RESIDENZA UNIVERSITARIA BIOMEDICA
FONDAZIONE COLLEGIO UNIVERSITARIO S. CATERINA DA SIENA
Pro Multis Sapientia

UNIVERSITÀ DEGLI STUDI DI PAVIA

Proposal from: Daniela Ovadia (ethicist, "cultrice della materia" MPSI02). The course is co-organized with Residenza Universitaria Biomedica – Collegio S. Caterina

COURSE ON ETHICS OF RESEARCH AND RESPONSIBLE RESEARCH AND INNOVATION

Course learning outcomes

Teaching ethics of research and Responsible Research and Innovation (RRI) at doctoral level in Universities is mandatory in most of European countries. Italy lacks of this tradition and expertise.

We set up an experimental interdisciplinary course in Ethics of Research and RRI for doctoral students at University of Pavia since the academic year 2016-2017, following the model proposed by the EU Commission (undergraduate students are welcomed, but should apply by e-mail with a motivation letter and a short CV).

The **methodology** includes frontal lessons, case discussions, participatory processes and active involvement of the students in the development of each lesson. We want to foster interaction and participation. Simulation of ethics assessment and social impact assessment of research procedures, ethics evaluation and interaction with the general public will also take place to allow the students to develop practical skills in the field.

The course will require some homework, like reading essays and papers.

Our teaching goals for ethics of research fit into the following four general categories: **knowledge, skills, attitude and behaviors.**

Knowledge about the responsible conduct of research will include the facts, guidelines, policies, data and other sources of information.

Among the core competencies that we want our students to acquire there are:

- Knowledge of, and sensitivity to, issues surrounding the responsible conduct of research and research misconduct.
- Appreciation for accepted, normative scientific practices for conducting research.
- Awareness of the grey areas and ambiguities of ethical issues, including differences between compliant and ethical behaviour in the conduct of research, or the range of acceptable and unacceptable practices.
- Awareness that rules change over time and vary across disciplines or nations.
- Information about the regulations, policies, statutes, and guidelines that govern the conduct of research in PHS funded institutions.

Skills to promote ethical practice in science include specific proficiencies, for example:

- Ethical decision-making, including recognizing problems, identifying and examining assumptions underlying practices, using analytical skills and strategies in addressing issues and problems, and exploring implications of different courses of action.
- Critical thinking and problem solving
- Conflict resolution, arbitration and mediation, people management
- Communication skills

Attitudes and behaviors, defined by an acceptance of the value of acting in ways which foster responsible conduct. This area of the course will focus on:

- Collection, use, and interpretation of research data
- Methods for reporting and reviewing research plans or findings
- Relationships among researchers with one another
- Relationships between researchers and those that will be affected by their research
- Means for responding to misunderstandings, disputes, or misconduct
- Options for promoting ethical conduct in research

Number of hours and timing: 20 hours during the first semester (from September to January)

Lecturers: Daniela Ovadia (16 hours), Maria Laura Fiorina (jurist, 4 hours)

Scientific committee: Gabriella Bottini, Amedeo Santosuosso

Disciplines involved the course: PhD students from all the disciplines are welcomed. The more multidisciplinary is the course, the best result we achieve. In previous years, the course recruited mostly PhD students from scientific disciplines (psychology, biology, medicine). We would like to increase the number of participants from Humanities and from Engineering and Technology disciplines.

Course syllabus

- At the roots of ethics and human subject research
- Informed consent
- Drug trials and recruitment
- Animal research
- Embryo and stem cell research
- Basic knowledge of legal aspects of ethics and science
- APA guidelines, psychological and social research
- Who evaluates the ethics? Research ethics committees, national and international institutions etc.
- Data management and privacy
- Ethics of new technologies, ethics of engineering
- Environmental ethics
- Social impact of scientific research: how to evaluate it
- Foresight and future studies
- Intellectual property and authorship
- "Publish or perish" and quality of research
- Professional ethics, misconducts, fraud and retractions
- Conflicts of interest
- Responsible research and innovation and EU ethics rules
- How to write an ethics work package for a research project
- Public involvement, techniques for public debate and decision making in controversial issues
- From ethics to policy making

Evaluation criteria

Students will be evaluted on the following criteria:

- attendance
- participation in the discussions and simulations
- final multiple choice questionnaire

Language: the course and case discussions will be held in English.