UNIVERSITÉ DE NEUCHÂTEL

Institut de biologie

Interuniversity Doctoral Program in Organismal Biology

Annual Report 2018

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At the last count (December 10), **75** Ph.D. students were registered in the doctoral program. This year **18** Ph.D. students received their doctoral degree. The average duration of their doctoral thesis was 4 years and 9 months.

18 courses or workshops were offered (see Table.1), which were attended by a total of **320** participants (**83** % Ph.D. students, **9** % post-docs or researchers, **8** % master students). Of the participants, **41** % were from the University of Neuchâtel, **24** % from Bern and Fribourg, **19** % from Geneva and Lausanne, and **17** % from other partner institutions (University of Zürich, ETH Zürich, Agroscope, etc.) and foreign institutions (see Graph.1).

Graph.1: Origin of participants to the courses

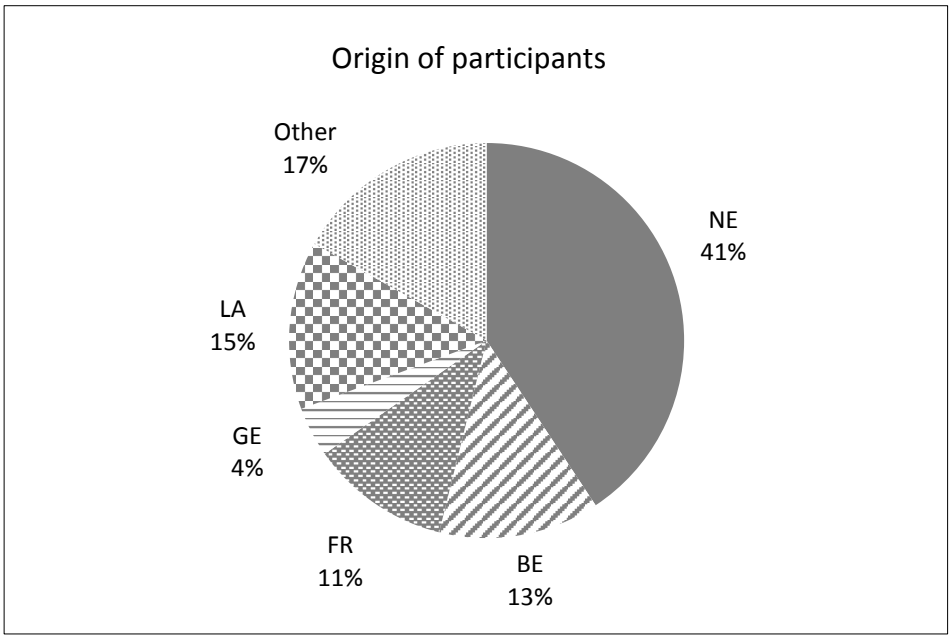


Table.1: Activities of the doctoral program year 2018 and evaluation scores

Evaluations were done by the participants at the activities (highest possible note is 4.0). The results from the evaluations were sent to the course instructors and the information is used for the selection and improvement of future courses.

Activities	Dates (2018)	Duration [days]	Speakers	*Participants [nr]	Credit points	Appreciation [min 1, max 4]
Communication activities						
How to obtain your first post-doctoral fellowship	24.04	1	M. Erb (University of Bern)	7	0.5	3.9
Patenting in life sciences - A hands-on workshop for Ph.D. students and postdocs - *in coll. with LS2 and CUSO*	11-12.06	2	H. Mueller (University of Basel & Swiss Federal Institute of Intellectual Property, Bern), S. Emler (SmartGene, Zug), M. Schweizer (Swiss Federal Patent Court), H. Zech (University of Basel), A. Deplazes (University of Zurich), R. Flükiger (University of Geneva)	45	1.0	-
Scientific writing clinic	19 & 26.06, 03.07	3	M. Matter (HEG Fribourg), J. Regan (ZUW University of Bern)	13	2.0	3.9
Career Compass: How to set the direction of your professional development	25.09, 17.10	2	D. Canella, T. Teichler (Lead to Trust, Zurich)	16	1.0	3.4
Publishing research articles	08.11	1	Ph. Mayer (Science-textflow, Winterthur)	14	0.5	3.9

Planning a career strategy - Networking & job finding methodology	13-14.11	2	P. Kraus (AHT' intermediation, Pfäffikon)	9	1.0	3.7

Research tools						
Chlorophyll fluorescence: in vivo study of plant physiology - *a joint course with CUSO Molecular Plant Sciences*	15-16.01	2	G. Finazzi (CEA Grenoble, France), M. Pollastrini (University of Florence, Italy), Z. Benedikty (PSI, Drasov, Czech Republic), P. Longoni (University of Neuchâtel), E. Demarsy (University of Geneva)	17	1.0	3.1
Plant imaging: advanced light microscopy - *a joint course with CUSO Molecular Plant Sciences*	08-09.03	2	S. Loubery (University of Geneva)	9	1.0	3.9
Introduction to ecological niche modelling	14-15.05	2	C. Randin (University of Lausanne & WSL)	10	1.0	3.7
Introduction to R - *a joint course with CUSO*	04-07.06	4	J. Goudet (University of Lausanne)	27	2.0	3.9
Metabolites profiling of plant secondary compounds	11.09	1	G. Glauser (University of Neuchâtel)	12	0.5	3.7
Applied statistical regression modelling for biologists using R - *a joint course with CUSO Ecology and Evolution*	12 & 19 & 26.10, 02 & 09.11	5	D. Kuonen (Statoo Consulting, Bern), M.-O. Boldi (University of Geneva)	20	2.5	3.4
Advanced data management & manipulation using R - *a joint course with CUSO Ecology and Evolution*	22-23.10	2	J. Wunder (WSL Birmensdorf & Wunder Consulting Wald, Zurich)	16	1.0	3.9

Scientific topics						
Open science: improving your research workflow to increase transparency and reproducibility	05.02	1	D. Roche (University of Neuchâtel), H. Seibold (University of Zurich), L. Henry (EPF, Lausanne), A. Scheel (Eindhoven University of Technology, The Netherlands), X. Schmalz (Ludwig-Maximillians University, Munich, Germany)	30	0.5	3.7
Biomineralization - *a joint course with CUSO Microbial Sciences & University of Lausanne*	09-10.04	2	K. Benzerara (Université Pierre et Marie Curie, Paris, France), T. Bontognali (ETH, Zürich), G. Gadd (University of Dundee, UK)	12	1.0	4.0
Visions for a sustainable agriculture - *a joint course with CUSO Ecology and Evolution & Molecular Plant Sciences*	02-04.05	3	J. Pickett (Cardiff University, UK), U. Kuhlmann (Plantwise, CABI, Switzerland), S. Kelemu (ICIPE, Kenya), L. Tamm (FiBL, Switzerland), S. Di Falco (University of Geneva), C. Screpanti (Syngenta, Basel)	40	1.5	3.7

Predicting outcomes of species interactions: linking ecology and evolution with demography and spread EEDAYS 2018 - *a joint course with CUSO Ecology and Evolution*	13-14.09	2	J. Maron (University of Montana, USA), J. Alexander (University of Lausanne), S. Keller (University of Vermont, USA), A. Guisan (University of Lausanne), E. Crone (Tufts University, USA), M. Saastamoinen (University of Helsinki, Finland), T. Züst (University of Bern), H. Müller-Schärer (University of Fribourg)	23	1.0 / 1.5	3.8

* all courses have a limited number of participants

Annual Ph.D. students meeting 2018 - Intellectual Property: from academia to industry

The annual meeting of the doctoral program is organised by the Ph.D. students themselves. For 2018, the organizers were Fabio Palmieri, Isha Jamil and Mélisande Aellen (University of Neuchâtel). The meeting took place 6 September in Neuchâtel. Four speakers, of which two internal (Prof Daniel Kraus, Faculty of Law, Dr Claudia Nash, Research and Innovation) and two external (Dr Jean-Luc Perret & Dr Lucien Rufener, INVENesis, Neuchâtel) were invited to give a talk. A total of 31 Ph.D. students attended the meeting. They presented the results of their research to their peers (21 posters presented and 6 fifteen-minute oral presentations).

The 1st oral presentation prize was attributed to Charlyne Jaccard (University of Neuchâtel), the 2nd oral presentation prize to Iga Tomczynska (University of Fribourg). Two best poster prizes were equally attributed (1st place, tied) to Maria Litto (University of Fribourg) and Aislinn Estoppey (University of Neuchâtel).

Congress and Mobility grants

9 congress travel grants (total CHF **7910.44**) were awarded to students enrolled into the doctoral program, which gave the awardees an opportunity to present their results (poster or oral presentation) to an international audience. In addition, **2** requests for mobility grants were received and all were partially granted (total CHF **1956.05**), allowing the students to visit other laboratories to conduct experiments, learn research techniques and/or discuss research results with experts in the field.

Global evaluation of the years 2017-2018

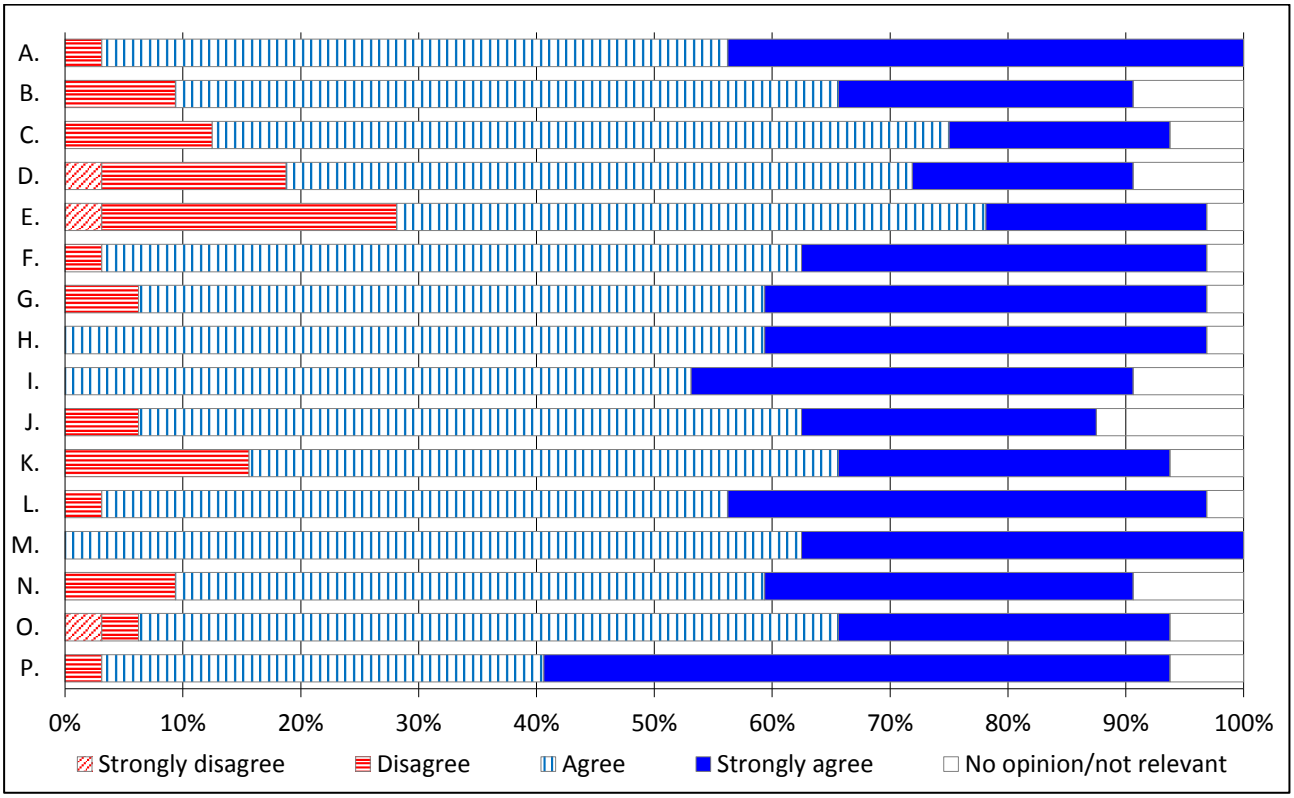
The global questionnaire was sent to all registered Ph.D. students and to their supervisors. Of the total responders, **78 %** were Ph.D. students (33.3 % of total of the doctoral program Ph.D. students), and **81 %** have attended courses or activities organized by the doctoral program. **47 %** of the responders have participated in the organization of activities.

Graph.2 provides a summary of the global evaluation of the doctoral program for the years 2017 and 2018. Asked questions are listed below. **Remarkably, 91 % of the responders would recommend our doctoral program to others**.

Global evaluation list of questions

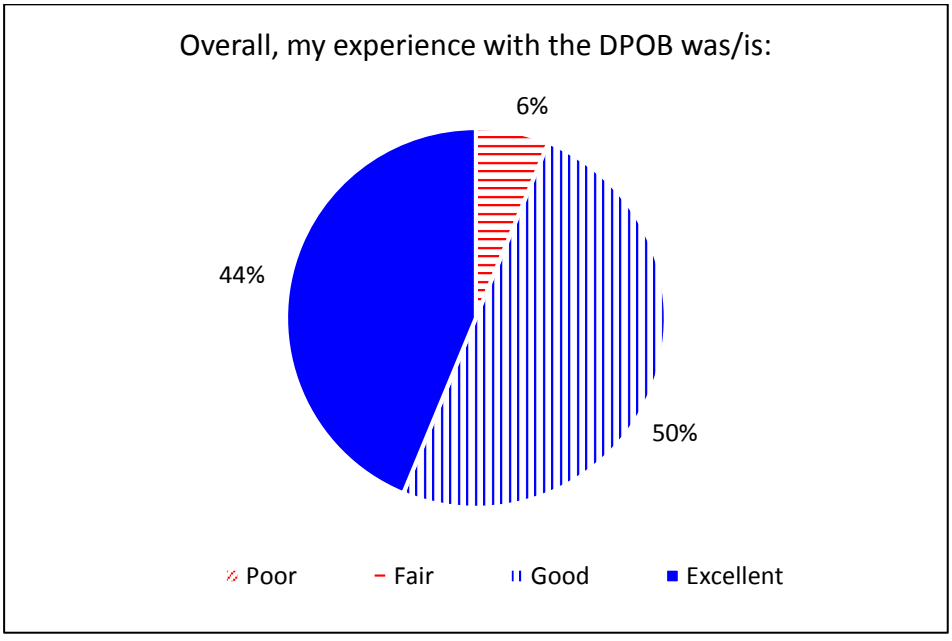
A. The Doctoral Program in Organismal Biology (DPOB) concept is good.
B. The requirements of the DPOB in matter of reports are adequate.
C. The requirements of the DPOB in matter of ECTS are adequate.
D. The range of courses was appropriate to my education.
E. The offer of courses was broad and complete.
F. The offered courses were of high standards.
G. Training methods and teaching approach were adapted to a doctoral program.
H. Overall, the speakers/teachers coaching was good.
I. I was motivated and did my best to actively participate at the courses.
J. The activities evaluation system was appropriate.
K. The time schedule of the courses was good.
L. The location of the courses was good.
M. The facilities provided for the courses were adequate (aulas, instruments, material, ...).
N. The main objective of the DPOB, i.e. to contribute to interdisciplinary learning, was met.
O. The added value of the offer of the DPOB justified the time that I invested in its activities.
P. I would recommend to enroll in the DPOB to others.

Graph.2: Results of the global evaluation 2017-2018



Overall, the evaluation was good (see Graph.3), as **44 %** of the responders rated the doctoral program as excellent, and **50 %** as good. This is consistent with the evaluation of previous years.

Graph.3: Overall experience with the doctoral program in Organismal Biology



The additional comments made by the responders (not shown) reflect their personal preferences in their respective research domain. While most of the comments were positive, it emerged that several responders wished to have more courses offered in their specific domain as well as broadening the topics proposed by, for instance including activities related to how to move from the academia to private and public companies. These remarks will be used for the planning of the next curriculum. We will continue collaborating with other programs to broaden the spectrum of courses that we can offer.