London. WC1H 0AL

Committee: Uta Frith, Terrie Moffit, Kurt Pawlik, Ulrich Teichler, Johan P. Mackenbach, Archana Singh-Manoux,

A9 Social Sciences

Chairperson: Antoine Bailly (to end 2017, renewable)

Antoine.Bailly@unige.ch

Rue de la Tour 51, 1867 Ollon, Switzerland

Committee: Alessandro Cavalli, Yale Ferguson, Sture Oberg, Justin Stagl, Yola Verhasselt Maria Paradiso (until Dec 2017, renewable), Maria Dolors Garcia-Ramon (Until Dec. 2017 renewable), Alun Jones (until Dec 2017, renewable)

A10 Law

Chairperson: Dagmar Coester-Waltjen (to AGM 2018, renewable)

coewa@freenet.de http://www.uni-goettingen.de/de/person/100247.html

Hilariastrasse 7, Pullach, Germany

Committee: William Cornish, Attila Harmathy, Eivind Smith, Ditlev Tamm, Verica Trstenjak (until 2017 renewable), Alain

Strowel (until 2017 renewable)

A11 Economics, Business and Management Sciences Chairperson: Klaus Zimmermann (to Nov 2017 renewable)

zimmermann@iza.org

Director of IZA, Schaumburg-Lippe-Str. 5-9, 53113 Bonn, Germany

Committee: Gianmarco Ottaviano, Jeroen van den Bergh, From Jan 2016 - Amelie Constant, Mirjana Radovic-Markovic, Reinhilde Veugelers (all unitl and of 2018, renewable)

CLASS B

B1 Mathematics

Chairperson: Jürg Kramer (to 2016 - renewable):

Dept. Mathematics. Humboldt University, Unter den Linden 6, 10099 Berlin.

Kramer@math.hu-berlin.de

Committee: Jean-Michel Bismut [to Sept. 2016], Helmut Hofer [to Sept 2016], Nigel Hitchin [retires 2017], Philippe Michel [to 2016], Umberto Zannier [to Sept 2016], Alfio Quarteroni [to Dec. 2017, renewable]

B2 Informatics

Chairperson: Jan Bergstra (to Sept 2016 renewable)

(Informatics Institute): Science Park 904, 1098 XH, Amsterdam, The Netherlands

i.a.bergstra@uva.nl

Committee: Dieter Fellner (Until AGM of 2018), Paul Spirakis (to 2017), Reinhard Wilhlem (to AGM 2016), Carlo Ghezzi (to 2017 renewable) Schahram Dustdar (to AGM 2018 renewable)

B3 Physics and Engineering Sciences

Chairperson: Muhsin Harakeh (ends AGM 2018)

m.n.harakeh@kvi.nl

Rijksuniversiteit Groningen, Kernfysisch Versneller Instituut, Zernikelaan 25, 9747 AA Groningen,

THE NETHERLANDS

Committee: Jörg Aichelin (ends AGM 2017), Jan Vaagen, (ends AGM. 2016), Pavel Exner -Vice Chair (ends AGM 2017) , Tamás Csörgö (until AGM 2016, renewable), Sydney Galès (until AGM 2016, renewable), Karlheinz Langanke (until AGM 2016, renewable); Maciej Ogorzalek (first term till AGM 2017 renewable), Minh Quang Tran (first term till AGM 2017 renewable)

B4 Chemical Sciences

Chairperson: Lynn Gladden (UK). Department of Chemical Engineering and Biotechnology University of Cambridge, New Museums Site, Pembroke Street, Cambridge, CB2 3RA, UK (2014 - 2016) lfg1@cam.ac.uk

Committee:. From Jan 2014 to 2016 - Jean-Marie Andre, Carmen Claver, Janine Cossy, Konstantin Hadjiivanov, Graham Hutchings, Joachim Sauer, Malgorzata Witko,

B5 Earth and Cosmic Sciences

Chairperson: Donald Dingwell (to 2016)

dingwell@lmu.de

University of Munich, Earth Sciences, Theresienstr. 41/111, 80333 München, GERMANY

Committee: Enric Banda, André Berger, Paul Crutzen, Camiel de Loore, ,

Jean-Claude Duplessy, Tuija Pulkkinen (till March 2018 renewable), John Ludden (till March 2018 renewable), Hans

Thybo (till March 2018renewable)

CLASS C

C1 Biochemistry and Molecular Biology

Chairperson: Witold Filipowicz (to 2016 renewable):

filipowi@fmi.ch

Friedrich Meischer Institute for Biomedical Research. Maulbeerestrasse 66, CH-4.58 Basel

Committee: Anton Berns, Nicholas Hastie, Maurizio Brunori, Esteban Domingo and

Daniella Rhodes, Moshe Yaniv (all from Sept. 2013 to 2016 renewable)

C2 Cell and Developmental Biology (renamed at the AGM of 2015)

Chairperson: Margaret Buckingham (2013)

margab@pasteur.fr

Institut Pasteur, Dept. Biologie du Développement, CNRS URA2578, 25 rue du Dr Roux,

Paris Cedex 75724, FRANCE

Committee: Francesco Blasi, Meinrad Busslinger, Ingrid Grummt, Carl-Henrik Heldin

C3 Physiology and Neuroscience (renamed at the AGM of 2015)

Chairperson: Dmitri Rusakov (to AGM 2016 renewable)

d.rusakov@ucl.ac.uk

UCL Institute of Neurology, Queens Square. London. WC1N 3BG

Committee: Marina Bentivoglio (till AGM 2017, renewable), Alfonso Araque (till AGM 2018), Robert Zorec (till AGM 2018), Alex Verkhratsky (till AGM 2016, renewable) Vladimir Parpura (till AGM 2017, renewable), Riita Salmelin (till AGM 2017, renewable), Cisca Wijmenga (till AGM 2016, renewable), Barbara Franke (till 31 December 2018, renewable)

C4 Organismic and Evolutionary Biology

Chairperson: Yvon Le Maho (to December 2015)

yvon.lemaho@iphc.cnrs.fr

Institut Pluridisciplinaire Hubert Curien, Département Ecologie, Physiologie et Ethologie,

23 rue Becquerel, F-67087 Strasbourg Cedex 2, FRANCE

Committee: Roy Anderson, Lars Walloe, Pat Monaghan (to 2017), Ricardo Guerrero (to 2017)

C5 Translational and Applied Biology

Chairperson: Anne Gro Salvanes (to 2017, renewable)

Anne.salvanes@bio.uib.no

Dept Biology, PO Box 7833, 5020 Bergen. Norway

Committee: Peter Raspor, Marianne Thoresen (all to 2017, renewable)

C6 Clinical and Veterinary Science (created at the AGM of 2015)

Chairperson: Stephen Holgate (from AGM 2015 to AGM 2018, renewable)

sth@soton.ac.uk

Sir Henry Wellcome Laboratories, Univ. Southampton, SO16 6YD, UK

Committee:

- 3 Committee members serve a three year term that can be renewed once only for a further three year period.
- 4 (date first term ends / date second and final term ends subject to agreement of the committee and Council)

¹ Committees are elected by the members of the section accordance with the Regulations for Section Committees. At least 50% of the committee has to be elected by a ballot of the membership of the Section. All members of the Section are eligible to stand for election as Committee candidates. The exact procedure for rotation and elections is decided by the Committees themselves. The Chair must ensure the committees reflect a balance of representation of the fields within the Section and should ensure a regular rotation of members of the committee.

² Chairs serve a three term, renewable once only for a further three years.