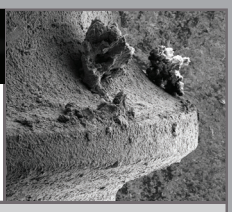

Little miracles

If we are to think big in terms of society's greatest challenges, we first need to think small

Think big, start small

A key plank of Horizon 2020, the European Union's next framework programme due to run from 2014 to 2020, is bridging the gap between blue sky research and marketable solutions. This is a theme running throughout the three pillars of the funding programme, from Excellent Science, to Industrial Leadership and culminating with Societal Challenges.

Brigitte von Rechenberg, Prof Dr med vet, Dipl ECVS

The European Union has designed a pathway for groundbreaking research, combined with expertise from industry, to develop those innovative solutions that could help solve the biggest challenges facing humanity, not least how to feed a growing global population, which will include far more elderly people, and at a time when the planet's resources are under threat from climate change.

Perceived wisdom has it that we must develop much more personalised and efficient solutions to these challenges. How do we feed more people with fewer resources? How do we make sure individuals get the care they need? How do we look after the growing number of people who have served society their entire lives, but who now look to the next generation?

In this newsletter we hear from EU Commissioner for Health, Tonio Borg, on his thoughts on personalised medicine, Nathalie Moll welcomes the new BRIDGE PPP and Brigitte von Rechenberg discusses the work of the Center for Applied Biotechnology and Molecular Medicine (CABMM) at the University of Zurich.

A promising concept

Personalised medicine is a concept defined by the European Alliance for Personalised Medicine (EAPM) as being 'a targeted approach to the prevention, diagnosis and treatment of disease based on an individual's specific profile.'

However, the realisation of a truly personalised approach to healthcare is still some way off, with several key developments required, including the establishment of a regulatory environment which allows early patient access to novel and efficacious personalised medicine.

Writing in the Foreword to the EAPM's Report from Irish Presidency March 20/21 2013 publication, entitled *Innovation and patient access to personalised medicine,* the European Commissioner for Health, Tonio Borg, said: "Personalised medicine is a promising concept. As patients are divided into groups based on their individual, biological, genetic and genomic characteristics, medical interventions are tailored to those patients' needs.

He added: "Ensuring patients' access to safe, quality treatment lies at the very heart of our European policies, and personalised medicine is part of our plans for the future of European healthcare. We are currently improving the legal framework for clinical trials and medical devices, which will benefit personalised medicine. Once adopted, the new Regulation on Clinical Trials will facilitate multinational trials."

Commissioner Borg's statement thus reveals that the robust regulatory environment called for by the EAPM is already becoming a reality, and, by fostering co-operation between all stakeholders, the right conditions for personalised medicine to be taken up and to be easily accessible to patients will undoubtedly be created.

www.euapm.eu

Bio PPP announces

A new €3.8bn public private partnership (PPP) for bio-based industries in Europe, aimed at ensuring smart, sustainable and inclusive economic growth and enabling Europe to become a world-leading Innovation Union, has been adopted by the European Commission.

The Bio-based Industries PPP, also known as 'BRIDGE' (Bio-based and Renewable Industries for Development and Growth in Europe), is a multisector initiative whose vision is that of a society and economy which increasingly makes everyday products from locally-sourced biomass and wastes, rather than fossil fuels.

It is hoped that the initiative will create jobs in a broad range of sectors in Europe, triggering rural economic growth across regions whilst placing sustainability and the smart and efficient use of resources at its heart. The PPP will also aim to overcome the 'valley of death' by bridging the gap between excellence in technology and success through EU commercialisation of bio-based products.

The announcement of the proposal is part of a €22bn innovation investment package of new Joint Technology Initiatives under Horizon 2020. Nathalie Moll, EuropaBio secretary general, stated: "For far too long the EU's industry leaders in Industrial Biotechnology, which is a key enabler of the broader bio-based economy, have had to seek support and investment overseas.

"Crucially this has meant that the benefits of cutting-edge EU technology are reaped elsewhere. Today's announcement is a positive sign that the EU is seeking to reverse this trend … it is now crucial that the European Parliament and member states support this proposal."

http://bridge2020.eu/

From bench to bedside and back again

The Center for Applied Biotechnology and Molecular Medicine (CABMM) (http://www.cabmm.uzh.ch/index.html) is an official competence centre of the University of Zurich with the objective of creating a stimulating environment for interdisciplinary and translational research in order to promote scientific exchange and collaborations between basic and clinical researchers.

The CABMM shows a unique structure, combining 1) a network of existing research groups interested in scientific exchange and collaboration on interdisciplinary and translational research projects and 2) a platform for collaborative research, where basic scientists, clinicians and veterinarians work shoulder to shoulder for the purpose of developing novel therapeutic approaches for the treatment of dysfunctional and diseased tissue.

Thereby, unlike other research centres, the CABMM is not focusing on one particular medical field, but on translational and interdisciplinary aspects. Thus, range and diversity or research being conducted within the CABMM is broad, but all research follows one aim: to facilitate the development of new treatment regimes by building a bridge between basic and clinical researchers.

Between the 51 active members from the University of Zurich (UZH) and the Swiss Federal Institute of Technology in Zurich (ETHZ), the CABMM shares the most modern infrastructure for translational research and offers together with the University Hospital (USZ) official accreditation for Good Manufacturing Practice (GMP) and Good Clinical Practice (GCP). Good Laboratory Practice (GLP) is also offered and is undergoing official accreditation at the Swissmedic (Swiss Agency for Therapeutic Products) at this time.

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