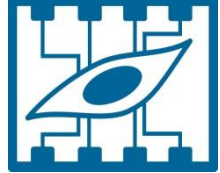




TECHNISCHE
UNIVERSITÄT
WIEN

Vienna University of Technology
Faculty of Technical Chemistry
Institute for Applied Synthetic Chemistry
Institute for Chemical Technologies and Analytics



COST-Action proposal:

Advanced Microfluidics Initiative for Applied Diagnostics

Dr Helene Zirath

AMI-Workshop

14-Dec-2020

<http://www.ias.tuwien.ac.at>

<http://www.cellchipgroup.com>

COST Action

- The European Cooperation in Science and Technology (COST) - funding organisation for the creation of research networks called COST Actions.
- Offer an open space for collaboration among scientists across Europe (and beyond) and thereby give impetus to research advancements and innovation.

COST Action is funding:

- Meetings, workshops, conferences
- Training schools
- Short-term scientific missions
- Communication and dissemination activities

- The average COST Action support is EUR 130,000 per annum



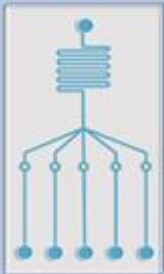
Aims

- Bundle relevant and complementary expertise that is present throughout Europe ranging from **microfluidics**, **material science** and engineering, **sensor technologies**, assay development, **manufacturing technologies**, **data security/IT** and regulatory affairs.
- Offer the European research and development landscape a communication platform that:
 - (a) fosters exchange of ideas between academic, industry and regulatory stakeholders
 - (b) enables network building for young scientists
 - (c) encourages industrial and academic partnerships
 - (d) provides training and continuous education opportunities for next generation of skilled workers.
- Establish the rapid translation of academic ideas and lab prototypes into commercial products by fostering close collaboration and communication between the different microfluidic stakeholders and end-users and have them involved from the very early stages.

Working groups

The **AMI** Work Plan is organised in five complementary Working Groups (WGs) each addressing an important aspect along the microfluidic value chain

Materials and Biointerfaces



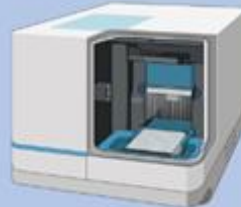
- Smart Materials
- Surface biofunctionalization
- Reagent storage
- Valves and pumps
- Biocompatibility
- Sample preparation

Bioassay Minituarization and Biosensor Development



- Bioassay development and optimization
- Biofunctionalization
- Ligand-target interaction
- Organ-on-Chip for diagnostics
- Sensor/system integration

Rapid Prototyping and Manufacturing Technologies



- CAD design, simulation
- Design for manufacturing
- System standardisation
- System integration
- Scale-up
- Additive manufacturing technologies

Regulatory Aspects and Data Security/IT



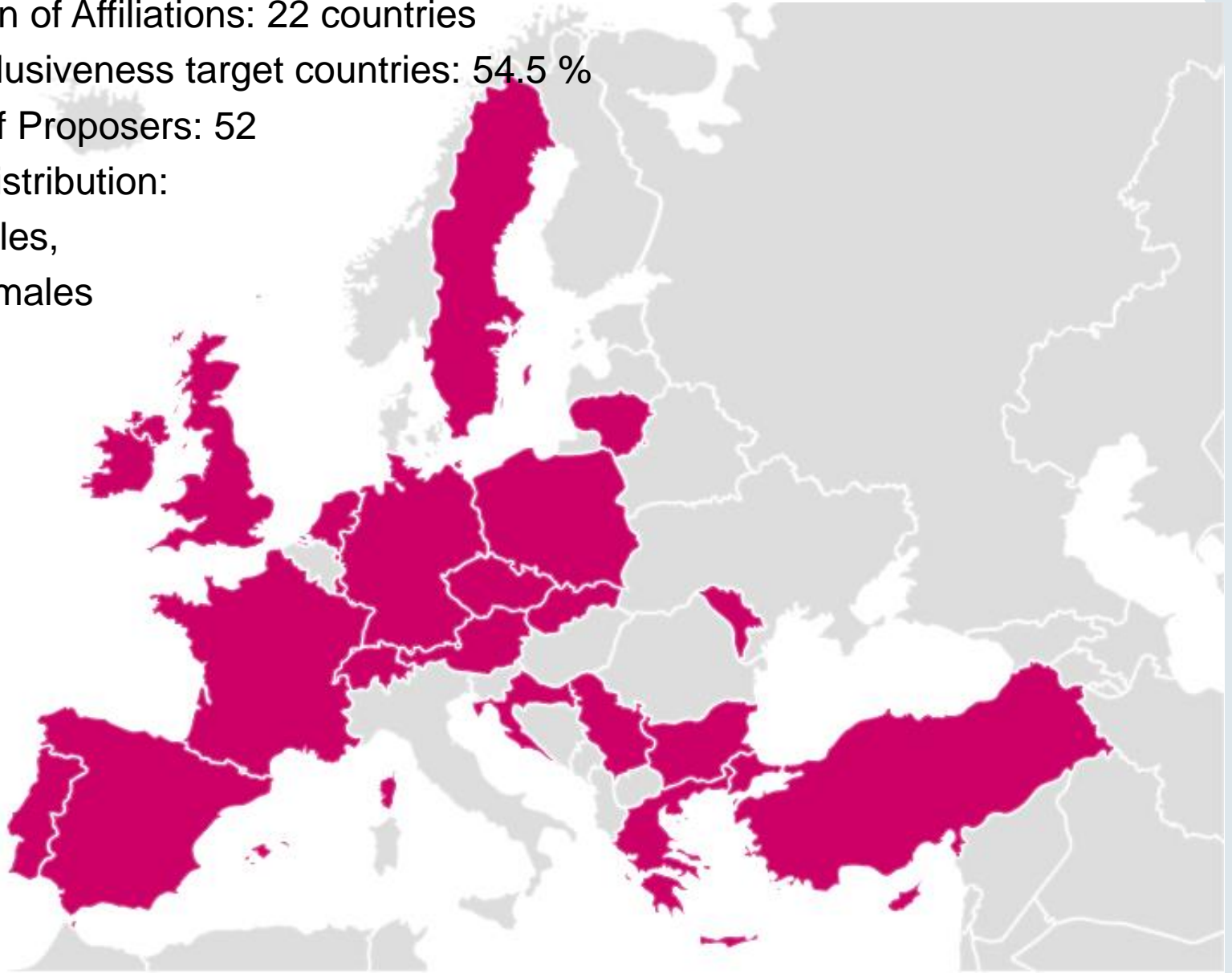
- Regulatory guidelines
- Commercialization
- Data assessment
- Telemedicine
- Privacy-preserving analytics

Impact Creation

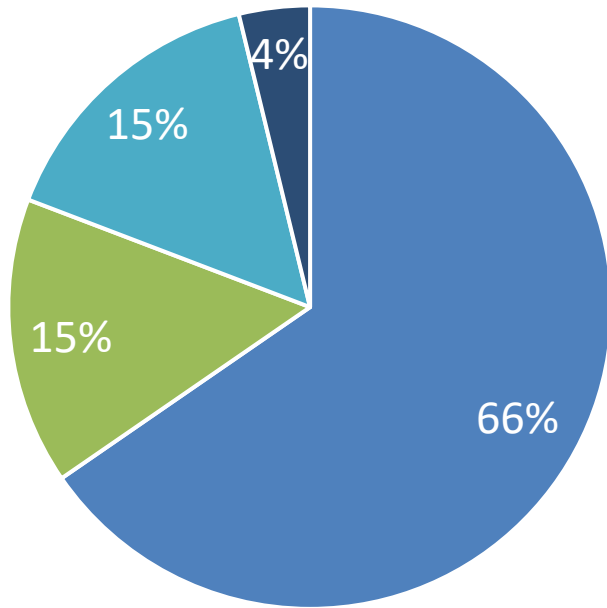


- Communication and dissemination
- Brand identity
- Integrated communication campaigns

- Distribution of Affiliations: 22 countries
- COST Inclusiveness target countries: 54.5 %
- Number of Proposers: 52
- Gender Distribution:
55.8% Males,
40.4% Females

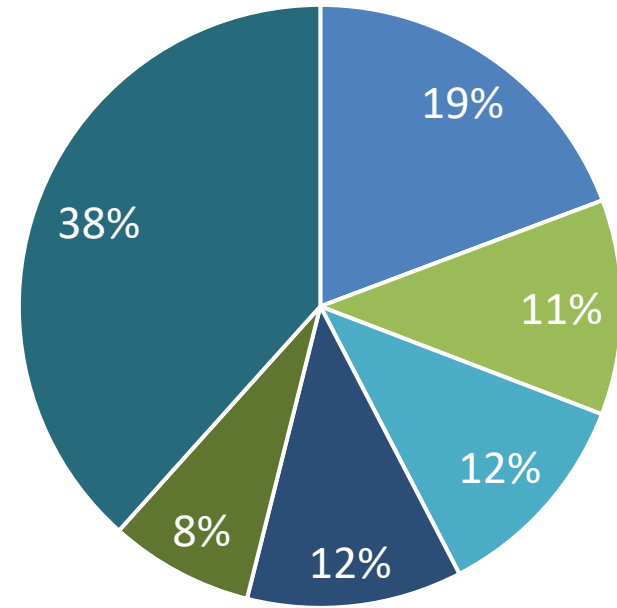


Institutional distribution



- Higher Education & Associated Organisations
- Private Non-Profit without market revenues, NGO
- Business enterprise
- Standards Organisation

Core Expertise of Proposers



- Nanotechnology
- Chemical sciences
- Materials engineering
- Medical engineering
- Biological sciences
- Other

Evaluation Feedback Wednesday, May 26, 2021

Interested in joining the consortium? New partners are welcome to join if project will receive funding.

Contact:

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