

IC2PerMed: a bridge between ICPerMed and China **IC2PerMed: ICPerMed和中国之间的桥梁**

Lili Wang, MD
王丽丽 博士
BGI genomics, China
中国华大基因



BGI华大





Chinese strategy in PM 中国在个性化医疗领域的战略

Key challenges and objectives 主要挑战和目标:

- creation of PM sector through **China Precision Medicine Initiative (PMI)** - 15-year project to establish China as a world leader in the field
- 通过**中国精准医疗计划 (PMI)** 这一为期15年的项目创造个性化医疗行业, 使中国成为该领域的世界领导者
- fostering **scientific research** to understand **genetics** and **biological make-up** of people
- 促进**科学研究**以了解人类的**遗传学**和**生物组成**
- development of **cutting-edge data collection** and **analysis tools**
- 发展**前沿的数据收集**和**分析工具**
- building of powerful **high-performance computing clusters**
- 构建**强大的高性能计算集群**

Fields of interest 关注领域:

New clinical life sciences technologies / Large scale cohort studies / 新的临床生命科学技术/大规模队列研究/

Big Data platforms and infrastructure / Sustainable healthcare system 大数据平台和基础架构/可持续的医疗体系



China Precision
Medicine Initiative
中国精准医疗计划

Program 计划:

PM National Key R&D Plan

个性化医疗国家重点研发计划

Agency 机构:

MOST, NHC

Investment 投资:

64 billion RMB 640亿人民币

Partnership 合作关系:

Public-Private Partnerships 公私合作

Participant 参与方:

Hospital, University, Institute, Industrial
医院、大学、研究所、行业公司

Start 开始:

2016

Duration: 持续时间:

15 years (2016-2031) 15年 (2016-2031)

Objectives: 目标:

- ❑ Promote PM interdisciplinary research and inter-sectoral collaboration through the whole value chain(data generation- translational science – healthcare system)
- ❑ 通过整个价值链（数据生成-转化科学-医疗体系）促进个性化医疗的跨学科研究和跨部门协作
- ❑ Establish and implement PM to next generation health system
- ❑ 建立并实施针对下一代医疗体系的个性化医疗

ICPerMed

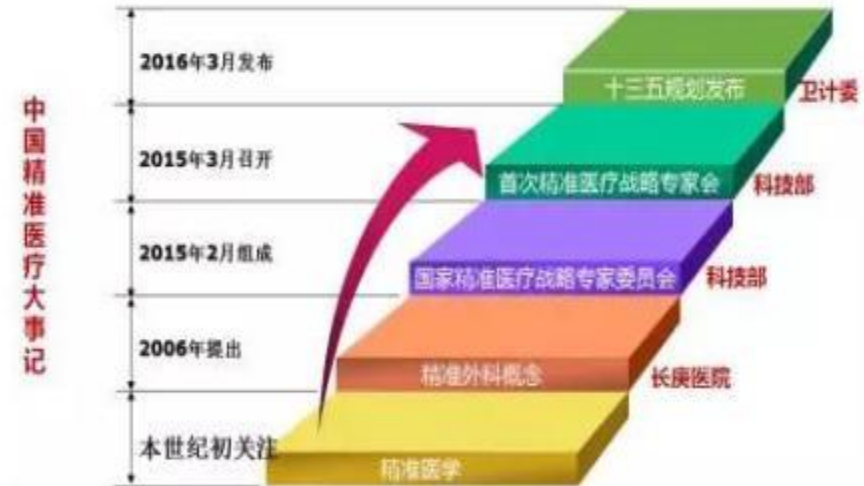


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China PMI 中国精准医疗计划

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“国家精准医疗战略专家会议”，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600亿元。



中国精准医疗已经上升为“国家战略”

Comparison of PM in Europe and China

欧洲和中国个性化医疗的比较

Item项目	EU欧盟	China中国
Funding agency 出资机构	ICPerMed consortium ICPerMed 财团	MOST (national and local) MOST (国家和地方)
Expert committee 专家委员会	5 challenge groups 5个挑战小组 5 action item groups 5个行动项目小组	19 experts 19位专家
Fields of interest 关注领域	Data and technology 数据与技术 Inter-sectoral synergies 部门间协同 Healthcare and systems reform 医疗和体系改革 Education and literacy 教育与扫盲	New clinical life sciences technologies 新的临床生命科学技术 Large scale cohort studies 大规模队列研究 Big Data platforms and infrastructure 大数据平台和基础架构 Sustainable healthcare system 可持续的医疗体系
Vision愿景	Next generation medicine 下一代医学	Health system reform 医疗体系改革

Big science & globalization 大科学与全球化



Stakeholder Group 利益相关者群体

- Full ICPeMed membership is restricted to ministries, public and private ‘not-for-profit’ health research funding and policy organisations.
- ICPeMed的正式成员资格仅限于政府部门、公共和私人“非营利”医疗研究出资以及政策组织。
- [Stakeholder group](#) ICPeMed is in close contact with all interested parties. Members of the stakeholder group are informed about ICPeMed’s work and invited to workshops and conferences to be part of ICPeMed. Experts and stakeholders are also invited to Executive Committee meetings for information and discussion on certain topics.
- [利益相关者群体](#) ICPeMed与所有有关各方保持密切联系。利益相关者群体的成员会获知ICPeMed的工作，并受邀参加作为ICPeMed一部分的研讨会和会议。还会邀请专家和利益相关者参加执行委员会的会议，以了解有关特定主题的信息和讨论。

Expected impacts ½ 预期影响1/2

Strategic Policy Level Cooperation Impacts 战略政策层面合作的影响：

- Create an innovative framework for European and Chinese policy stakeholders to act upon concrete steps towards the implementation of PM in their own countries
- 为欧洲和中国的政策利益相关者创建一个创新框架，以采取具体措施在自己的国家实施个性化医疗
- 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.
- 确保跨国部署个性化医疗的必要法规包含正确的技术、社会和业务因素，以促进其采用和实施。
- 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
- 审查并讨论中欧之间将个性化医疗原则纳入各自针对医疗的研究合作计划的政策协调范围

IC2PerMed supports the implementation of IC2PerMed支持实施



Expected impacts 2/2 预期影响2/2

Research and Science collaboration 研究与科学合作:

- Help EU and China shape their future research collaboration frameworks for fostering scientific and technological exchanges regarding PM 帮助中欧建立未来的研究合作框架，以促进有关个性化医疗的科学技术交流
- 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 定义研究、技术和体系领域，以实现改善社会和医疗体系方法的构建，将与个性化医疗相关的道德、公平、数据安全和信任放在未来发展的核心，并评估其社会影响

EU-China PM Research, Development and Innovation ecosystems 中欧个性化医疗研究、发展和创新生态系统:

- Identify the key PM standards, interoperability schemes and pragmatic measures necessary for enabling joint R&D&I initiatives, notably under the ERA PerMed framework 确定关键的个性化医疗标准、互操作性方案和切实可行的必要措施，以实现联合R&D&I计划，尤其是在ERA PerMed框架下
- 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 通过中欧在个性化医疗领域的道德和法规框架来应对医疗经济原则的现实，并确定实施适应措施和解决方法零散的最佳实践

Bridging with China

连接中国的桥梁



 **ICPerMed**
INTERNATIONAL CONSORTIUM

 **IC2PerMed**

