Integrating China in the International Consortium for Personalised Medicine

“Policies and programmes in the field of Personalized Medicine: first results of the mapping activities of the IC2PerMed project”
Integrating China in the International Consortium for Personalised Medicine

An Overview of Project aims, activities, expected results

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Description of the action

IC2Permed is a Coordination and Support Action (CSA) project, funded from the European Commission in support of the ICPerMed network.

CSAs consist primarily in accompanying measures such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure and may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.
IC2PerMed’s vision is to become an efficient lever for supporting EU-China collaboration for the development of Personalized Medicine research and innovations through the ICPeRMed initiative (that involves 40 partners from 31 Countries), enabling populations to access personalised, smart and inclusive healthcare solutions in the near future.
Project ID

• Starting Date: January 1st, 2020
• Duration: 48 months
• Consortium: 10 Partners
The Context

- Thanks to advances in biomedical and digital technologies, **Personalised Medicine (PM) improves healthcare** and underpin more efficient and sustainable health systems.

- **China it is attracting massive interest**, with the government capitalising on its expertise in biotechnology, computing hardware and producing infrastructures for supporting bioinformatics projects.

- **Turning PM into an opportunity for citizens and patients** requires the engagement of stakeholders internationally to define common research and development approaches, standards and priorities. In order to respond to these challenges, **the EU supports actions developed within the International Consortium for Personalised Medicine (ICPerMed)**.

- **The EU-funded IC2PerMed project will provide key solutions for enabling the convergence under ICPerMed of European and Chinese stakeholders towards a common approach of PM, involving policymakers and healthcare beneficiaries.**
A growing community at work to build a **common approaches** of Personalised Medicine research, development, innovation and regulation.
Europa-Cina, al via il progetto “IC2PerMed” per la medicina personalizzata


Sanità: Università Cattolica, al via il progetto di ricerca “IC2PerMed” con la Cina per la medicina personalizzata

Integrating China in the International Consortium for Personalised Medicine: Kick-off meeting of new ICPerMed-related project

18 febbraio 2020 – IC2PerMed, a new ICPerMed-related coordination and support action, will hold its kick-off meeting on February 17-19, 2020 in Rome, Italy.

IC2PerMed aims at providing key solutions for enabling the convergence of European and Chinese stakeholders under ICPerMed, towards a common approach of personalised medicine research, innovation, development and implementation. The project wants to achieve this by:

1. mapping policies, programmes, standards and initiatives related to personalised medicine in Europe and in China for identifying the opportunities for research collaborations;
2. structuring its developments upon an ecosystem of European and Chinese experts, collaborating in working groups centred on ICPerMed action plan priorities;
3. setting bridges with key-organisations involved in the definition and implementation of personalised medicine and healthcare systems in both economic areas, both on benefits for coordinated approaches for research and on concrete developments taking place within and along the project;
4. inserting its developments in international contexts, through ICPerMed and its involvement in relevant initiatives and networks.
UCSC Staff in IC2PerMed

Walter Ricciardi
*Principal Investigator*
WFPHA, President
Mission Board on Cancer,
President, Horizon Europe

Antonio Giulio de Belvis
Supporting Investigator

Stefania Boccia
Co-Principal Investigator

Laura Motta
Grant manager

Sabrina Montante
Brussels liaison office

Chiara Cadeddu
Project Manager
UCSC involvement in shaping Public Health Genomics policies in the EU

“Public health Genomics is the responsible and effective translation of genome-based knowledge and technologies into public policy and health services for the benefit of population health” (Bellagio Statement, 2006)

The Public Health Genomics European Network (PHGEN)

Beyond Public Health Genomics
A Framework for Future Personalised Healthcare

Ron Zimmern, Hilary Burton, Sowmiya Moorthy, Laura Blackburn and Stefania Boccia

A DISCUSSION PAPER
The Personalized Prevention of Chronic Disease (PRECeDI) project

- **Consortium**: 11 Partners
- **Period**: Jan, 2015-Dec, 2018

The PRECeDI project has received funding from the European Union’s Horizon 2020 research and innovation programme MSCA-RISE-2014: Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE) under the grant agreement No645740.
The European network staff eXchange for integrAting precision health in the health Care sysTems (ExACT) project

✓ **Consortium**: 17 Partners
  - 7 EU Countries (Belgium, Germany, Greece, Italy, Netherlands, Spain, UK)
  - 1 Associated country (Switzerland)
  - 2 Third Countries (USA and Canada)
    - of which
      - 10 Academic
      - 7 Non Academic

✓ **Duration**: 48 months
✓ **Starting Date**: March, 2019
✓ **Secondments**: ✓ 74 researchers in secondment

The ExACT project has received funding from the European Union’s Horizon 2020 research and innovation programme MSCA-RISE-2014: Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE) under the grant agreement No 82399
Collaboration between China and the EU

- In December 2015, the China-EU Co-Funding Mechanism on research and innovation (CFM) cooperation was launched and has played a significant role in supporting win-win cooperation.

- The EC and the Ministry of Science and Technology of the People’s Republic of China (MOST) agreed to the renewal of the CFM for the years 2018-2020 to support joint projects between European and Chinese universities, research institutions and companies.

- This collaboration plays an important role in jointly addressing global challenges, therefore both partners aim to improve framework conditions for cooperation on innovation.
IC2Permed approach

01. Mapping
Identifying Chinese and EU appropriate policies, programmes, stakeholders and standards to consider and involve in developments; Envisioning benefits for healthcare ecosystems and benefits for populations

02. Expertising
Building upon exchanges between experts in PM domains for fostering actionable approaches

03. Exemplifying
Setting concrete practices of successful collaboration over a PM core thematic (biobanks) for illustrating and inspiring research collaborations

04. Engaging
Creating strong bridges with key stakeholders from the EU, China and beyond, integrating Chinese stakeholder in ICPPerMed and liaising with international peers
IC2PerMed Pert Chart

WP4: Communication, dissemination, outreach and exploitation

WP1: Mapping of PM policies and programmes in Europe and China

WP2: Knowledge synthesis on the identification, transferability and scaling up of international standards in personalized medicine

WP3: Forster research collaboration between EU and China

WP5: Project management
Advisory Board members

- **Wen Mao**, temporarily replaced Tianyu Shen - Geneva and Zili Huang – Shanghai (World Economic Forum Beijing Representative Office, International)
- **Usman Khan** (FIPRA, Europe)
- **Jie Huang** (National Institute for Food and Drug Control, China)
- **Mao You** (China National Health Development Research Centre, China)
- **Martina Cornel** (Community Genetics & Public Health Genomics, Amsterdam UMC, Netherlands)
- **Anant Jani** (Department of Primary Health Care Sciences, University of Oxford, UK)
- **Gaetano Guglielmi** (Department of Prevention, Italian Ministry of Health)
Project developments

**Working groups**: Community of EU and Chinese PM stakeholders analysing and designing a **roadmap** for developments upon PM R&I schemes for facilitating the integration of Chinese stakeholders in ICPerMed activities by the relevant agencies.

- **Mapping of Personalised Medicine’s policies and programmes in Europe and China**
- **Delegations visits**
  Creating a solid framework for collaboration
  formalising engagement of relevant Chinese stakeholders within the ICPerMed initiative

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<tr>
<th>Working Group 1</th>
<th>Working Group 2</th>
<th>Working Group 3</th>
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<td>Developing awareness and empowerment</td>
<td>Big data and ICT Solutions</td>
<td>Translating basic to clinical research and Beyond</td>
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<td>Shaping sustainable health care</td>
<td>Bringing innovation to market</td>
<td>Research Funding</td>
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Working Group framework Set-up

3 Collaborating WGs to define frameworks for implementing the ICPPerMed’s Action Plan into China by providing insights on the current status of implementation of PM approaches in EU and China

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<th>WG</th>
<th>Challenges</th>
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<td>WG1</td>
<td>Shaping sustainable health care</td>
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<td>WG2</td>
<td>Innovation and Market</td>
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<td>WG3</td>
<td>Research and Clinical Studies in PM</td>
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Experts identified n. 35

❖ Europe 75%
   (Italy, Estonia, The Netherlands, Spain, Hungary, Belgium, Germany, United Kingdom, Switzerland, Denmark, France, Austria, Finland)

❖ China 20%

❖ Canada 5%
Expected Impacts (1/2)

**Strategic Policy Level Cooperation Impacts:**

- Create an **innovative framework** for European and Chinese policy stakeholders to act upon concrete steps towards the implementation of PM in their own countries.

- Ensure that the necessary **regulations for the transnational deployment** of PM encompass the right level of technical, social and business considerations for fostering its uptake and implementation.

- Review and discuss the scope for **harmonisation of policies** between EU and China for integrating PM principles in respective research collaboration schemes focusing on health.
Expected Impacts (2/2)

Research and Science collaboration:

- Help EU and China shape future research collaboration frameworks for fostering scientific and technological exchanges regarding PM.
- Define the areas for research, technologies and systems to achieve the structuring of an approach to improve social and healthcare systems putting PM-related ethical, equity, data security and trust at the core of future developments and assess its social impacts.

EU-China PM Research, Development and Innovation ecosystems:

- Identify the key PM standards, interoperability schemes and pragmatic measures necessary to enable joint R&D&I initiatives, notably under the ERA PerMed framework.
- Compare healthcare economic principles’ realities with ethical and regulatory frameworks from both EU and China areas in the fields of PM and define best practices for implementing the adapted measures and tackle fragmentation of approaches.
Keep in touch

• Stay tuned, check IC2PerMed website and link with its social media
• For more information on, how to get involved, etc. please get in touch with EU / Chinese contacts
• You will be contacted by e-mail following this event for further contributing to developments

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