Translational medicine (TM) is the breakthrough of the 21st century towards improving prevention, diagnostics, quality of patient care, and cost-effectiveness of the entire healthcare system. Questions should emerge by the bedside, then one or a combination of the different areas of science will find the answers. These answers should be developed into systematic knowledge and evidence-based guidelines, and, finally, through communication, this knowledge should be transferred to patients, healthcare professionals, medical students, insurance companies, industrial partners and economic and political decision makers. The whole cycle of TM ensures the effective utilization of research results, the ultimate benefit for patients. TM includes four main areas of medicine: **TM HEALTHCARE, TM SCIENCE, TM KNOWLEDGE,** and **TM COMMUNICATION.** In order to run a TM centre efficiently, an interdisciplinary team supporting these areas is also necessary: **TM INTERDISCIPLINARY.**

Understanding the crucial importance of the TM cycle, the Academia Europaea, which serves as an official advisor to the European Union, launched a project in November 2018 with the objective of identifying the problems and challenges in TM and suggest recommendations which can facilitate improvements in the field.
The following work packages have been initiated:

**WP1: TM Healthcare** The starting point and endpoint of TM are healthcare institutions, where questions arise, and patients, who benefit from research results (bedside-to-bench-to-bedside approach). This is also the site for conducting clinical research. Different levels of translational healthcare institutions should be determined according to the level of involvement.

**WP2: TM Science** Questions that emerge in TM HEALTHCARE must be answered via a systematic enterprise that leads to knowledge. This WP will summarize the methodologies leading to (i) discoveries of new mechanisms and targets, (ii) development of new drugs and interventions, and (iii) information concerning the safety and effectiveness of interventions.

**WP3: TM Knowledge** Thousands of articles are published daily, but without summaries. This knowledge would not be available for utilization in clinical practice. This WP will summarize the different categories of knowledge publications, including (i) discussions, commentaries, and individual opinions; (ii) reviews; (iii) systematic reviews; (iv) textbooks: publications of specialist working groups; (v) EBM Guidelines; and (vi) national and local protocols.

**WP4: TM Communication** Distribution of knowledge is needed for better political and insurance decisions, for adherence to guidelines by medical professionals, for communication between disciplines, and for disease prevention and quality of life. The target audience for these educational materials are: (i) medical professionals, (ii) patients, (iii) interdisciplinary members of the scientific community (biostatisticians, IT specialists, nurses, and clinical research administrators), (iv) decision makers (politicians and insurance companies), (v) pharmaceutical companies, and (vi) undergraduate and postgraduate students.
**The project**

**WP5: TM Interdisciplinary** As noted above, running a TM centre efficiently requires an interdisciplinary team to support these areas. TM Science, TM Knowledge, and TM Communication must be established in a professional TM centre in support of the central TM Healthcare facility. This WP will summarize the categories of essential groups (Biostatistics, Informatics, Medical Education, Data Management, Ethical coordinator, Biobank coordinator, Healthcare Economics etc.).

**WP6: TM Academy** This WP will develop recommendations for Universities and Academies concerning the usability of different scientific methods (i.e. systematic reviews, meta-analyses, and case reports) in the degrees listed above. Developing a uniform evaluation system for PhDs, habilitation degrees, and higher doctoral degrees (DSc) in the different areas of TM is an unmet need.

**Project leaders commissioned by Academia Europea**

Péter Hegyi (University of Pécs, Pécs, Hungary)
Stephen Holgate (University of Southampton, Southampton, UK)
Ole Petersen (Cardiff University, Cardiff, UK)

**Project development**

1) Expert selection and Decision on the major structure February–March, 2019
2) Identifying specific questions April, 2019
3) Group work on specific WPs May-August, 2019
4) Consensus meeting (2-day-meeting) 23-24 September, 2019
5) Publication December, 2019

The meeting will be broadcasted through a conference calling system called Zoom. In case you wish to join the discussion online, please send an e-mail to pr@tm-centre.org to receive the invitation and instructions.
23 September
Monday

OPENING
9:00 - 9:05
Welcome
9:05 - 9:20

Péter Hegyi (Pécs, Hungary): Introduction of the AE Project

INDIVIDUAL EXPERIENCES IN TM I.
9:20 - 9:35
Ole Petersen (Cardiff, UK): Roadblocks to patient benefit from research: Acute Pancreatitis
9:35 - 9:50
Stephen Holgate (Southhampton, UK): How do we assess the impact of research?
9:50 - 10:05
Jeffrey Laurence (New York, USA): Repairing broken pipelines: Supporting translational medicine
10:05 - 10:20
Joao Paulo Monteiro (New York, USA): Challenges with publishing translational research
10:20 - 11:00

PANEL DISCUSSION
11:00 - 11:20  Coffe break

INDIVIDUAL EXPERIENCES IN TM II.
11:20 - 11:35
Lajos Kemény (Szeged, Hungary): Publishing or patenting? My adventures in translational research.
11:35 - 11:50
Zoe Ann Gray (Southhampton, UK): Involving patients and the public in research
11:50 - 12:05

András Varró (Szeged, Hungary): Cooperative research between clinical and basic research labs: pitfalls and successes

12:05 - 12:20

Tara Lamont (Southhampton, UK): Reaching different audiences

12:20 - 12:35

Shuang Peng (Guangzhou, China): Translational Medicine for achieving Healthy China 2030

12:35 - 13:20  PANEL DISCUSSION

13:20 - 14:20  Lunch

WORK PACKAGES I.

14:20 - 14:35

Bálint Erőss (Pécs, Hungary): WP1 Healthcare

PANEL DISCUSSION

15:20 - 15:35

András Garami (Pécs, Hungary): WP2 Science

PANEL DISCUSSION

16:20 - 16:40  Coffe break

16:40 - 16:55

Zsolt Szakács (Pécs, Hungary): WP3 Knowledge

PANEL DISCUSSION

19:00

Social event at Duna Palota

Dinner
24 September
Tuesday

WORK PACKAGES II.
8:30 - 8:45
Dalma Dobszai (Pécs, Hungary): WP4 Communication

PANEL DISCUSSION
9:30 - 9:45
Andrea Szentesi (Pécs, Hungary): WP5 Interdisciplinary

PANEL DISCUSSION
10:30 - 11:00  Coffe break
11:00 - 11:15
Márta Balaskó (Pécs, Hungary): WP6 Academy

PANEL DISCUSSION
12:00 - 13:15
Closing remarks & lunch
This project is generously supported by the

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