

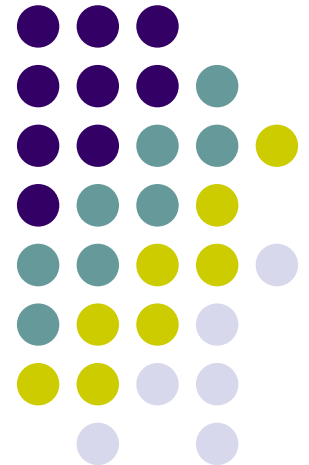
Ghent 26-11-2007 MARIE CURIE training programme



Workshop 2

Isabelle Cambier-Kustoscz,
CDE coordinator

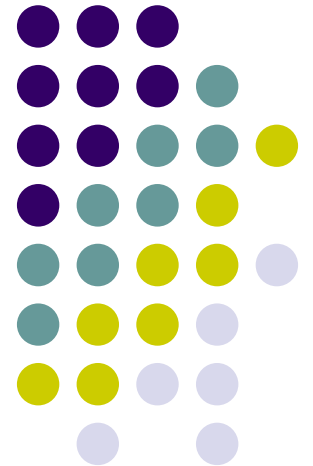
<http://cde.univ-lille1.fr>



Some information about



EU POLICY

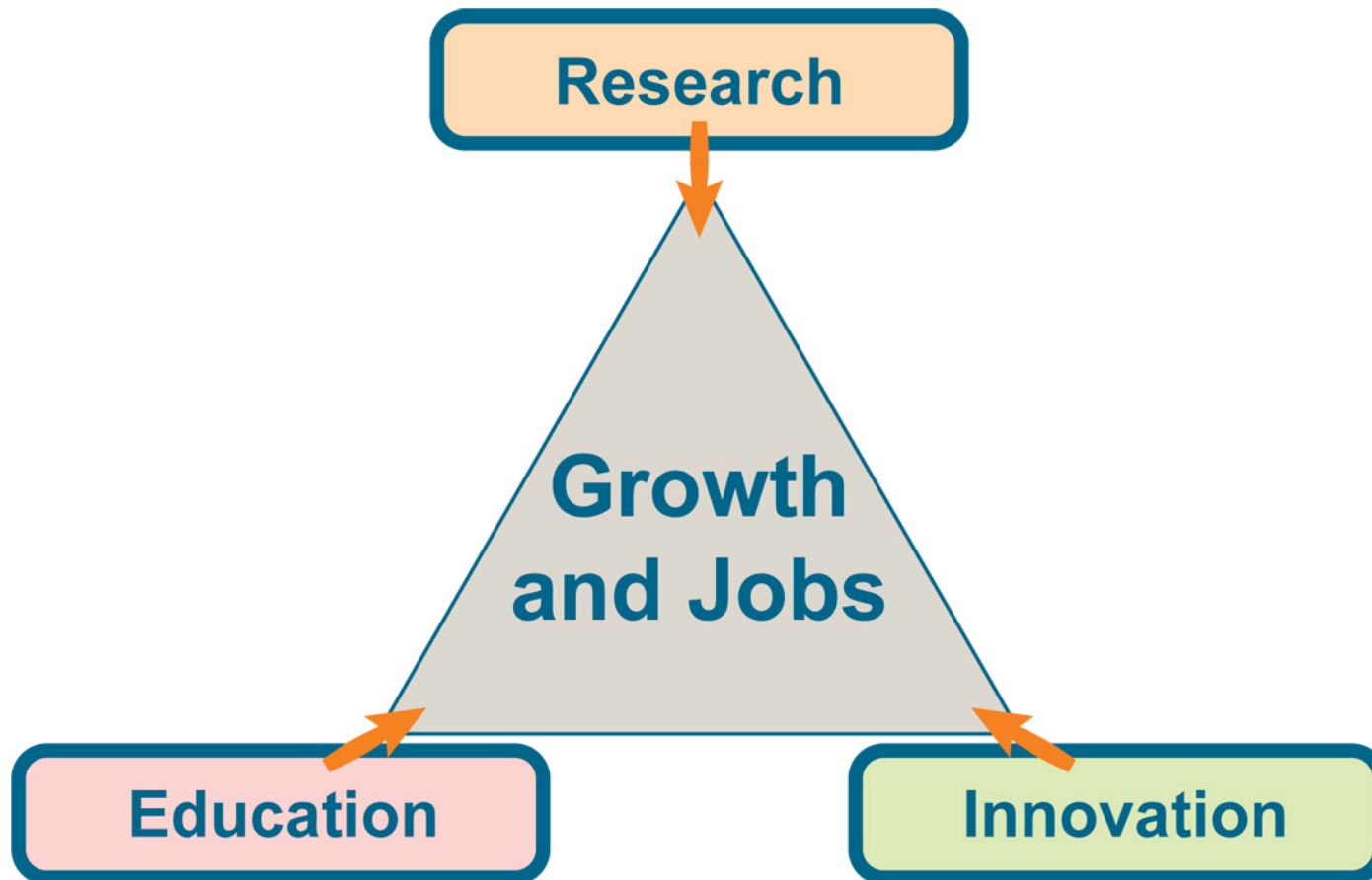
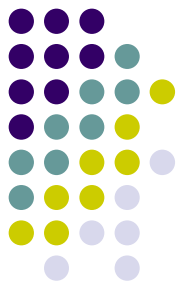


In a knowledge-based society



- doctors find themselves at the confluence of science and society, the world of academia and the world of business, human values and professional competencies, as well as economic and social knowledge and progress. The crucial role of doctoral education is acknowledged at national, European and international level.

S&T contributes to the Lisbon objectives
economic growth, employment creation, environmental protection, social challenges: fight poverty, improve human health and quality of life



Ministers meeting in Berlin in September 2003

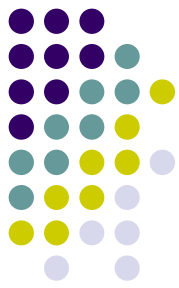


- « European Higher Education Area and European Research Area – two pillars of the knowledge based society »
- *Ministers call for increased mobility at the doctoral and post-doctoral levels and encourage the institutions concerned to **increase their cooperation in doctoral studies and the training of young researchers.***

European charter et code of recruitment



- These two documents are key elements in the European Union's policy to make research an attractive career
- Giving individual researchers the same rights and obligations
- The European Charter for Researchers addresses the roles, responsibilities and entitlements of researchers and their employers or funding organisations.
- The Code of Conduct for the Recruitment of Researchers aims to improve recruitment, to make selection procedures fairer and more transparent and proposes different means of judging merit

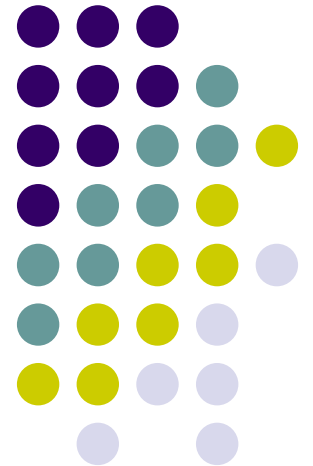


Ten basic principles (Salzburg 2005)

- The core component of doctoral training is the advancement of knowledge through original research
- Embedding in institutional strategies and policies
- The importance of diversity
- Doctoral candidates as early stage researchers
- The crucial role of supervision and assessment
- Achieving critical mass
- Duration (3 to 4 years full-time as a rule)
- The promotion of innovative structures
- Increasing mobility
- Ensuring appropriate funding

Some information about

MARIE CURIE ITN



3 main goals of Initial Training Network



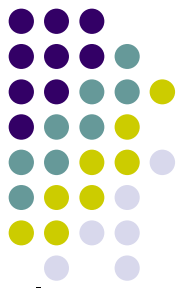
- To improve research competences and complementary skills of young researchers
- To help them join established research teams (to draw the map of « intensiv research » universities)
- To enhance their career prospects in the both public and private sectors.

What must we find in the training programme ?



- A joint training programme (local /external)
 - 1- first focused on scientific and technological knowledge through research (in laboratory)
 - 2- secondly on training modules (in Doctoral school) : complementary or soft skills
 - 3- Training Events (conferences, summer schools, advanced courses, joint meetings...)

Doctoral programme based on...



scientific and technological knowledge through research and basic scientific courses in Masters or Doctoral Schools

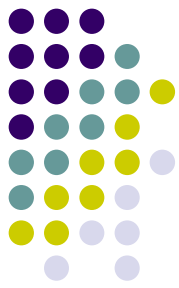
A few examples are

- Molecular spectroscopy; Laser diagnostics in combustion, plasmas and environment; Remote sensing of environment; Radiative transfer in atmosphere; Reactivity in homogeneous and heterogeneous phases; Modelling of reactive and complex systems.
- **Personnal Career development plan**
A plan built for each researcher with his supervisor in the host university.

- **Complementary skills**
In the frame of doctoral schools

management, funding of research, property rights, exploitation method of research results, entrepreneurship, ethical aspects, communication and societal outreach, Doctoriales, writing a proposal, New chapter of the thesis

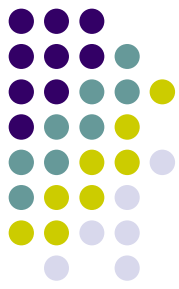
- **Training events**
With visiting scientists, with external researchers, with multidisciplinary aspects if possible.....



With a supervisory board

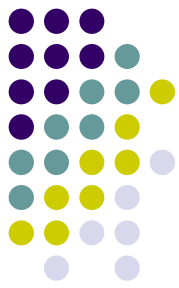
- Good balance between hard and soft skills
- Between local and external training (visiting scientists)
- Well appropriate to the needs of each recruited young researchers
- Exchanges in the frame of the network (how the network's potential will be exploited)
- SME's point of view (essential) : to define the skills requirements for the young researchers.

Involvement of industrial partners or SME's



- Three levels :
 - Full network partner in the research programme
 - Provider of research training and complementary training (secondment)
 - Members of the supervisory board.

An example of evaluation (with a goog mark 4.9/5)



- Importance and timeliness of the training needs are well emphasized.
- Multidisciplinary / interdisciplinary training consistent with the research program.
- The network-wide training activities based on workshops, summer schools and conferences are presented in detail with clear indication of time scheduling and organizers.
- Summer schools and a conference will be opened to external researchers and world leading specialists will be invited.
- Complementary training and intellectual property rights are well addressed.
- Supervision of ESRs by one of the partners and secondments to another partner of the network is also a positive issue.
- The role of the industry is at a high level participating in both the research and training parts of the project.

(with a bad mark 4.1/5)



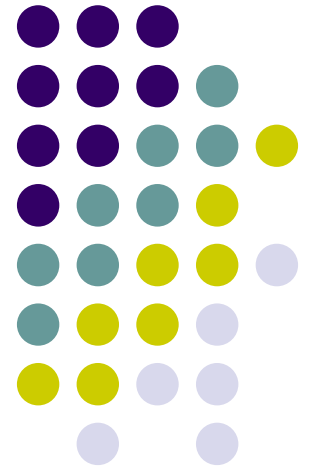
- **Strengths:**
- Inter-partner mobility and exchange is planned
- Established local PhD programs with training of complementary skills and a two week annual school are included
- The objective of the network is for trainees to obtain a European PhD
- One annual week is devoted to discovering the business world
- The deliverables for each trainee (a PhD degree and 4 publications) are ambitious but realistic
- Well organised, sophisticated training program for a European PhD, with interdisciplinary aspects, secondments, and well defined deliverables.

- **Weaknesses:**
- The progress evaluation and network specific training contributions could be described in more detail
- It should be described whether complementary skill training is networkwide for all ESRs or local with one of the partners only
- The network partners might benefit if some specific interactions among the groups were planned
- Industrial partner should be involved in the training

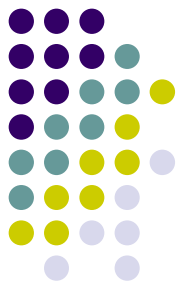
conclusion



Collège Doctoral Européen
Lille - Nord-Pas de Calais



The coordination and exchange of good practice between doctoral schools



should allow to rapidly increase their impact on the knowledge economy

- by improving the quality of services available to PhD students and consequently their employability;
- by valorising the R&D capital of the young researchers trained by the schools;
- and by consolidating collaboration between the academic world and the business world in the widest possible sense.



How to work together ?

Inter-university and inter-doctoral schools cooperation to

- integrate doctoral students in the european research space
- enhance attractiveness of doctoral studies
- built synergy between the academic world and the professional world

In sharing projects

- Marie Curie Initial training network and international fellowships
- Common trainings or events (fundamental, scientific, advanced courses and complementary skills)