Horizon 2020 Societal Challenge 1 Health, demographic change and wellbeing



Gary Morgan MPT Innovation Group



Horizon 2020 Societal Challenges

1. Health, demographic change and well-being

- 2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy
- 3. Secure, clean and efficient energy
- 4. Smart, green and integrated transport
- 5. Climate action, environment, resource efficiency and raw materials
- 6. Europe in a changing world inclusive, innovative and reflective societies
- 7. Secure societies protecting freedom and security of Europe and its citizens







Background

Focus

Personalising health and care

Aims

The ageing of the European population, increasing communicable and non-communicable disease burden and the fall-out from the economic crisis are jeopardising the sustainability and equity of European health and care systems. The call aims to create opportunities for breakthrough research and radical innovation in response to these challenges, by supporting the translation of findings into the clinic and other health and care settings to improve health outcomes, reduce health inequalities and to promote active and healthy ageing







One call

- Personalising health and care
 H2020-PHC-2014, €549.3 million, 17 topics
- Additional call on co-ordination activities
 H2020-HCO-2014, €40 million, 11 topics

Deadlines March/April 2014
Includes single-stage and two-stage proposals







Understanding health, ageing and disease

 Understanding health, ageing and disease: determinants, risk factors and pathways







Effective health promotion, disease prevention, preparedness and screening

- Health promotion and disease prevention: translating 'omics' into stratified approaches
- Evaluating existing screening and prevention programmes
- Improving the control of infectious epidemics and foodborne outbreaks through rapid identification of pathogens
- Vaccine development for poverty-related and neglected infectious diseases:
 Tuberculosis

Note: international participants & part of the Global TB Vaccine Partnership







Improving diagnosis

- Development of new diagnostic tools and technologies: in vitro devices, assays and platforms
- Clinical research for the validation of biomarkers and/or diagnostic medical devices

Note: SME focus

Innovative treatments and technologies

- New therapies for chronic non-communicable diseases
- Clinical research on regenerative medicine
- Comparing the effectiveness of existing healthcare interventions in the elderly







Advancing active and healthy ageing

- Advancing active and healthy ageing with ICT: Service robotics within assisted living environments
- Advancing active and healthy ageing with ICT: ICT solutions for independent living with cognitive impairment
- Developing and comparing new models for safe and efficient, prevention oriented health and care systems







Advancing active and healthy ageing

- Self-management of health and disease: citizen engagement and mHealth
 - Citizen engagement in health, wellbeing and prevention of diseases
 - mHealth applications for disease management
- Foresight for health policy development and regulation
- Advancing bioinformatics to meet biomedical and clinical needs
- eHealth interoperability

Note: USA links







Co-ordination activities

- Support for the European Innovation Partnership on Active and Healthy Ageing
- Joint Programming: Coordination Action for the Joint Programming Initiative (JPI) "More Years, Better Lives – the Challenges and Opportunities of Demographic Change"
- Support for international infectious disease preparedness research

 Note: should include third countries
- Global Alliance for Chronic Diseases: prevention and treatment of type 2 diabetes

Note: must include international stakeholders in low- and middle-income countries







Co-ordination activities

Note: ERA-Nets are coordinated funding involving funding agencies from multiple countries

- ERA-NET: Establishing synergies between the Joint Programming on Neurodegenerative Diseases Research and Horizon 2020
- ERA-NET: Aligning national/regional translational cancer research programmes and activities
- ERA-NET: Systems medicine to address clinical needs
- ERA NET: Rare Disease research implementing IRDiRC objectives
- Bridging the divide in European health research and innovation
- Mobilisation and mutual learning action plan
- National Contact Points







Funding from Australia

- Own Institution sources
- National Health Medical Research Council
 - The National Health and Medical Research Council (NHMRC) European Union (EU) Collaborative Research Grants scheme aims to provide assistance to Australian researchers to participate in multinational research collaborative projects with international researchers that have been selected for funding under the European Commission's Seventh Framework Programme (FP7) Cooperation Calls for proposals.
 - http://www.nhmrc.gov.au/grants/types-funding/-z-list-funding-types/nhmrc-european-union-collaborative-research-grants







EU Projects – Gary Morgan

- EUFP6 AMIDA "Augmented multi-party interaction with distance access" (Lead Uni Edinburgh, CSIRO)
- EUFP7 EURASIAPAC (Lead Fraunhofer, CSIRO, University of Canterbury NZ)
 - http://eurasiapac-fp7.eu
- EUFP7 AU2EU "Authentication and Authorization for Entrusted Unions" (Lead Technical University of Eindhoven, CSIRO, Macquarie University, UNSW, RMIT, Edith Cowan University)
 - €8.64 million
 - Trustworthy information sharing for biosecurity incident management
 - http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.4825011







Thank you





