Growing disciplines are characterized by institutional differentiation including the built-up of teaching. This is also true for neuroethics, whose institutionalization started about a decade ago. To advance best practice in teaching neuroethics, we report our experiences in conducting the Zurich Spring and Summer School in Neuroethics that took place in April and June 2013. In total 13 participants from eight countries joined the School. Discussing case examples, group activities, and input on methodology were mostly appreciated by the participants; „information overload" was the major critique. Four scientific contributions resulted from the School.

Teaching Neuroethics - The Zurich Spring & Summer School Experiences

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NATIONAL CORE FOR NEUROETHICS
LA NEUROÉTHIQUE

Goals of the Course

We wanted to...

... attract participants from various countries.

... present a broad overview of topics clustered along the thematic fields „Research in neuroscience", „Damaged brains, damaged minds?", „Repaired and enhanced brains", „Neuroscience and society".

... allow both for theoretical and practical work, including meeting with experts and site visits.

... promote students' own scientific output.

Participants

Our aim was to attract primarily (but not exclusively) PhD students in neuroscience and philosophy. The course was advertised in various mailing lists; it turned out that it was more difficult to approach neuroscientists compared to philosophers. In total, 15 persons from 8 countries applied; 6 had a background in science/medicine, 9 in philosophy. Two participants had to decline their application, 6 attended only the Spring School. The group size turned out to be favorable for intensive teaching and group work and we achieved the desired diversity with respect to background and countries.

Design of the School

We designed our school as consisting of two parts that were separated by eight weeks. The first "theoretical" part (Spring School, 4 days) gave an overview on the various issues that are discussed within neuroethics; Prof. Judy Illes joined this part as external faculty. The second "practical" part (Summer School, 5 days) had a focus on methodology, site visits and individual work on student projects. During the first part of the school the organizers served mainly as teaching fellows whereas afterwards their role was tutoring and mentoring student projects.

Output Targets

For each part, we defined an "output target" consistent with the design of the School:

1) The first part was concluded by a one-day workshop of researchers with a background in science (neuroscience, neurology) or humanities (ethics, law); and our aim was that the students were able to **critically contribute to the workshop discussions**.

2) The goal of the second part was that the students work in a **project that they defined** during the weeks between the spring and summer school sessions, with an **abstract as the main outcome**. Students were encouraged to submit their abstracts to the International Neuroethics Society Meeting 2013. Four abstracts were finally submitted, i.e. more than half of the students that participated in both parts of the School provided a scientific output.

Feedback by Students

We used an extensive feedback form to evaluate the school. The main findings were: 1) Case examples were highly appreciated, and a balance between empirical knowledge and normative reflection should be achieved. 2) Group activities, e.g. discussion role plays, are an important tool to consolidate theoretical insights. 3) Learning empirical methodology (bibliometrics, survey design) was highly valued by the participants. 4) Discussing too many topics leads to „information overload" and shoud be avoided.

Take Home Messages

- Set a **thematic focus** and use **case examples** and **group activities** to work on the topics.
- Include courses on **methodology** on „how to do stuff" in neuroethics - and then use it for small projects.
- Students are willing and able to actually do **scientific work** in a School - so go for it.

Photographic Impression

Clustering ideas

Presenting can be fun

Outlining own ideas

Discussing with experts