

# European Technology Platforms Conference 2010

## Workshop on Education and Skills

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IMIM - Universitat Pompeu Fabra

Barcelona Biomedical Research Park (PRBB)



- Involvement in **IMI JU**: Participation in the KM and E&T committees for the elaboration of the strategic research agenda (SRA); currently member of its Scientific Committee
- Representing the **Alianza 4 Universidades (A4U)**, a cluster of four research universities from Madrid and Barcelona



IMI SRA is organised around four strategic areas:

- **Prediction of Drug Safety**
- **Prediction of Drug Efficacy**
- **Knowledge Management**
- **Education and Training:** This addresses the bottlenecks related to gaps in expertise in biomedical R&D knowledge and skills. Bottlenecks to be resolved are those related with the previous areas. The education and training pillar will also ensure that Europe's biomedical education landscape is enhanced to revolutionise the conventional drug discovery and development paradigm.

### **General Gaps:**

- Many of the players involved in the medicines R&D process need an integrated overview of the entire process. Specialised professionals need an understanding of the interdisciplinary aspects of pharmaceutical R&D. An 'helicopter' view in the process is essential for many stakeholders (regulatory authorities personnel, clinical investigators, university teachers, ethics committee members and journalists, etc.).
- On the other hand, there is a profound need for qualified personnel within the natural, technical, pharmaceutical and medical sciences. Furthermore, there is a need for ongoing training to keep them updated with scientific and technology developments.

### **Specific Gaps (I):**

- The current organisation of universities facilitates the building of silos, where each scientific area lives its own life without much interaction with other areas.
- In most European countries, the scientific interaction between scientists in academia and industry is minimal, and often the movement of intellect is uni-directional towards industry.
- There are training needs on translational science. Translational medicine is emerging as an attempt to bridge the gap from bench to bedside and back again by combining a thorough understanding of the biology of a disease with the clinical picture.

## **Specific Gaps (II):**

Scientists are urgently needed within these specific areas:

- Safety scientists with a much broader spectrum of knowledge than the traditional toxicologist.
- Pharmacology, non-clinical and clinical.
- Physicians specialised in pharmaceutical medicine.
- Scientists skilled in bioinformatics, biosimulation, computational modelling, knowledge management, systems biology, and pharmaceutical biotechnology.
- Medical statisticians and biostatisticians.
- Scientists and technicians on biomedical imaging.

### **Specific Gaps (and III):**

- Continuous professional development, including an update on new scientific developments and technologies for scientists, physicians, patients and carers.
- People working in SMEs, especially in the early phases of medicines R&D, need an integrated overview of the medicines development process, including regulatory requirements, business skills and understanding of the business environment.
- Journalists, venture capitalists and the public lack an understanding of the process of medicines development, including the risk–benefit balance.

### **Current E&T projects** (funded in the 1<sup>st</sup> Call):

- EMTRAIN: European Medicines Research Training Network
- SAFESCIMET: Safety Sciences for Medicines Training Programme
- PHARMATRIN: Pharmaceutical Medicine Training Programme
- EU2P: Pharmacovigilance Training Programme

### **Planned topic** for the 3<sup>rd</sup> Call:

- Fostering a broader understanding of pharmaceutical R&D in the broader public



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The universities are very well positioned institutions for providing the educational actions required by the Technology Platforms because:

- Long tradition in higher education
- Worthwhile education and research mix

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Nevertheless, for doing so, it has to:

- Evolve from “what professors like to teach” to “what the society demands to learn”
- Intensively collaborate with the industry and other relevant institutions
- Go beyond programmes built around classical subjects (Biology) by developing programmes addressing societal challenges (Drug Discovery)

*Lifelong training are very required in our rapidly changing world*

The screenshot shows a web browser window displaying the IDEC website. The browser's address bar shows the URL: [http://www.idec.upf.edu/en/seccions/oferta\\_formativa/inCompany\\_presentacio.php](http://www.idec.upf.edu/en/seccions/oferta_formativa/inCompany_presentacio.php). The website header includes the IDEC logo and navigation tabs for MBA, Masters and postgraduates, International Programmes, Online Programmes, Executive Education, and In-company Training. Below the header, there are tabs for IDEC, ALUMNI, SERVICE FOR COMPANIES, SERVICE FOR PARTICIPANTS, and ADMISSIONS. The main content area is titled 'In-company training' and features a section for 'Joining forces' with a portrait of Emili Cuatrecasas. A quote from Emili Cuatrecasas is displayed: "IDEC is a fine example of collaboration between university and business in the field of education. Up to now the result has been very beneficial and it has enormous future potential".

**General Programme**

- MBA
- Masters and postgraduates
- International programmes
- Online programmes
- Executive Education
- In-company training**
  - Presentation
  - Programmes developed
  - Clients
- University masters

**In-company training**

**Joining forces**

In the society of learning only talent prevails, and discovering, nurturing and developing such talent are some of the most important tasks faced by corporations. Programmes for business people and custom programmes for companies are IDEC's response to the needs of managerial staff.

Custom programmes are closely linked to a company's strategies and are designed with it in order to adapt them to its objectives. The key is to have a profound knowledge of the client and IDEC's role as an integral part of the organisation.

**How we are different**

We work with the company so as to offer the necessary services at any given time. Our way of doing things is characterised by the ability to listen, flexibility, high standards and the quality of our service:

- quality and prestige guaranteed by the University
- programmes offering three different study methods : classroom participation, e-learning and blended learning

**Emili Cuatrecasas**  
Member and President  
Cuatrecasas

"IDEC is a fine example of collaboration between university and business in the field of education. Up to now the result has been very beneficial and it has enormous future potential"

*All the society and not only the professionals directly involved in a particular R&D challenge, might be “educated” on the matter: The education of the media professionals is a must*

The screenshot shows a web browser window displaying the IDEC website. The browser's address bar shows the URL: <http://www.idec.upf.edu/master-in-scientific-medical-and-environmental-communication>. The website header includes the IDEC logo (Universitat Pompeu Fabra) and navigation menus for MBA, Masters and postgraduates, International Programmes, Online Programmes, Executive Education, and In-company Training. Below the header, there are tabs for IDEC, ALUMNI, SERVICE FOR COMPANIES, SERVICE FOR PARTICIPANTS, and ADMISSIONS. The main content area features a sidebar on the left with links for 'Master in Scientific, Medical and Environmental Communication', 'Presentation', 'Internships', 'Fees and financing', and 'Sponsors and partners'. The central content area displays the title 'Master in Scientific, Medical and Environmental Communication' with the dates 'Barcelona, February - December 2011'. Below this, there is a 'Presentation' section with a 'next >' link. The text in the presentation section discusses the transition from an industrial society to a knowledge society and the importance of public communication of science. On the right side, there is a vertical menu with icons and links for 'Online application', 'Contact', 'Print', 'Send to a friend', and 'Other programmes of interest'. At the bottom of the right menu, there are links for 'Postgraduate course of Video Journalism (ENG)', 'Journalism and Media - Professional Development Programme', and 'Journalism and Media - Professional Development Programme'.

Master in Scientific, Medical and Environmental Communication. IDEC-UPF

http://www.idec.upf.edu/master-in-scientific-medical-and-environmental-communication

Universitat Pompeu Fabra / Global Campus

english / castellano / català

idEC UNIVERSITAT POMPEU FABRA

MBA Masters and postgraduates International Programmes Online Programmes Executive Education In-company Training

IDEC ALUMNI SERVICE FOR COMPANIES SERVICE FOR PARTICIPANTS ADMISSIONS

Home > General Programme > Masters and postgraduates

Master in Scientific, Medical and Environmental Communication

Presentation

Internships

Fees and financing

Sponsors and partners

General Programme

MBA

Masters and postgraduates

International programmes

Online programmes

Master in Scientific, Medical and Environmental Communication

Barcelona, February - December 2011

Presentation next >

**Presentation**

We are at an historic moment, defined by the evolution and transition from the industrial society to the knowledge society, the development of which is principally based on the rapid incorporation of scientific innovations into daily life. For this reason, the transformations that accompany this evolution are not only economic but also, particularly, cultural and social. It is therefore increasingly necessary to initiate strategies aimed at publicizing this new knowledge and its possible applications and uses and the ethical, social, economic and political questions deriving from them.

Public communication of the sciences is of strategic relevance in this context. There can be no doubt that, with the changes that are taking place in our society and in the process of transition toward a knowledge-based economy, the traditional formula of RDI has become essential for attaining a competent position on the world stage. It seems, however, clear that the sum of research, development and innovation

Online application

Contact

Print

Send to a friend

Other programmes of interest

Postgraduate course of Video Journalism (ENG)

Journalism and Media - Professional Development Programme

**Many thanks for your attention**



Ferran Sanz (IMI – UPF – A4U)