

Policies and programmes in the field of Personalized Medicine: first results of the mapping activities of the IC2PerMed project" Online workshop, November 23, 2020

IC2PerMed: a bridge between ICPerMed and China

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Chinese strategy in PM

Key challenges and objectives:

- creation of PM sector through China Precision Medicine Initiative (PMI) 15-year project to establish China as a world leader in the field
- fostering scientific research to understand genetics and biological make-up of people
- development of **cutting-edge data collection** and **analysis tools**
- building of powerful **high-performance computing clusters**

Fields of interest:

New clinical life sciences technologies / Large scale cohort studies /

Big Data platforms and infrastructure / Sustainable healthcare system





China Precision Medicine Initiative

| Program: | PM National Key R&D Plan | |
|--------------------|---|--|
| Agency: | MOST, NHC | |
| Investment: | 64 billion RMB | |
| Partnership: | Public-Private Partnerships | |
| Participant: | Hospital, University, Institute, Industrial | |
| Start: | 2016 | |
| Duration: | 15 years (2016-2031) | |
| Objectives: | Promote PM interdisciplinary research and inter-sectoral collaboration through the whole value chain(data generation- translational science – healthcare system) Establish and implement PM to next generation health system | |

ICPerMed





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2006年首先提出了精准外科的概念,后被引用到肿瘤放疗、妇科等医学领域。2015年,科技部召开了"国家精准医疗战略 ,成立了中国精准医疗战略专家组,共19位专家组成了国家精准医疗战略专家委员会,并计划在2030年前投入 专家会议" 600亿元。





Comparison of PM in Europe and China

| ltem | EU | China |
|---------------------|--|---|
| Funding agency | ICPerMed consortium | MOST (national and local) |
| Expert committee | 5 challenge groups 5 action item groups | 19 experts |
| Fields of interest | Data and technology | New clinical life sciences technologies |
| | Inter-sectoral synergies | Large scale cohort studies |
| | Healthcare and systems | Big Data platforms and infrastructure |
| | reform | Sustainable healthcare system |
| | Education and literacy | |
| vision | Next generation medicine | Health system reform |



Big science & globalization





Stakeholder Group

- Full ICPerMed membership is restricted to ministries, public and private 'not-for-profit' health research funding and policy organisations.
- <u>Stakeholder group</u> ICPerMed is in close contact with all interested parties. Members of the stakeholder group are informed about ICPerMed's work and invited to workshops and conferences to be part of ICPerMed. Experts and stakeholders are also invited to Executive Committee meetings for information and discussion on certain topics.



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

IC2Permed supports the implementation of







Expected impacts 2/2

Research and Science collaboration:

- Help EU and China shape their 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 for enabling joint R&D&I initiatives, notably under the ERA PerMed framework
- Confront 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

Bridging with China



