

**Bi-annual Advisory Board Review
Life Science Zurich Graduate School
and**

**Plant Science, Science & Policy, and
Microbiology & Immunology PhD Programs,**

October 2013

Advisory Board:

Mariken de Krom, University Medical Center Utrecht

Winship Herr, University of Lausanne

Sally Leever, Cancer Research UK London Research Institute

Isabel Roditi, University of Bern

Plant Science PhD program

Dr Melanie Paschke, program administrator, together with Prof. Ueli Grossniklaus, presented the Plant Science PhD program. This PhD program started in 2002 and forms a part of the Plant Science Center, a competence center founded in 1998 by the University of Zurich, the ETH, and the University of Basel. In general, this PhD program is strong, although it has to continually rise to the challenge of an inter-institutional program where the members are distributed over different cities.

Strengths

- PSC-Syngenta fellowships have promoted excellent, often interdisciplinary, PhD studies published in outstanding journals.
- A mandatory colloquium on “Challenges in Plant Sciences.”
- A well-developed course program and transferable skills emphasis.
- A research symposium organized by students every two years.
- PhD students are opened up to experimental techniques and networking.
- Student enthusiasm.

Weaknesses

- There exist inconsistent thesis committee requirements. For example, the Department of Environmental Systems Science (ETH) does not require a thesis committee. The AB felt that the Plant Science PhD program should work in collaboration with the LSZGS to establish and promote the benefits of PhD thesis committees for PhD advisors. For example, the Plant Science PhD program and LSZGS could organize an ad hoc meeting for an exchange of views between PhD advisors that see the benefits of PhD committees and those that do not currently integrate their students into PhD thesis committees.
- There was evidence that thesis committees are not meeting on a sufficiently regular basis.
- Junior PhD advisors with unclear status as independent researchers could be better integrated into the PhD program.

Opportunities

- Increase communication with new faculty including junior PhD advisors with unclear status as independent researchers.

- To better promote the value added of the Colloquium by discussing its format with current PhD students.
- To provide the administrative support necessary to alert PhD students and advisors by email of the need to organize a thesis committee meeting.
- The program should work with the PhD advisors and PhD programs, including at the University of Basel, to ensure that the Plant Science program receives thesis committee reports.
- If possible, students would be aided if a single record of course certificates were maintained by the program.
- The program should help junior faculty develop their research careers, for example by considering an information day to describe the doctoral program as well as share good practices in doctoral education with new faculty. Junior faculty representative(s) could be encouraged to participate in program committees.

Threats

- It was noted that there will be considerable senior faculty turnover in the upcoming years. This will have an impact on the role of senior leadership in the program.

Science & Policy PhD Program

This program began as an offshoot of the Plant Science program and its original name was Plant Science & Policy PhD program. The descriptor “Plant” has been dropped so as to broaden the scope of the program. This change will only be successful if members of the broadened community support the program in a substantial way.

This PhD program was presented by Dr. Andrea Pfisterer with Drs. Manuela Dahinden and Melanie Paschke of the steering committee participating. The program is relatively small and does not aim to be large. Currently 60% of students are international recruits and 47% of students are female. The program is generally well appreciated by participating faculty and students alike.

Strengths

- The Science & Policy PhD program is an innovative and interesting PhD program.
- The student understanding of the Science & Policy PhD program is good.
- The program provides an intensive fundamental research experience, which produces graduates with a firm understanding of the research process with all its strengths and weaknesses.
- The program has raised important external funding including NSF, Marie Curie, and Mercator funding for fellowships and program development.
- There are courses directly tailored to this unusual program.
- The program promotes student internships in policy environments.
- A Summer School program provides an excellent learning experience.

Weaknesses

- Students in Environmental sciences lack thesis committees.

Opportunities

- Expansion of the internship program.
- Broaden the science and policy design to other fields in the life sciences. Four new departments are currently interested in being involved.
- Development of the new Marie Curie Bridges PhD fellowship program.

- Provide better PhD student supervision by for example student email alerts for the organization of upcoming thesis committee meetings.
- Consider the possibility to offer the policy track as a 6 months add-on to the other PhD programs. This makes it possible for a PhD student to completely focus on his research PhD and at the same time gain knowledge in the policy field.

Threats

- A new title means that the program is no longer uniquely associated with the Plant Science PhD program. For a broader success it will need to receive support — administrative, educational, and moral — from areas outside of the plant sciences. It will also be important to ensure that its mission of integrating basic research and policy making does not lose focus and is instead well-integrated across life sciences and potentially beyond. Will PhD advisors step up to the plate to support the program?
- The time constraints and funding mechanisms for a PhD based both on research and policy training is demanding.
- Program stability should be ensured both in regulations and in courses provided.