Integrating China in the International Consortium for Personalised Medicine
将中国纳入国际个性化医疗联盟

# "Policies and programmes in the field of Personalized Medicine: first results of the mapping activities of the IC2PerMed project"
# "个性化医疗领域的政策和计划：IC2PerMed项目梳理活动的初步结果"

*19th January 2021*
*2021年1月19日*

IC2PerMed

"Policies and programmes in the field of Personalized Medicine: first results of the mapping activities of the IC2PerMed project"

个性化医疗领域的政策和计划：IC2PerMed项目梳理活动的初步结果

19.01.21

09:45 – 10:00

# IC2PERMED: OVERVIEW OF PROJECT AIMS, ACTIVITIES, EXPECTED RESULTS
# IC2PERMED：项目概况目标、活动和预期结果

*Prof. Stefania Boccia*

*Università Cattolica del Sacro Cuore – UCSC*

# Workshop info 研讨会信息

- Please note this workshop is recorded and will be published online, the video's link will be provided to you when available 请注意，该研讨会将录制并在线发布，视频准备好后，会将链接提供给您

- Participants are welcome to ask their questions 欢迎与会人员提出问题：
  - Writing these in the chat box 在聊天框中写下问题
  - Raising hand during presentation 在演讲过程中举手

- The workshop moderator will provide participants with the opportunity to ask their questions to the speakers 研讨会主持人将为与会人员提供向演讲者提问的机会

- Please note your contacts' details will be processed in line with the GDPR directive 请注意，您的联系详细信息将按照GDPR指令进行处理

- For more information on this event, please contact 有关此活动的更多信息，请联系：chiara.cadeddu@unicatt.it

IC2PerMed

# Today's Agenda 今日议程

This workshop is aimed at presenting the first results of the IC2PerMed Project to all Chinese stakeholders interested in mapping the policies and the programmes on Personalized Medicine (PM) in China and Europe. It will provide to participants a clear understanding of the project aims, of the work done so far on the "Mapping of PM policies and programmes in China and Europe " and of the activities in which a broad group of invited experts are called to join forces with the Consortium Partners, in order to foster EU-China collaboration in PM. Advice, expectation, time frame and terms of collaboration will be widely discussed during this event.

此次研讨会的目的是向对于中国和欧洲的个性化医疗（PM）政策和计划梳理感兴趣的所有中国利益相关者展示IC2PerMed项目的初步成果。它将使与会人员对项目目标、迄今为止在"中国和欧洲的个性化医疗政策和计划梳理"方面所做的工作以及需要广泛邀请的专家与联盟合作伙伴共同参与的活动有清晰的了解，以促进中欧在个性化医疗方面的合作。在此次活动中，将广泛讨论建议、期望、时间表和合作条款。

日程安排：

将中国纳入国际个性化医疗联盟(IC2PerMed)研讨会
"个性化医疗领域的政策和方案：IC2PerMed 项目测绘活动的初步成果"
2020 年 01 月 19 日星期二 北京时间 16:00-18:00

16:00-16:10 欢迎及致辞
　　　　主持嘉宾：Lili Wang, BGI Genomics 王丽丽 华大基因

16:10-16:25 IC2PerMed：项目的目标、进程及预期结果
　　　　汇报嘉宾：Stefania Boccia, Università Cattolica del Sacro Cuore

16:25-16:45 IC2PerMed：ICPerMed 与中国的桥梁
　　　　汇报嘉宾：Mary Wang, Telethon Foundation
　　　　Lili Wang, BGI Genomics 王丽丽 华大基因

16:45-17:15 中国和欧洲个性化医疗政策和已有计划的梳理
　　　　汇报嘉宾：WenYa Wang /Sylvia Zhou, Tsinghua University
　　　　　　　　王闻雅/周童心 清华大学
　　　　　　　　Timo Strohäker, Steinbeis 2i
　　　　　　　　Ilda Hoxhaj, Università Cattolica del Sacro Cuore

17:15-17:30 个性化医疗进程：下一步该怎样做？个性化医疗体系下药品适应症、可传递性(transferability)、规模扩张(scaling up)的国际性准则
　　　　汇报嘉宾：Chiara Cadeddu, Università Cattolica del Sacro Cuore

17:30-18:00 自由讨论及闭幕
　　　　主持嘉宾：Lili Wang, BGI Genomics 王丽丽 华大基因

IC2PerMed

# Integrating China in the International Consortium for Personalised Medicine

**An Overview of Project aims, activities, expected results**

将中国纳入国际个性化医疗联盟

项目目标、活动、预期结果概述

## Stefania Boccia

*Section of Hygiene-Institute of Public Health*

*Università Cattolica del Sacro Cuore,*

*Fondazione Policlinico "A. Gemelli" IRCCS, Rome, Italy*

# Description of the action
# 行动说明

IC2Permed is a **Coordination and Support Action (CSA)** project, funded from the European Commission in support of the ICPerMed network.
IC2Permed是一个**协调与支持行动（CSA）**项目，由欧盟委员会出资以支持ICPerMed网络。

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.
CSA主要包括伴随措施，例如**标准化、传播、提高认识和沟通、联网、协调或支持服务、政策对话以及相互学习练习和研究**，包括对新基础架构的设计研究，还可能包括不同国家的计划之间的战略规划、联网和协调的补充活动。

# The Vision of the Project 项目愿景

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

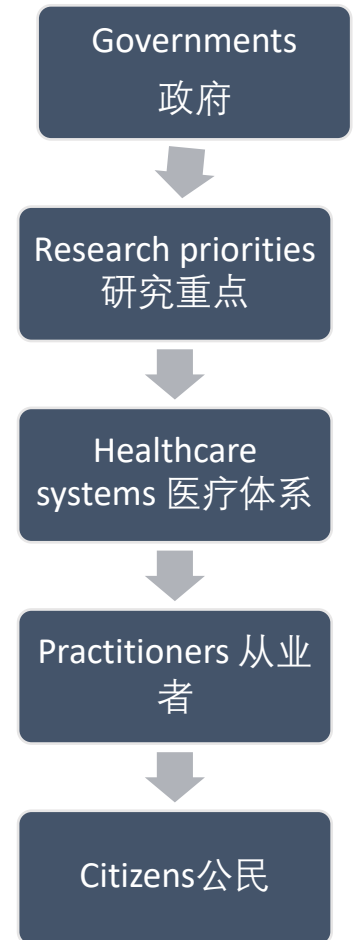IC2PerMed的愿景是成为一个**通过ICPerMed计划支持中欧合作开展个性化医疗研究和创新的有效杠杆**（涉及来自31个国家/地区的40个合作伙伴），使人们能够在不久的将来获得个性化、智能和包容性的医疗解决方案

# Project ID项目 ID

- European Union: Horizon 2020 CSA - Coordination and support action (SC1-HCO-01-2018-2019-2020)
- 欧盟：地平线2020 CSA - 协调与支持行动(SC1-HCO-01-2018-2019-2020)
- Starting Date : January 1st, 2020
- 开始日期：2020年1月1日
- Duration : 48 months
- 持续时间：48个月
- Consortium : 10 Partners
- 联盟：10个合作伙伴

# The Context背景

❑ Thanks to advances in biomedical and digital technologies, **Personalised Medicine (PM) improves healthcare** and underpin more **efficient and sustainable health systems** 由于生物医学和数字技术的进步，**个性化医疗（PM）改善了医疗**并支撑**更高效、更加可持续的医疗体系**

❑ **China it is attracting massive interest,** with the government capitalising on its expertise in biotechnology, computing hardware and producing infrastructures for supporting bioinformatics projects. **在中国，它引起了巨大的兴趣，**政府利用其在生物技术、计算硬件和生产基础设施方面的专业知识来支持生物信息学项目。

❑ **Turning PM into an opportunity for citizens and patients** requires the engagement of stakeholders internationally <u>**to define common research and development approaches**</u>, standards and priorities. In order to respond to these challenges, **the EU supports actions developed within the International Consortium for Personalised Medicine** (ICPerMed). **将个性化医疗转变为公民和患者的机会**需要利益相关者的国际参与，<u>**以定义通用的研发方法**</u>、标准和优先事项。为了应对这些挑战，**欧盟支持在国际个性化医疗联盟内制定的行动**（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 由欧盟出资的 IC2PerMed项目将提供关键解决方案，以使ICPerMed在欧洲和中国的利益相关者之间趋于一致，形成决策者和医疗受益者共同参与的通用个性化医疗方法**

Governments
政府

Research priorities
研究重点

Healthcare
systems 医疗体系

Practitioners 从业者

Citizens公民

IC2PerMed

# The Kick-off meeting in Rome- February 2020
# 2020年2月在罗马举行的启动会议

# UCSC Staff in IC2PerMed
# IC2PerMed中的UCSC人员



**Stefania Boccia**
*Co-Principal Investigator*
*副首席研究员*



**Walter Ricciardi**
***Principal Investigator***
*WFPHA, President*
*Mission Board on Cancer,*
*President, Horizon Europe*
**首席研究员**
*WFPHA主席*
欧洲地平线计划癌症使
命委员会主席



**Antonio Giulio de Belvis**
*Supporting Investigator*
*支持研究者*



**Laura Motta**
*Grant manager*
*赠款经理*



**Chiara Cadeddu**
Project Manager
项目经理

IC2PerMed

# UCSC's Young collaborators in IC2PerMed
# IC2PerMed中的UCSC年轻合作者



**Alisha Morsella**
*Project Management
supporter*
*项目管理支持人员*



**Carolina Castagna**
*WP4 - Communication and
dissemination aspects*
*WP4-交流和传播方面*



**Ilda Hoxhaj**
*WP1 – Research and mapping*
*WP1–研究与梳理*



**Michele Sassano**
*WP1 and WP2*
*Working Groups' set-up工作组设置*



**Marzia di Marcantonio**
*Cultural mediator*
*文化协调者*

# UCSC involvement in shaping Public Health Genomics policies in the EU
# UCSC参与塑造欧盟的公共卫生基因组学政策

> *"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)*
> "公共卫生基因组学以负责任且有效的方式，将基于基因组的知识和技术转化为公共政策和卫生服务，从而造福人类。"*(贝拉吉奥宣言, 2006年）*

## The Public Health Genomics European Network (PHGEN)

**Beyond Public Health Genomics**

**A Framework for Future Personalised Healthcare**

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

**A DISCUSSION PAPER**

## Commentary

### Beyond public health genomics: proposals from an international working group

Stefania Boccia[1], Martin Mc Kee[2], Roza Adany[3], Paolo Boffetta[4], Hilary Burton[5], Anne Cambon-Thomsen[6], Martina C. Cornel[7], Muir Gray[8], Anant Jani[8], Bartha Maria Knoppers[9], Muin J. Khoury[10], Eric M. Meslin[11], Cornelia M. Van Duijn[12], Paolo Villari[13], Ron Zimmern[14], Alfredo Cesario[15], Anna Puggina[1], Marco Colotto[1], Walter Ricciardi[1]

### New challenges of public health: bringing the future of personalised healthcare into focus

Walter Ricciardi[1,2], Stefania Boccia[1]

IC2PerMed

# The Personalized Prevention of Chronic Disease (PRECeDI) project
## 慢性疾病的个性化预防（PRECeDI）项目



- **Consortium**: 11 Partners

- **联盟:** 11个合作伙伴

- **Period**: Jan, 2015-Dec, 2018

- **期间:** 2015年1月至2018年12月



**Personalised medicine for disease prevention**

Medical practitioners are increasingly adopting a 'personalised medicine' (PM) approach involving individually tailored patient care. An EU-funded project is fostering collaboration on PM research and training, with special emphasis on the prevention of chronic diseases.



**Public Health Genomics**

**Research Article**

Public Health Genomics
DOI: 10.1159/000504652

**How to Integrate Personalized Medicine into Prevention? Recommendations from the Personalized Prevention of Chronic Diseases (PRECeDI) Consortium**

Stefania Boccia[a, b]   Roberta Pastorino[b]   Walter Ricciardi[a, b]   Róza Ádány[c]
Floris Barnhoorn[d]   Paolo Boffetta[e, f]   Martina C. Cornel[g]   Corrado De Vito[h]
Muir Gray[i]   Anant Jani[j]   Michael Lang[k]   Jim Roldan[l]   Annalisa Rosso[h]
José Manuel Sánchez[l]   Cornelia M. Van Dujin[m, n]   Carla G. Van El[g]   Paolo Villari[h]
Ma'n H. Zawati[k]

**A Success Story recognition from the EC**
**EC的成功案例表彰**

**2nd "Best Practice in Personalised Medicine"**
**ICPerMed Recognition 2019**
**第二届"个性化医疗最佳实践"**
**ICPerMed表彰，2019年**
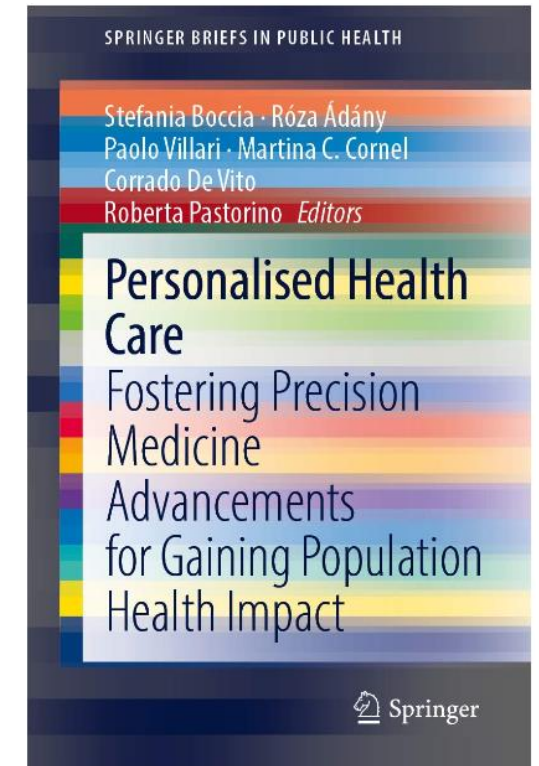


SPRINGER BRIEFS IN PUBLIC HEALTH

Stefania Boccia · Róza Ádány
Paolo Villari · Martina C. Cornel
Corrado De Vito
Roberta Pastorino *Editors*

**Personalised Health Care**
Fostering Precision Medicine Advancements for Gaining Population Health Impact

Springer

# The European network staff eXchange for integrAting precision health in the health Care sysTems (ExACT) project
# 欧洲网络人员交流以在医疗体系中整合精准医疗（ExACT）项目

✓ **Consortium**: 17 Partners **联盟**： 17个合作伙伴

> 7 EU Countries (Belgium, Germany, Greece, Italy, Netherlands, Spain, UK) 7个欧盟国家（比利时、德国、希腊、意大利、荷兰、西班牙、英国）
> 1 Associated country (Switzerland) 1个关联国家（瑞士）
> 2 Third Countries (USA and Canada) 2个第三国（美国和加拿大）
> > *of which其中*
> > > 10 Academic 10个为学术
> > > 7 Non Academic 7个为非学术

**Precision Health & Sustainability**
@PHS_projects

EU funded ExACT project, with a multidisciplinary approach, is dedicated to integrating precision health in health care systems

🔗 exactproject.net

✓ **Duration持续时间:** 48 months： 48个月

✓ **Starting Date开始日期:** March, 2019 2019年3月

✓ **Secondments借调:**
> ✓ 74 researchers in secondment借调74名研究人员

**Editorials**

## Personalized prevention and population health impact: how can public health professionals be more engaged?

Stefania Boccia[1,2], Walter Ricciardi[1,2]

# Collaboration between China and the EU
# 中欧合作

❑ 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

❑ 2015年12月，**中欧科研创新联合资助机制**（CFM）合作启动，在支持双赢合作中发挥了重要作用

❑ 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

❑ 欧共体和中华人民共和国科学技术部（MOST）同意续签CFM至**2018-2020**，以支持中欧大学、研究机构和公司之间的联合项目

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

❑ 这项合作在**共同应对全球挑战**方面起着重要作用，因此，双方都希望改善创新合作的框架条件

IC2PerMed

# IC2Permed approach
# IC2Permed方法

## 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
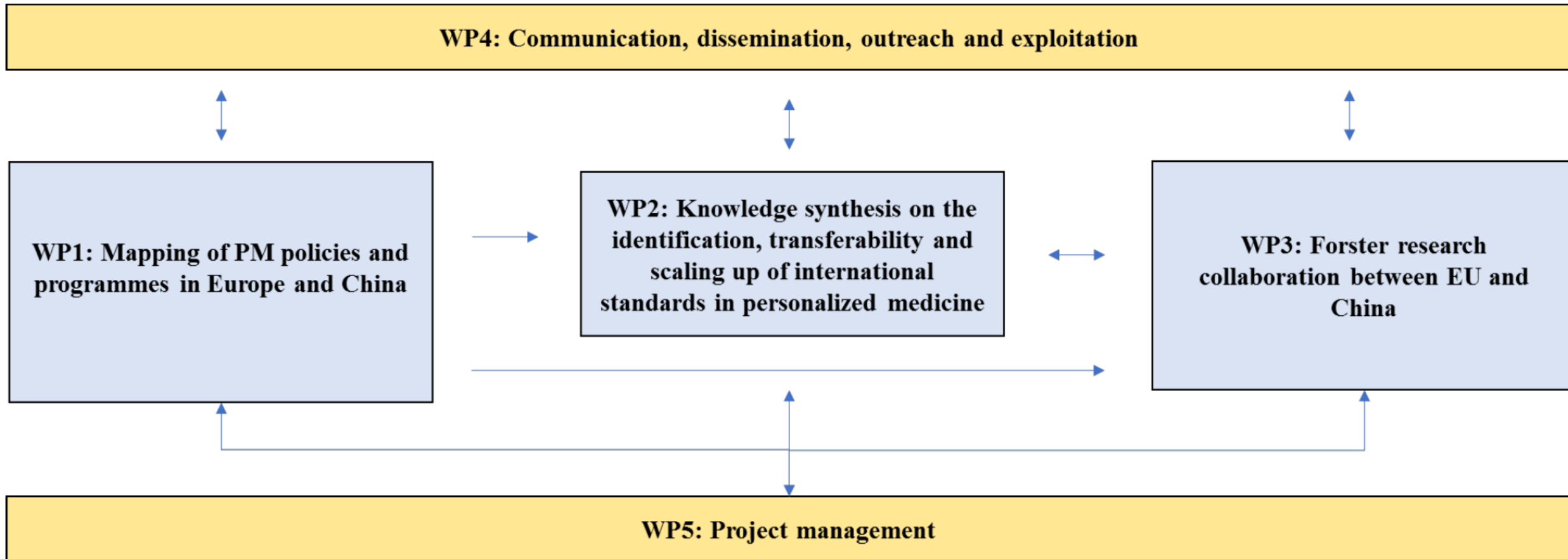
## 04. Engaging

Creating strong bridges with key stakeholders from the EU, China and beyond, integrating Chinese stakeholder in ICPerMed and liaising with international peers

ICPerMed
INTERNATIONAL CONSORTIUM

IC2PerMed

# IC2PerMed Pert Chart
# IC2PerMed Pert图表

# Advisory Board members
# 咨询委员会成员

- **Wen Mao**, temporarily replaced Tianyu Shen - Geneva and Zili Huang – Shanghai (World Economic Forum Beijing Representative Office, International) 暂时取代Tianyu Shen（日内瓦）和Zili Huang（上海）（世界经济论坛北京代表处，国际）

- **Usman Khan** (FIPRA, Europe) （欧洲FIPRA）

- **Jie Huang** (National Institute for Food and Drug Control, China) （中国国家食品药品监督管理局）

- **Zili Huan**g (World Economic Forum) （世界经济论坛）

- **Mao You** (China National Health Development Research Centre, China) （中国国家卫生发展研究中心，中国）

- **Martina Cornel** (Community Genetics & Public Health Genomics, Amsterdam UMC , Netherlands) （社区遗传学和公共卫生基因组学，阿姆斯特丹UMC，荷兰）

- **Anant Jani** (Department of Primary Health Care Sciences, University of Oxford, UK) （初级保健护理科学系，牛津大学，英国）

- **Gaetano Guglielmi** (Department of Prevention, Italian Ministry of Health （预防科，意大利卫生部）

# Project developments项目发展

**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

**工作组**：欧盟和中国的个性化医疗利益相关者共同体，分析和设计个性化医疗研究与创新方案的发展**路线图**，以促进相关机构将中国的利益相关者纳入ICPerMed活动

Mapping of Personalised Medicine's policies and programmes in Europe and China

梳理欧洲和中国的个性化医疗政策和计划
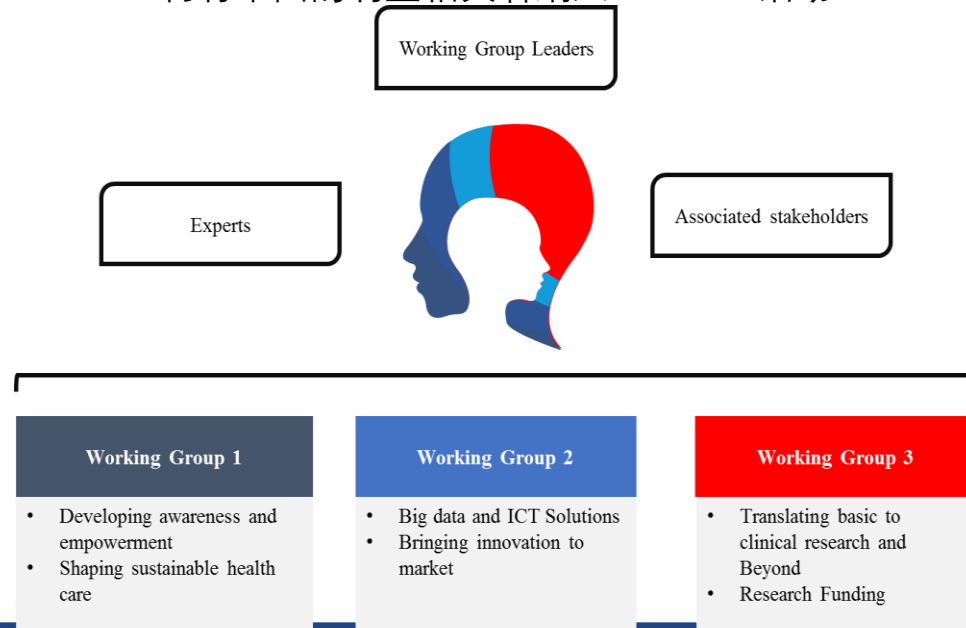
Delegation visits Creating a solid framework for collaboration formalising engagement of relevant Chinese stakeholders within the ICPerMed initiative

代表团访问 建立一个坚实的合作框架，正式使相关的中国利益相关方参与ICPerMed计划

Working Group Leaders

Experts

Associated stakeholders

| Working Group 1 | Working Group 2 | Working Group 3 |
|---|---|---|
| • Developing awareness and empowerment<br>• Shaping sustainable health care | • Big data and ICT Solutions<br>• Bringing innovation to market | • Translating basic to clinical research and Beyond<br>• Research Funding |

IC2PerMed

# Working Group framework Set-up
# 工作组框架设置

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

3个合作工作组，通过提供有关欧盟和中国实施个性化医疗方法现状的洞察，定义在中国实施ICPerMed行动计划的框架
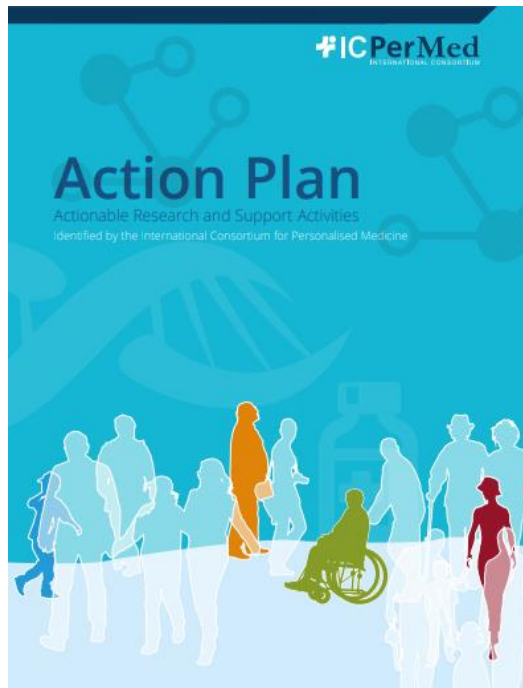
| WG 工作组 | Challenges 挑战 |
| --- | --- |
| WG1 | Shaping sustainable health care 塑造可持续医疗 |
| WG2 | Innovation and Market 创新与市场 |
| WG3 | Research and Clinical Studies in PM 个性化医疗的研究与临床试验 |

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# Experts identified n. 35
# 确定的专家数35

❖ *Europe欧洲 75%*

(Italy, Estonia, The Netherlands, Spain, Hungary, Belgium, Germany, United Kingdom, Switzerland,

Denmark, France, Austria, Finland)

（意大利、爱沙尼亚、荷兰、西班牙、匈牙利、比利时、德国、英国、瑞士、丹麦、法国、奥地利、芬兰）

❖ *China中国 20%*

❖ *Canada加拿大5%*

IC2PerMed

**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造一个**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。

**Research and Science collaboration 研究与科学合作:**

❑ Help EU and China shape 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 to enable 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

❑ 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 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

IC2Permed supports the implementation of

SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH AND WELL-BEING

IC2PerMed

# Keep in touch
# 保持联系

- Stay tuned, check IC2PerMed website and link with its social media

- 持续关注，访问IC2PerMed网站并关注其社交媒体

- For more information on, how to get involved, etc. please get in touch with EU / Chinese contacts

- 有关如何参与等更多信息，请联系欧盟/中国的联系人

- You will be contacted by e-mail following this event for further contributing to developments

- 本活动结束后将通过电子邮件与您联系，以进一步促进发展

| European contacts<br>欧洲联系人 | Chinese contacts<br>中国联系人 |
|---|---|
| Dr. Chiara Cadeddu<br>chiara.cadeddu@unicatt.it<br>IC2PerMed@unicatt.it | Ms. Sylvia Zhou<br>sylviazhou@mail.tsinghua.edu.cn<br>Ms. Lili Wang<br>wanglili2@genomics.cn |

www.ic2permed.eu

twitter.com/Ic2PerMed

chiara.cadeddu@unicatt.it

IC2PerMed

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**Emails: stefania.boccia@unicatt.it**
**stefania.boccia@policlinicogemelli.it**
*Personal twitter account: @PHS _projects*
*twitter.com/Ic2PerMed*