

Institut de biologie

Interuniversity Doctoral Program in Organismal Biology

Annual Report 2014

Christiane Bobillier & Ted Turlings



At last count (end of December 2014), 85 PhD students were registered in the doctoral program. This year 10 PhD students received their doctoral degree. The average duration of their doctoral thesis was 3 years and 10 months.

22 courses or workshops were offered (see Table), which were attended by a total of 541 participants (76 % PhD students, 20 % post-docs or researchers, 4 % master students). Of the participants 30 % were from the University of Neuchâtel, 16 % from Bern and Fribourg, 20 % from Geneva and Lausanne, and 34 % from the other partner institutions (University of Zürich, ETH Zürich, Agroscope, etc.) and foreign institutions. Most of the courses were evaluated by the students, as indicated in the last column of the below table (highest possible note is 4.0). The results from the evaluations were sent to the course instructors and the information will be used for the selection and improvement of future courses.

Duration [days]	Speakers	*Participants [nr]	Credit points	Appreciation [min 1, max 4]
2	P. Matthias (SCNAT, Bern), H. Müller (Uni Basel & Swiss Federal Institute of Intellectual Property), S. Emler (SmartGene, Zug), Daniel Kraus (Uni Neuchatel & Umbricht Attorneys at Law), R. Flükiger (Uni Geneva)	38	1.0	3.6
1	M.L. Goldschmid (consultant)	12	1.0	3.8
3	M. Matter (HEG Fribourg), Jeannette Regan (ZUW Uni Bern)	12	2.0	3.9
2	Gaëtan Glauser (Uni Neuchâtel), Armelle Vallat (Uni Neuchâtel)	12	1.0	3.4
1	Charles Andrès (Uni Neuchâtel)	6	0.5	3.6
0.5	Ph. Mayer, science-textflow, Winterthur	14	0.5	3.4
_	0.5	0.5 Ph. Mayer, science-textflow, Winterthur	0.5 Ph. Mayer, science-textflow, Winterthur 14	0.5 Ph. Mayer, science-textflow, Winterthur 14 0.5

Table: Activities of the doctoral program year 2014

Research tools						
Analysis of whole-genome sequence data: assessment of polymorphisms of individual and pooled samples, and genome-wide association study - <i>a joint course with</i> <i>CUSO StarOmics</i>	17-20.02	4	R. Kofler (Verterinärmedizinische Universität Wien, Austria), Z. Kutalik (Uni Lausanne), A. Platzer (Gregor- Mendel Institut of molecular plant biology, Wien, Austria)	21	2.0	3.5
Introduction to plant metabolomics	6-7.03	2	JL. Wolfender (Uni Genève), S. Rudaz (Uni Genève), J. Boccard (Uni Genève), G. Glauser (Uni Neuchâtel)	22	1.0	3.5
Scanning electronic microscopy (SEM)	7 & 9.04	1.5	M. Vlimant (Uni Neuchâtel), M. Jacquet (Uni Neuchâtel)	7	1.0	3.7
Methods in animal communication research - calls, facial expressions, gestures	5-6.05	2	K. Hammerschmidt (German Primate Centre, Göttingen, D), D. Reby (Uni Sussex, U.K.), S. Townsend (Uni Zurich), B. Waller (Uni Portsmouth, U.K.), Z. Clay (Uni Neuchatel), E. Genty (Uni Neuchatel), K. Zuberbühler (Uni Neuchatel)	35	1.0	3.5

~	40.0.04.07			-	1.0	
Scanning electronic microscopy (SEM) 2 nd session	19 & 21.05	1.5	M. Vlimant (Uni Neuchâtel), A. Vernudachi (Uni Neuchâtel)	7	1.0	3.7
Field course in environmental microbiology (Val Piora, Ticino) <i>a joint activity with</i> <i>CUSO Microbial sciences</i>	13-18.07	5	P. Junier (Uni Neuchâtel), J. Pernthaler (Uni Zurich), X. Perret (Uni Geneva), F. Schreiber (ETH and EAWAG), M. Tonolla (Uni Geneva and Dipartimento della sanità, Ticino), J. Zopfi (Uni Basel),	10	2.0	-
An introduction to R - Module 1 - Swiss institute in statistical genetics (Lausanne) - <i>in coll.</i> <i>with CUSO Ecology and</i> <i>Evolution</i>	26-29.08	4	J. Goudet (Uni Lausanne)	38	2.0	3.7
Population genetic data analysis - Module 2 - Swiss institute in statistical genetics (Lausanne) - <i>in coll. with</i> <i>CUSO Ecology and Evolution</i>	1-3.09	2.5	J. Goudet (Uni Lausanne), Bruce Weir (University Washington, USA	38	1.5	3.5
Elements of R for genetics and bioinformatics - Module 3 - Swiss institute in statistical genetics (Lausanne) - <i>in coll.</i> <i>with CUSO Ecology and</i> <i>Evolution</i>	3-5.09	2.5	Thomas Lumley (University Auckland, New Zealand), Kenneth Rice , (University Washington, USA)	34	1.5	3.9
Quantitative genetics - Module 4 - Swiss institute in statistical genetics (Lausanne) - <i>in coll. with CUSO Ecology</i> <i>and Evolution</i>	8-10.09	2.5	William M. Muir (University Purdue, USA), J.Bruce Walsh, (University Arozina, USA)	48	1.5	3.8
Mixed models in quantitative genetics - Module 5 - Swiss institute in statistical genetics genetics (Lausanne) - <i>in coll.</i> <i>with CUSO Ecology and</i> <i>Evolution</i>	10-12.09	2.5	William M. Muir (University Purdue, USA), J.Bruce Walsh, (University Arozina, USA)	26	1.5	3.8
Introduction to chromatography and mass spectrometry for biologists	5-6.11	1.0	Gaëtan Glauser, (University of Neuchâtel), Armelle Vallat (University of Neuchâtel)	12	1	3.4

Scientific topics						
Use of microbes in the conservation and restoration of art objects - <i>a joint</i> <i>symposium with CUSO</i> <i>StarOmics</i>	20.01	1	F. Cappitelli (Università degli Studi di Milano Italy), JF. Loubière (Amonit, France), E. Joseph (Uni Neuchâtel)	7	0.5	3.6
Fundamental and applied protistology	15-16.04	1.5	F. W. Spiegel (Uni Arkansas, USA), D.J.G. Lahr (Uni São Paulo, Brazil), S. Gray (Uni Fribourg), J. Pawlowski (Uni Geneva), T. Posch (Uni Zurich), F. Altermatt (EAWAG, Dübendorf), E. Lara (Uni Neuchâtel)	21	0.5 1.0 1.5	3.8
Workshop on cooperation and cognition – <i>a joint activity</i> <i>with SNF ProDoc program on</i> <i>"Proximate and ultimate</i> <i>causes of cooperation</i>	2-3.06	2	Sarah Brosnan (Georgia state Uni USA), Peter Hammerstein (Humboldt-Uni, D), Katie McAuliffe (Yale Uni, USA), Alicia Melis (Warwick Business School, UK), Arnon Lotem (Tel-Aviv Uni, Israel), Rui Oliveira (ISPA Lisbon, P), Markus Wild (Uni Basel) F	32	1.0	3.7

Genomics of the speciation continuum (Fribourg) - <i>in coll.</i> <i>with CUSO Ecology and</i> <i>Evolution</i>	4-5.09	2	N. Bierne (CNRS Montpellier, France), A. Buerkle (Uni Wyoming, USA), T. Pyhäjärvi (Uni Oulu, Finland), M.H. Schierup (Aarhus Uni, Danemark), O. Seehausen (EAWAG, Switzerland), J. Wiens (UniArizona, USA)	79	1.0 / 1.5	-
Communication between and within plants - <i>a joint course</i> with CUSO Molecular Plant Sciences	10-11.11	2	C. De Moraes (ETH Zürich), V. Flors (Uni Jaume I, Spain), D. Johnson (Uni Aberdeen, UK), R. Karban (UC Davis, USA), J.H. Westwood (Virginia Tech, USA)	23	1.0	3.6

* most of the course have a limited number of participants

Supported travel at courses / workshops

	Dates	days		ECTS
Research with biological material from abroad – International regulations and good research practice, Uni Zurich	1-2.04	2	S. Biber-Klemm (SCNAT & Uni Basel), M. D'Alessandro (Federal Office for the Environment), M. Lörtscher (Federal Veterinary Office), S. Martínez (Uni Basel & Zurich-Basel PSC), F. Pythoud (Federal Office for Agriculture)	1.0
PSC Summer School "Green Revolution Reloaded", Einsiedeln & FiBL Frick	7-12.9 & 31.10	7	P. Ahl Goy (Biosafety SECB), Z. Pervez Bharucha (Uni Essex, UK), A. Champetier de Ribes (ETH Zürich), A. Crole-Rees (Crole-Rees), E. Gelinsky (ECNH), C. Gerber (Swiss Farmer's Union),R. Home (FiBL), B. Keller (Uni Zurich), D. Klauser (Syngenta), C. Schader (FiBL), J. Six (ETH Zürich), J. Stuurman (Keygene), A Walter (ETH Zürich), G. Wuelser (td- net)	3.0
PSC Symposium "Rooted: successful strategies of sessile beings", ETH Zürich	7.11	1	I. T. Baldwin (MPI Jena, Germany), J. L. Bowman (Monash Uni, Australia), L. Dolan (Uni Oxford, UK), W. Busch (GMI Vienna, Austria), C. De Moraes (ETH Zürich), M. Schmid (MPI Tübingen, D), D. Reinhardt (Uni Fribourg), M. Boutry, (Uni Louvain, B), D. Chinchilla (Uni Basel)	0.5

Annual PhD students meeting 2014 - Ethics in Science

The annual meeting of the doctoral program is organised by the PhD students themselves. This year the organizers were Sevasti Filippidou and Jacqueline Huber (University of Neuchâtel). The meeting took place on 8 May 2014 in Neuchâtel. Daniel Kraus (University of Neuchâtel), Ariane Willemsen (Swiss Ethics Committee), Angelika Hilbeck (ETH Zurich) Marco D'Alessandro (Federal Office for the Environment FOEN) were invited to give a talk. A total of 59 PhD students attended the meeting. They presented the results of their research to their peers (34 posters presented and summarized with short oral presentations). The first prize for oral presentation was attributed to Brittany Fallon (University of Neuchâtel), the 2nd prize to Sharon Wismer (University of Neuchâtel), the 1st poster prize to Anaële Simon (University of Neuchâtel), and the 2nd poster prize to Maximilien Cuny (University of Neuchâtel).

Mobility grants

11 congress travel grants (total CHF 7640) were awarded, which gave the awardees an opportunity to present their results (poster or oral presentation) to an international audience. In addition, 1 request for mobility grants was received and was partially granted (total CHF 500), allowing the student to visit another laboratory to conduct experiments, learn research techniques and/or discuss research results with experts in the field.