



Multidisciplinary seminars on the responsible conduct of research

for early-career researchers,
their supervisors and mentors

Education for Responsible Conduct of Research (RCR) and Education for Sustainable Development (ESD) promote values and attitudes which are conducive to the achievement of a sustainable future. Both aim to develop the capacities of students to:

- 1** Develop an ethic of personal responsibility to participate as active and involved citizens in building a sustainable future
- 2** Achieve change in values and behaviour through reflection, individual and collective learning and evaluation
- 3** Develop core skills like critical and creative thinking, enquiry-based learning (EBL), identification and assessment of issues – social, cultural, economic, environmental –, autonomy, communication and cooperation

Both recognize that new approaches to training are needed both at institutional and personal levels. To develop quality learning in research, the challenge is to open spaces of dialogue and collective learning within a highly fragmented and competitive scientific environment.

“ **Most important of all, as the first scientific studies of the factors behind good conduct confirm, is the example set by senior researchers themselves. It is here in the laboratory that the trajectory of research conduct for the twenty-first century is being set.** ”

(Leading by example, Editorial Nature Vol 445, Issue no. 7125 / 18 January 2007)

The Réflexives[®] seminars

Training through research significantly contributes to the development of those core competencies that are central to employability and to the education of critical citizens: critical thinking, analysing, arguing, independent working, learning to learn, problem-solving, cooperative working, etc

→ Objectives

To help PhD students to:

- Build research projects with strong scientific background and hypotheses
- Understand the interdependence of social, cultural, economic and ecological issues
- Enhance communication skills in the context of science in society
- Assess and reflect about research practices
- Develop positive attitudes toward life-long learning in matters involving the responsible conduct of research

→ Strategy

- Open “transaction spaces” and create a learning environment
- Foster interdisciplinary dialogue by mixing PhD students and supervisors from different disciplines
- Focus on the scientific and professional project of the PhD student assisted by his/her supervisor(s)
- Share best practices: reflecting on research practices and professional and skills development

→ Method

- Use linguistics and heuristics tools
- Work on both oral and written discourse (dialogical approach and analysis of written productions)
- Work in groups of 8 to 10 participants with two facilitators (researchers trained in communication and facilitation/mediation)

At INRA

- **14 research departments, a wide range of disciplines:** applied mathematics, integrative biology, environmental sciences, human food and food safety, social sciences, etc
- **5-day seminars with workshops on:**
 - Creativity: constructing a research project, building one's scientific identity
 - Reflective practice: encouraging participants to engage with their own learning using reflective journals
 - Communication within the changing paradigm of researchers IN society

At the European level

CEC-WYS (Center for Women and Youth in Science): a E-U funded SSA

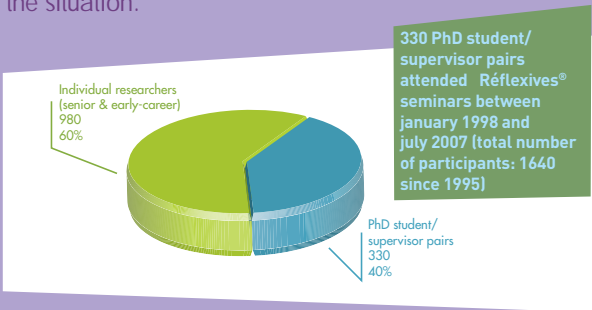
- **2 seminars:** Budapest, Hungary (october 2005) and Bratislava, Slovakia (january 2006)
- **Public:** early-career researchers, PhD students and their supervisors

BIORHIZ: a Marie Curie Training Network in conjunction with project CONSIDER

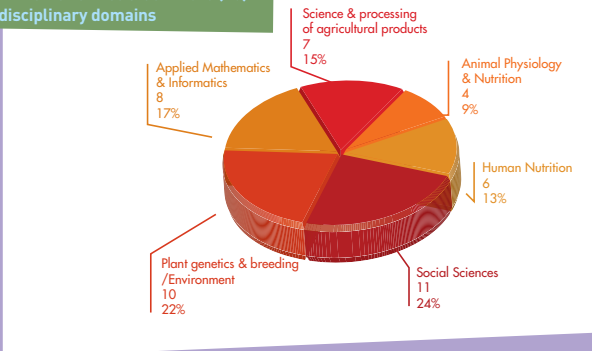
- **2 seminars:** Juelich, Germany (october 2006) and Copenhagen, Denmark (december 2006)
- **Public:** PhD Students and their supervisors; early-career researchers

What participants said

- The seminar has opened my eyes regarding the position and the role of the researcher in the society, and his responsibility.
- It helped me broaden my horizons and think about the other people not working in my field and try to communicate with them better.
- I didn't expect interdisciplinary approach and so many useful methods to be presented. I wanted to come back with a clearer picture on my PhD and from this point of view the training seminar has fulfilled my expectations completely.
- Attending the seminar helped me to realize what was "wrong". I didn't really understand what science is actually about. Now I understand better.
- During the reflective practice, I began to think more about the relation between my personal wishes, dreams, priorities, career, and the real life, and how I can change the situation.



Researchers involved as facilitators in the Réflexives® seminars (46): disciplinary domains



For further information on Réflexives®

• <http://www.reflexives-lpr.org>

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