



An Introduction to Health KTN Collaborations and Funding Opportunities

Prof Mehdi Tavakoli, Technical Director HealthTech and Medicines KTN

UK Diagnostics Forum

19 March 2014, Oxford UK



KTN: Building a Healthy Nation through Business Innovation



The HealthTech and Medicines KTN (Health KTN) supports business innovations through partnerships, access to funding and knowledge transfer.

Connecting Partners

• Bringing together & facilitating collaborations with a common goal

Access to Funding

Identify and influence new and existing sources of funding

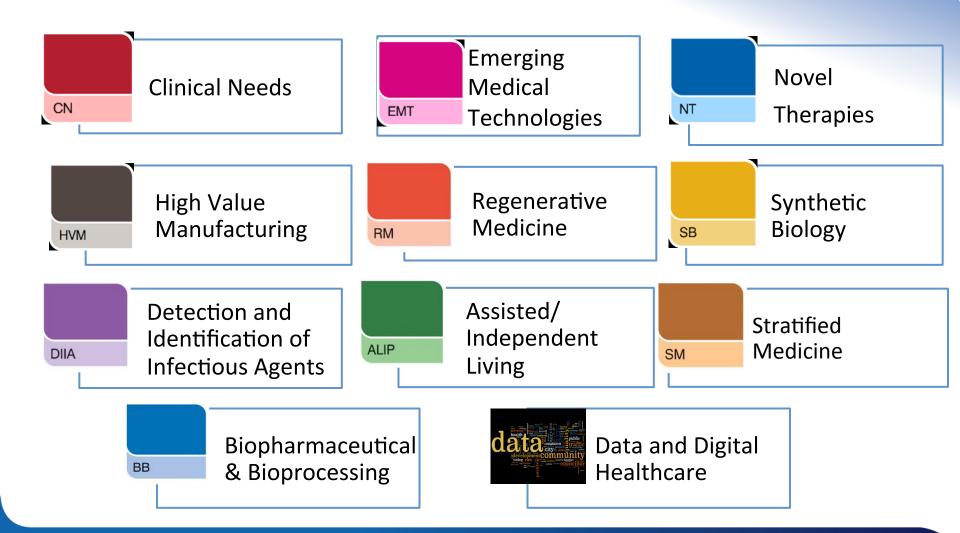
Knowledge Transfer

Opening doors to wider networks of people/organisations



UK Health Priority Areas







Priority Areas - Clinical Needs



- Identifying unmet clinical needs and influencing future funding calls (eg TSB Reg Med 2014).
- Facilitating industry/clinicians collaborations through events.
- Identifying funding opportunities and collaborating partners.
- Access to leading clinicians and clinical centres of excellence.
- Close collaboration with DH, NHS, NIHR, NICE, NOCRI, NHS-24, NISCHR, HSCNI and influencing future national. healthcare innovation strategy.
- Close collaborations with clinician-led major initiatives e.g. HTCs, DEC's, AHSNs, BRCs, etc.
- Facilitating commercialisation of new products, accelerating

Knowledge Transfer Network

HealthTech and Medicines

Clinicians/Industry Collaborations





Sepsis – Case Study









Workshop 1: Define Clinical Need

Sepsis: Identifying Clinically Useful Diagnostic Tools

Workshop 2: Introduce Industry to Address Clinical Need

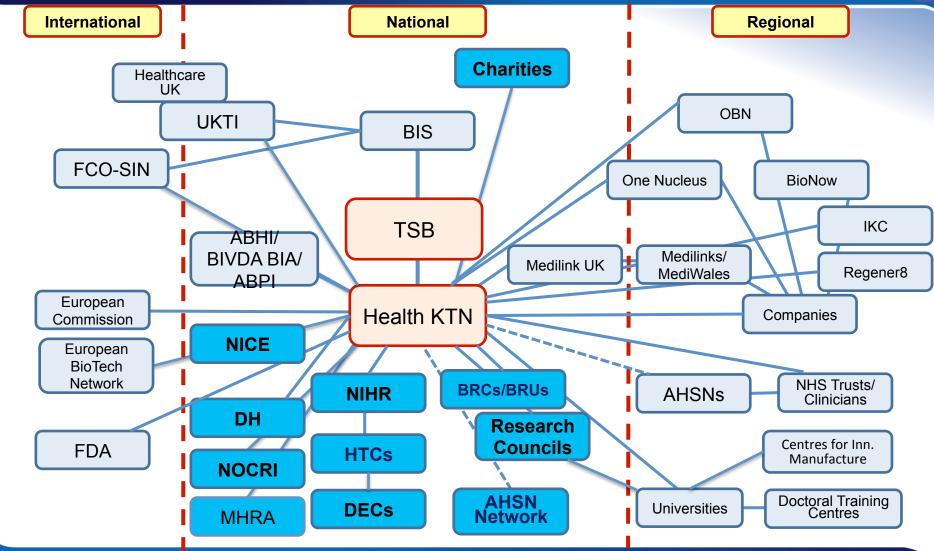
Sepsis: Industrial Engagement Workshop

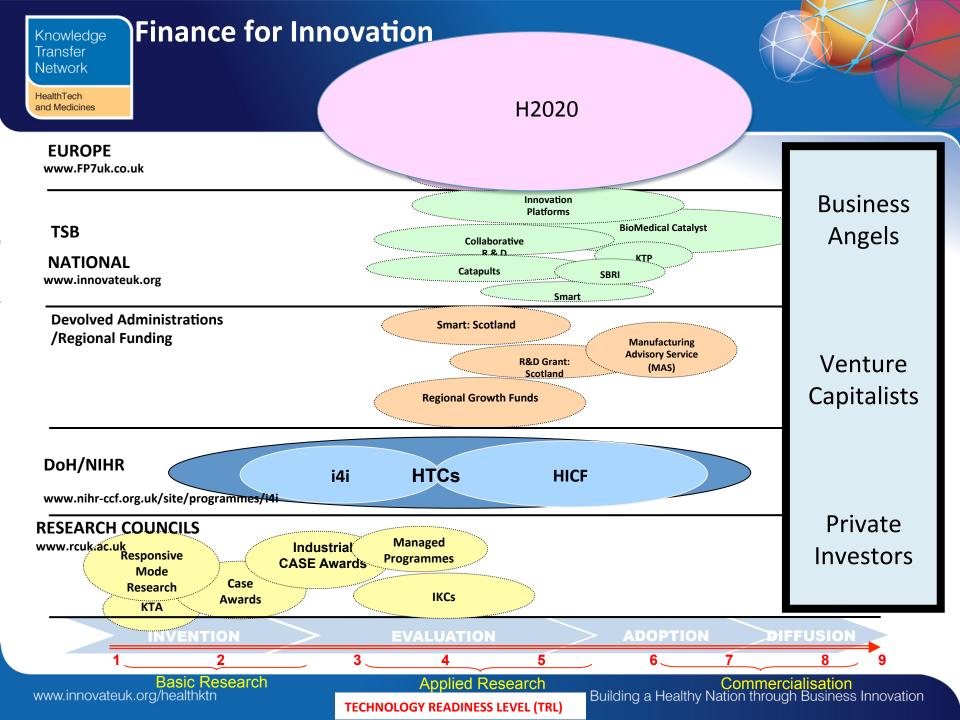
Funding Call Launch under The Detection & Identification of Infectious Agents (DIIA) Innovation Platform



Supporting Organisations









TSB & MRC-Biomedical Catalyst

- Joint TSB and MRC programme
- Translating excellent science into clinical practice
- Three categories of grant:
 - Feasibility/Confidence in Concept Award
 - Early Stage Award/DPFS
 - Late Stage Award/DCS
- Open to UK SMEs and academics individually or in collaboration
- Developing novel solutions to healthcare challenges including:
 - disease prevention and proactive management of health and chronic conditions
 - earlier and better detection and diagnosis of disease.
 - highly effective treatments tailored to patients' needs.
- Applications are accepted on a rolling basis for assessment by independent experts at designated times throughout the year (see website for assessment batch dates).
- Current call-Round 6, opened 13 Feb, closes 4 Jun 2014.





Biomedical Catalyst- Round 2 Awards

- Applied Nanodetectors Ltd Point of care exhaled breath test for the diagnosis of community acquired pneumonia.
- Integrated Magnetic Systems Ltd Magnetic antibodies in point-of-care diagnostics.
- Cirridian Medical Ltd Implantable continuous glucose monitor using an optical reflection grating.
- **Lancaster University** Acoustic emission as a non-invasive biomarker for quantitative dynamic assessment of knee joint repair in clinical trials and stratified medicine.
- **ProteinLogic Ltd** -Feasibility of developing a novel biomarker signature as an innovative diagnostic for tuberculosis (TB).
- **Imagen Biotech** -The use of High Content Phenotypic screening to guide the clinical management of cancer treatment.
- **Enigma Diagnostics Ltd** Resonant sensing, a novel form of DNA detection for low-cost highly informative tests; construction of an assay for multidrug resistant TB and bovine TB.
- **Base4 Innovation Ltd** A rapid, highly sensitive, adaptable diagnostic for broad spectrum pathogen screening.
- **Lancaster University-** Acoustic Emission as a non-invasive biomarker for quantitative dynamic. assessment of knee joint repair in clinical trials and stratified medicine.
- Gentronix Ltd Assessment of the feasibility of developing an in vitro screen for epigenetic mutagens.



Biomedical Catalyst - Round 3 Awards

- Moor Instruments Ltd -Video Rate Blood Flow Imaging for Reconstructive Plastic Surgery.
- **Owlstone Ltd** Non-invasive identification and monitoring of Inflammatory Bowel Disease (IBD).
- Physiomics plc Clinical version of the Physiomics Virtual Tumour.
- Roslin Cellab Ltd Use of a Novel Cell Printer to Create, Analyse and Optimise 3D Liver Tissues.
- Sareum Ltd SAR studies to validate novel Fatty Acid Synthase (FASN) inhibitors as anti-cancer therapeutics.
- Manus Neurodynamica Ltd Developing a novel non-invasive aid for early diagnosis of Parkinson's Disease.

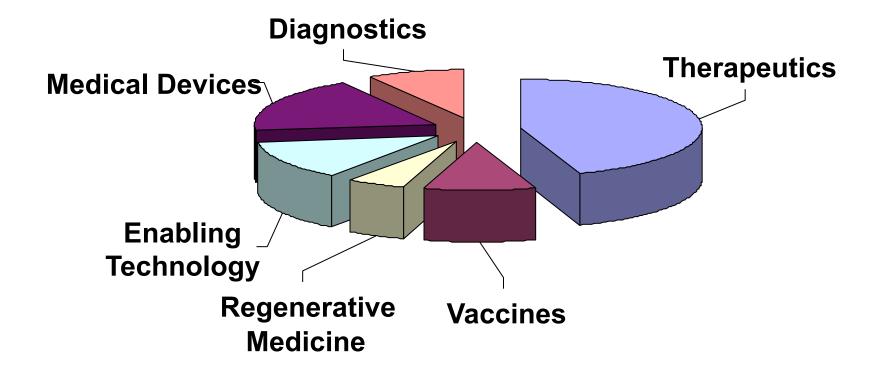


Wellcome Trust - The Translation Fund

- The aim of Translation Awards is to develop innovative and ground breaking new technologies in the biomedical area.
- Funds ambitious projects or portfolio programmes with an unmet healthcare need.
- Projects must have already demonstrated proof of principle, supported by experimental data.
- Broad areas of healthcare will be considered current highlight is "Restoring the Body".
- Applicants submit a short concept note.
- Preliminary applications are by invitation only.
- Concept note deadlines: 25 April and 13 June 2014.



Diversity of Translation Funding



Technology Transfer



H2020



Excellent Science

European Research Council (ERC)

Future & Emerging Technologies (FET)

Marie Skłodowska-Curie actions

> Research Infrastructures

Industrial Leadership

Leadership in Enabling and Industrial Technologies

Access to Risk Finance

Innovation in SMEs

Societal challenges

Health, demographic change and wellbeing

Food security, sustainable agriculture, forestry, marine, maritime, inland water and bio-economy

Secure, clean and efficient energy

Smart, green and integrated transport

Climate action, environment, resource efficiency and raw materials

Inclusive, innovative and reflective societies

Secure societies – protecting freedom and security of Europe and its citizens

Spreading Excellence and Widening Participation

Science with and for Society

EIT

JRC



SME Instrument



?

Concept & Feasibility Assessment

Demonstration
Market Replication
R&D

Commercialisation

SME window EU financial facilities



Idea to concept, risk assessment, technological & commercial feasibility

Demonstration, prototyping, testing, market replication, scaling up, miniaturisation, research Quality label for successful projects, access to risk finance, indirect support

IDEA

continued support throughout the project

MARKET



Clinical validation of biomarkers and/or diagnostic medical devices - PHC-12-2014-1



H2020-SMEINST-1-2014Sub call of: H2020-SMEInst-2014-2015

Deadline Date: 2014-12-17 17:00:00 (Brussels local time)

Main Pillar:Industrial Leadership, Total Call Budget: €25,102,000

Specific challenge: Biomarkers are used in clinical practice to describe both normal and pathological conditions. They can also have a prognostic or a predictive power.

Scope: The SME instrument consists of three separate phases and a coaching and mentoring service for beneficiaries. Participants may apply to phase 1 with a view to applying to phase 2 at a later date, or directly to phase 2.

Phase1: A draft business plan and feasibility study verifying the technological/practical and economic viability of the clinical validation proposed. These may, for example, comprise risk assessment, market study, user involvement, intellectual property (IP) management, innovation strategy development, partner search, feasibility of concept etc

Expected impact:

Increased clinical availability and exploitation of biomarkers for the benefit of the patient.

New diagnostic devices.

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2540-phc-12-2014-1.html



PHC 11 – 2015: Development of new diagnostic tools and technologies: in vivo medical imaging technologies

Deadlines: S1,14 Oct 2014 and S2, 24 Feb 2015, Budget: €330,000,000

Specific challenge:

• The development of new diagnostics for improved clinical practice.

Improved clinical decisions based on new and improved diagnostic tools and techniques.

Scope: development of new and innovative *in vivo* imaging tools and technologies. Tools and technology should aim at improving diagnosis, prediction, monitoring, image-based intervention or assessment of therapeutic response, with a significant impact on clinical decisions and health outcomes.

EU contribution:4-6M Euros.

Expected impact:

- New *in vivo* diagnostic tools and methods providing more accurate, less invasive, more reliable and earlier disease diagnosis, prediction or response to therapy, leading to improved clinical decisions and outcomes.
- Contribution to the sustainability of health care systems.
- Growth of the European diagnostics sector, in particular for SMEs.



_connect portal





www.healthktn.org

www.innovateuk.org

THANK YOU

mehdi.tavakoli@ktn-uk.org

H2020: octavio.pernas@tsb.gov.uk

WT: M.Antia@wellcome.ac.uk

