

Annual Report 2015

Faculty of Medicine

Faculty of Science

Faculty of Veterinary Medicine (Vetsuisse Faculty)

Graduate School for Cellular and Biomedical Sciences

PhD Program

- ▶ Cell Biology
- ▶ Molecular Biology & Biochemistry
- ▶ Immunology
- ▶ Neuroscience
- ▶ Epidemiology
- ▶ Biomedical Sciences
- ▶ Biomedical Engineering

<http://www.gcb.unibe.ch>





Graduate School
for Cellular and
Biomedical Sciences



^b
UNIVERSITÄT
BERN

Annual Report 2015

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Introduction

2015 was the 10th year of the Graduate School for Cellular and Biomedical Sciences (GCB) since it was launched in September 2005 as a common project of the Faculties of Medicine, Science, and Veterinary Medicine (now Vetsuisse) of the University of Bern. Over the 10 years, the GCB grew continuously and reached 399 graduate students that had been enrolled by the end of 2015. An important basis for the success of the GCB is the comprehensive interdisciplinary and often interfaculty guidance of the graduate students and their projects. The multidisciplinary course program of the GCB completes the internationally competitive training which is offered to our students. To allow international exchange, the GCB provided financial support to 56 students to present and discuss their results at congresses abroad during 2015. The considerable number of 76 students graduated, and more than 130 scientific papers were published by students of the GCB in 2015. Thus, the project of a common organization of our school by the three Faculties has demonstrated to be a most successful system for graduate student education in an environment where basic and medically oriented research is increasingly merging. Of course, the institutional arrangement can only provide the platform for the activities of PIs and students. The success depends on the enthusiasm and activities of all involved people. Highly motivated PIs continuously create ideas for innovative research and try to get the required funding, while the students are committed to conduct most of the scientific work and to make the required things happen from designing and conducting the experiments to publication. I would like to thank all the organizers, the PIs, the mentors, and the funding institutions for contributing so much to the success of our lively Graduate School and to the education of a young scientist generation.

Happy Birthday GCB!



Prof. Dr. Rupert Bruckmaier,
GCB President

Bern, June 14, 2016

PhD Program

The **GCB** offers structured training in experimental research in the fields of biochemistry, cell and molecular biology, immunology, biomedical sciences, epidemiology, neuroscience, and biomedical engineering, leading to a PhD, MD, PhD, or DVM, PhD degree. Its administration is jointly assured by the Faculty of Medicine, the Faculty of Science, and the Vetsuisse Faculty.

By the end of 2015, **399 candidates** were enrolled in the PhD program, which is similar to 2014 (389 candidates). The thesis projects are carried out at laboratories of the three participating faculties or at affiliated institutions. In 2015, these included the Institute of Virology and Immunology (IVI) in Mithelhäusern (now as part of the Vetsuisse Faculty Bern), the Institute for Research in Biomedicine (IRB) in Bellinzona, the EMPA in St. Gallen, and the Swiss Paraplegic Research in Nottwil.

Each PhD candidate is supervised by a thesis committee consisting of the **supervisor**, a **co-advisor** and a member of the appropriate GCB Expert Committee (**mentor**).

The **supervisor** is responsible for the research project, adequate supervision, the laboratory infrastructure and the salary of the candidate.

The **co-advisor** must not be affiliated with the same institute as the supervisor, but should be an expert in the research area of the thesis project. He meets with the candidate at least twice a year to discuss and assess progress of the thesis work, as well as advising and supporting him/her.

The **mentor** decides, together with the candidate and the supervisor, on the individual training program, taking into account the candidate's previous education.

Moreover, in order to promote independent evaluation, an **external co-referee** assesses the PhD thesis of the candidate at the end of the study course.

The training program requires a certain number of learning credits which can be obtained by participating in approved, project-related and interdisciplinary courses, workshops, seminars, and lectures during the doctoral training period. Prior to graduation, candidates must **(i)** pass the exams of the individual training program, and **(ii)** in the course of the second year, present their work in a scientific seminar in the presence of the thesis committee, to document in-depth knowledge of the research field («Mid-term Evaluation»).

The GCB actively supports the participation of candidates in national and international conferences and in special training courses offered by recognized institutions in Switzerland and abroad, by granting a financial contribution which covers a substantial part of the costs in each case. This support is very much appreciated by both candidates and supervisors.

A further aim of the structured doctoral program of the GCB lies in the promotion of a lively scientific exchange between PhD candidates and senior scientists, and the stimulation of networking activities such as regular discussions with the thesis committee and exchange among peers during the annual GCB Symposium. Moreover, PhD candidates have the opportunity to attend external courses and conferences, to invite internationally renowned scientists for a seminar, or to organize a small workshop or meeting on a specific topic.

Organization

The GCB is headed by the PhD Committee (executive committee), which is composed of two members each of the Faculty of Medicine, the Faculty of Science, and the Vetsuisse Faculty Bern, and the Program Coordinator. Taking turns, each faculty member acts as President.

Thus, in August 2015, **Prof. Dr. Rupert Bruckmaier** (Vetsuisse Faculty) took over the presidency of the GCB from **Prof. Dr. med. Frank Stüber** (Faculty of Medicine). Over the two years of Frank's judicious leadership, and with the active support of the Coordinator PD Dr. Marlene Wolf, the pending tasks within the GCB were tackled with much energy and brought to best possible conclusion, serving candidates' and senior scientists' needs and concerns alike. We would like to thank Frank very warmly for his commitment to the GCB.— Under Rupert's and Marlene's guidance, the GCB goes on thriving and growing, this fact being demonstrated by a steadily increasing number of PhD candidates, enlarged Expert Committees, and an ever widening spectrum and range of courses conducted within the framework of the PhD program of the GCB. Therefore, we are very proud to be able to continue the important work of the GCB after its 10th Anniversary Year.

August 2015 also marks the year in which the Expert Committee «Biomedical Sciences & Biomedical Engineering» decided to split up into two separate units, i.e. «Biomedical Sciences» on the one hand, and «Biomedical Engineering» on the other hand. As a consequence, both these committees were considerably enlarged, thus ensuring, together with the other three Expert Committees, an even better representation of expertise in each of the research fields covered by the PhD program of the GCB.

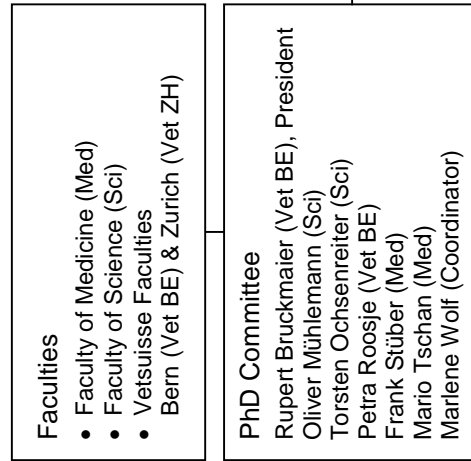
The online application platform (<https://unibegcb.glowbase.com/>) now allows PIs to post their PhD positions any time, and to concurrently benefit from structured, complete application folders, and from a wider pool of applications originating from an international community of candidates.

Some changes in the GCB administration have to be reported for 2015 as well: **Corina Moser** left the GCB in March 2015 and was replaced in April by **Anita Dähler**, currently holding a 60% position. In August 2015, **Melanie Künzli**—Master student in Psychology and GCB office assistant for one year—accepted a new challenge and moved on to an institution which offered her a psychology internship. In her place, **Nora Baronian**, Bachelor student in Law, joined the administrative team at the GCB office in September, in a 40% position. Our thanks go to both Corina Moser and Melanie Künzli for their valuable contribution to the GCB team work, and we are pleased to count on the support offered by Anita Dähler and Nora Baronian.

GCB Organization Chart

(as of 31.12.2015)

Med: Faculty of Medicine
 Sci: Faculty of Science
 Vet BE: Vetsuisse Faculty Bern
 Vet ZH: Vetsuisse Faculty Zurich
 IRB: Institute for Research in Biomedicine,
 Bellinzona



Expert Committees				
Biological Systems Petra Roosje (Vet BE), Chair Antoine Adamantidis (Med) Rupert Bruckmaier (Vet BE) Andrea De Gottardi (Med) Britta Engelhardt (Med) Volker Enzmann (Med) Brigitte Frey (Med) Daniel Fuster (Med) Peter Gehr (Med) Thomas Lutz (Vet ZH) Ruth Lyck (Med) Ernst Niggli (Med) Verena Niggli (Med) Torsten Seuberlich (Vet BE) Jürg Streit (Med) Deborah Stroka (Med) Christophe von Garnier (Med) Hans Rudolf Widmer (Med)	Biomedical Engineering Dominik Obrist (Med), Chair Lorin Benneker (Med) Philippe Büchler (Med) Martin Frenz (Sci) Bernd Jung (Med) Roland Kreis (Med) Stavroula Mougialakou (Med) Tobias Nef (Med) Richard Nyffeler (Med) Mauricio Reyes (Med) Hendrik von Tengg (Med) Guoyan Zheng (Med) Matthias Zwicker (Sci) Philippe Zysset (Med)	Biomedical Sciences Frank Stüber (Med), Chair Guido Beldi (Med) Matthias Egger (Med) Benjamin Gantenbein (Med) Daniela Gorgas (Vet BE) Willy Hofstetter (Med) Olivia Keiser (Med) Daniel Lottaz (Med) Nicola Low (Med) Stephan Reichenbach (Med) Gertraud Schüpbach (Vet BE) Colin Schwarzwald (Vet ZH) Walter M. Senn (Med) Christoph Stettler (Med)	Cell Biology Mario Tschan (Med), Chair Charaf Benarafa (Med) Giuseppe Bertoni (Vet BE) Stefan Freigang (Med) Siegfried Hapfelmeier (Med) Thomas Kaufmann (Med) Philippe Krebs (Med) Kathy McCoy (Med) Kenneth McCullough (Vet BE) Eduardo Moreno (Sci) Vincent Perreten (Vet BE) Jens Stein (Med) Marcus Thelen (IRB) Yitzhak Zimmer (Med)	Molecular Biology & Biochemistry Oliver Mühlemann (Sci), Chair Michael Altmann (Med) Rémy Bruggmann (Sci) Peter Bütikofer (Med) Jürg Gertsch (Med) Adrian Hehl (Vet ZH) Carlo Largiadèr (Med) Tosso Leeb (Vet BE) Mariusz Nowacki (Sci) Torsten Ochsenreiter (Sci) Norbert Polacek (Sci) Isabel Roditi (Sci) Sven Rottenberg (Vet BE) André Schaller (Med) Achim Stocker (Sci) Volker Thiel (Vet BE) Christoph von Ballmoos (Sci) Benoît Zuber (Med)
PhD Candidates	PhD Candidates	PhD Candidates	PhD Candidates	PhD Candidates

Changes in Committee Memberships During 2015

PhD Committee

President:	Prof. Dr. med. Frank Stüber	until July 2015
	Prof. Dr. Rupert Bruckmaier	since August 2015

Expert Committee «Biological Systems»

Joined:	Prof. Dr. Antoine Adamantidis (Med)	January 2015
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Expert Committee «Biomedical Engineering»

Joined:	Prof. Dr. Philippe Büchler (Med)	January 2015
	PD Dr. Lorin Benneker (Med)	August 2015
	PD Dr. Bernd Jung (Med)	August 2015
	PD Dr. Stavroula Mougiakakou (Med)	August 2015
	Prof. Dr. Guoyan Zheng	August 2015

Expert Committee «Biomedical Sciences»

Joined:	Prof. Dr. Benjamin Gantenbein (Med)	January 2015
	PD Dr. Olivia Keiser (Med)	August 2015
	Prof. Dr. Daniela Gorgas (Vet BE)	October 2015

Expert Committee «Cell Biology»

Joined:	Prof. Dr. Siegfried Hapfelmeier (Med)	August 2015
Resigned:	Prof. Dr. Andrew Hemphill (Vet BE)	October 2015

Expert Committee «Molecular Biology & Biochemistry»

Joined:	Prof. Dr. Volker Thiel (Vet BE)	January 2015
	Prof. Dr. Benoît Zuber (Med)	January 2015
	Prof. Dr. Sven Rottenberg (Vet BE)	April 2015
	Prof. Dr. Christoph von Ballmoos (Sci)	April 2015
	PD Dr. André Schaller (Med)	November 2015
Resigned:	Prof. Dr. André Schneider (Sci)	February 2015
	Prof. Dr. Sabina Gallati (Med)	October 2015

Obituary

In January 2016, the very sad news reached us that **Prof. Dr. Primus Mullis** (Faculty of Medicine and Inselspital, Bern University Hospital), one of our most committed GCB members, passed away, much too soon, after a short illness. Primus was prominently involved in the founding of the GCB and subsequently served as a discerning and influential member of the PhD Committee between 2005 and 2011, and as President of the GCB (2008-2009), as well as a dedicated supervisor and mentor for many PhD candidates of the GCB. He defended and promoted the cause of the GCB, and most notably also the MD-PhD program, with single-minded energy—complemented by his perceptive actions and his genial humor. His death on January 12, 2016, caught us completely unawares, and he is very sadly missed by all of us.

Doctoral Candidates

Candidates can apply three times per year for admission to the GCB: on 15 April, 15 August, and 15 December. In the course of 2015, 98 PhD candidates were newly admitted (Table 1). The GCB is internationally oriented and currently represented by doctoral candidates with degrees from 45 different countries.

Degree	University of Bern	Other Swiss Universities	Foreign Universities	Total	in %
Medical Degree	1	0	0	1	1.0
Vet. Medical Degree	1	1	9	11	11.2
Science Degree	33	11	42	86	87.8
Total	35	12	51	98	100.0
in %	35.7	12.3	52.0	100.0	

Table 1. Admission of new PhD candidates in 2015, specifying the place of origin of their Master's degrees.

At the end of 2015, **399 candidates** were enrolled in the GCB. 201 candidates (50.4%) were holding a degree from a foreign university, and 54.1% of the doctoral candidates were women. Since the start of the PhD program in 2005, the GCB has therefore experienced an 8.9-fold increase of participants (Figure 1).

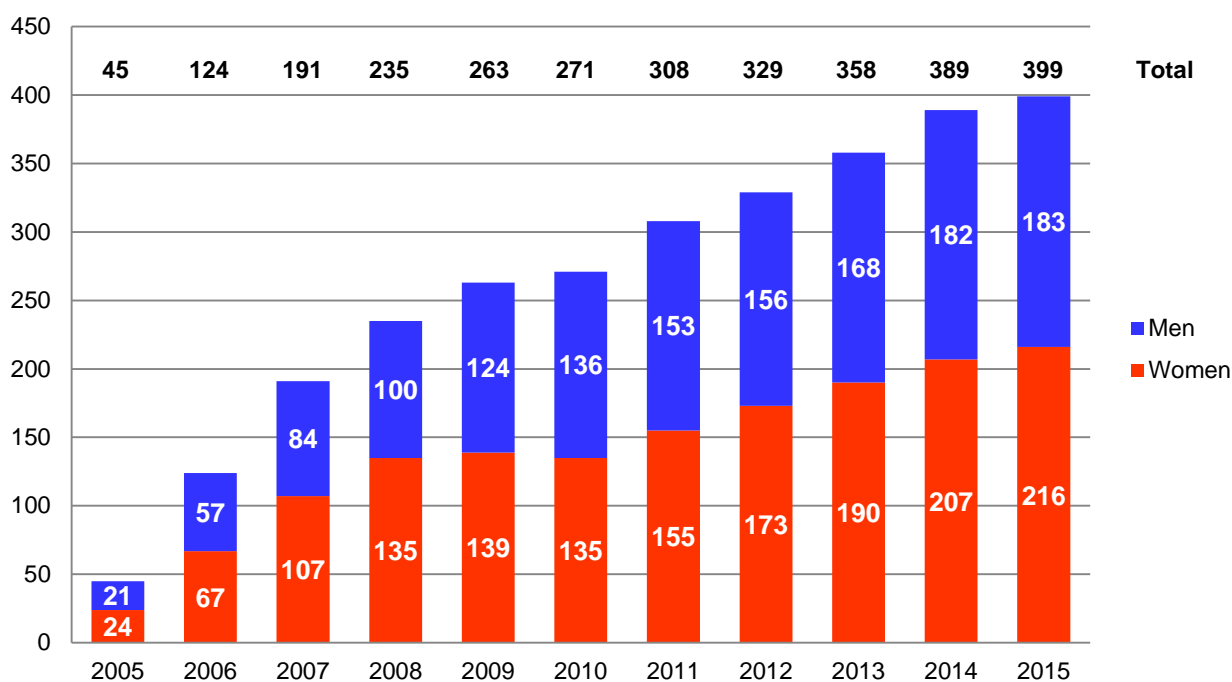


Figure 1. PhD candidates 2005-2015.

Figures 2 and 3 document the distribution of the doctoral candidates within the different research fields (GCB Expert Committees) and Faculties/Institutions, respectively.

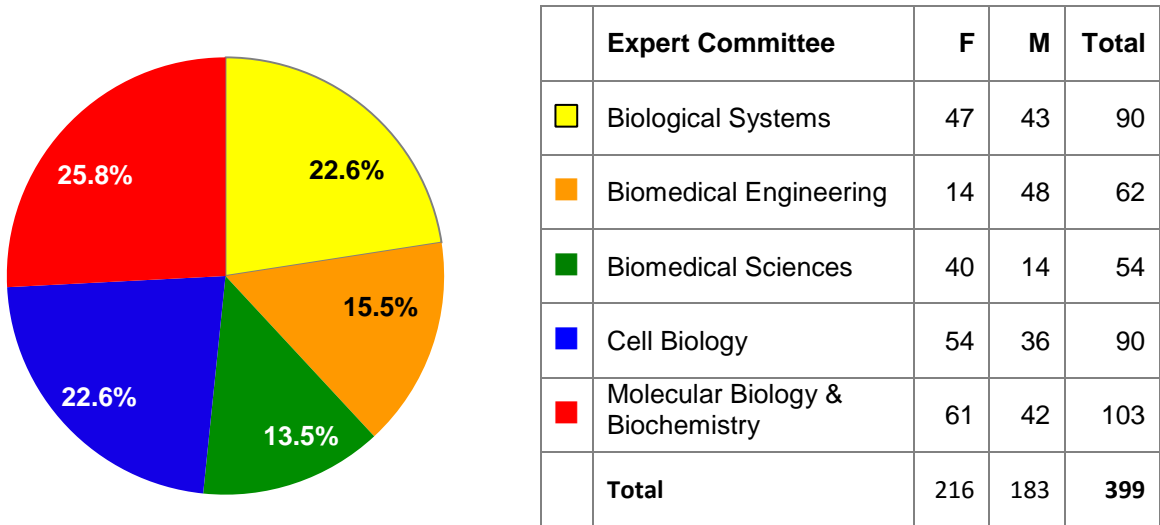


Figure 2. Distribution of PhD candidates within the five GCB Expert Committees.
 Left: Percentage. Right: Number of candidates (F = women, M= men).

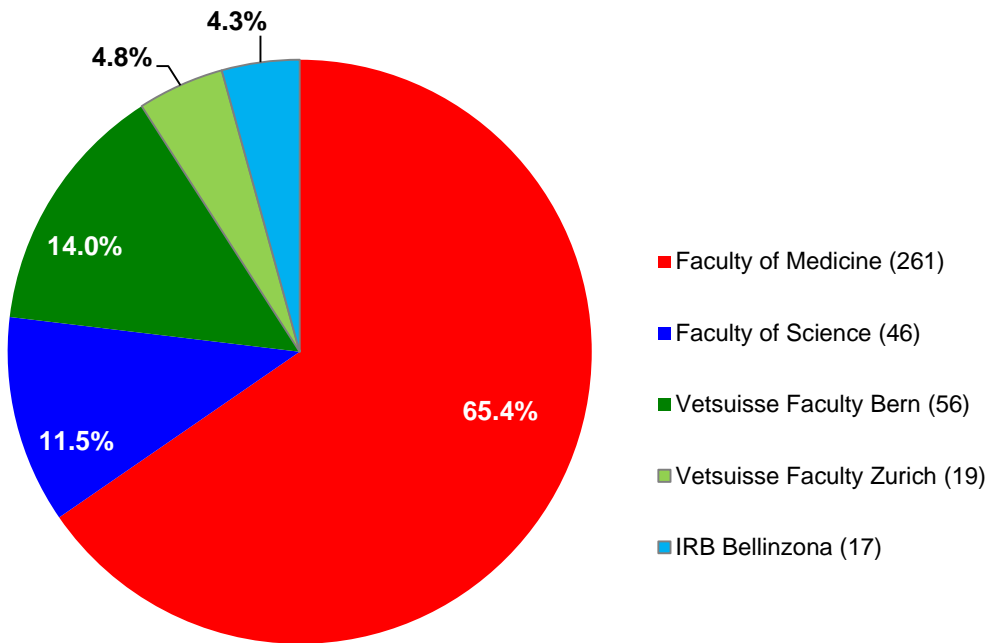


Figure 3. Distribution of PhD candidates within the Faculties/Institutions.
 In parentheses: number of candidates; in chart: percentage.

Courses and Seminars

For each candidate, seminars and courses are individually selected from courses organized and supported by the GCB, from the teaching units of the faculties, and also from courses offered by other Swiss Universities, in particular by the ETHZ or the EPFL for the field of Biomedical Engineering, or by inter-university programs like the NCCRs «TransCure» and «RNA and Disease», the Doctoral Program in Biology and StarOmics (both CUSO), the Doctoral Program in Population Genomics (Universities of Basel, Bern, Fribourg & Lausanne), the Forum for Genetic Research (sc | nat, Swiss Academy of Sciences), the BENEFRI Neuroscience Program (Universities of Bern, Neuchâtel & Fribourg), the Swiss Institute of Bioinformatics (SIB), or the Swiss School of Public Health PhD program (SSPH+). Some candidates also take part in internationally organized Summer Schools which provide high quality training in specific fields.

Special Courses for GCB Students

Lectures, Tutorials, and Book Clubs

- *Scientific Integrity*, organized by T. Ochsenreiter, Institute of Cell Biology (mandatory lecture for all GCB candidates)
- *Immunology* (book club: Abul K. Abbas, *Cellular and Molecular Immunology*), coordinated by M. Wolf & G. Favre, GCB
- *Cell Biology («Happy Cell»)*, (book club: Bruce Alberts et al., *Molecular Biology of the Cell*), coordinated by M. Wolf & G. Favre, GCB
- *Principles in Transgenic Mouse Technology* (workshop), organized by C. Benarafa and U. Deutsch, Theodor Kocher Institute, and P. Krebs, Institute of Pathology
- *Stem Cells & Regenerative Medicine* (lecture), organized by V. Enzmann, DCR
- *Crosstalk in Academic, Clinical and Pharmaceutical Cancer Research: Willing to improve?* (lecture), organized by M. Tschan, Institute of Pathology, and N. Leupin, Celgene
- *Topics in Tumor Biology* (lectures and discussions of scientific publications), organized by D. Stroka, DCR, M. Tschan, Institute of Pathology, and Y. Zimmer, DCR
- *Molecular Aspects of Psychoactive Drugs* (lecture), organized by J. Gertsch, Institute of Biochemistry & Molecular Medicine IBMM
- *Evolution and Physiology of Adaptive Mechanisms in Mammals* (lecture), organized by R. Bruckmaier, Division of Veterinary Physiology, Vetsuisse Faculty Bern
- *Environment-related Diseases: from Climate Change to Nanotoxicology* (lecture and excursion to the Jungfrauoch High Altitude Research Station), organized by H. Krug, EMPA St. Gallen
- *Excitation-Contraction Coupling and Cardiac Contractile Force* (book club: Donald M. Bers), organized by E. Niggli, Dept. of Physiology
- *Lecture Course: International PhD Program in Immunology, Cell Biology and Biochemistry*, organized by the IRB in Bellinzona, for IRB students
- *Introduction to Epidemiology & Biostatistics* (summer course), organized by G. Schuepbach and J. Berezowski, Vetsuisse Faculty Bern
- *Classical Papers in Public Health* (discussions of scientific publications), organized by M. Egger, ISPM

- *Critical Review of Scientific Manuscripts* (epidemiology field), organized by C. Kuehni and M. Egger, ISPM
- *Epidemiology* (book club: Leon Gordis), organized by C. Kuehni, ISPM
- *Epidemiology/Critical Appraisal* (journal club/seminar), organized by S. Trelle, ISPM
- *Essential Medical Statistics* (book club: B.R. Kirwood and J.A.C. Sterne, Blackwell Publishing), organized by M. Zwahlen, ISPM
- *Infectious Diseases* (discussions of scientific publications), organized by N. Low, ISPM
- *Paediatric Epidemiology* (journal club/seminar), organized by C. Kuehni, ISPM
- *Writing a Grant Application* (tutorial), organized by C. Kuehni, M. Egger, and M. Zwahlen, ISPM

Practical Courses, Workshops, Summer Schools

- *Cell Migration*, organized by B. Engelhardt, J. Stein, and R. Lyck, Theodor Kocher Institute
- *Vascular Cell Biology*, organized by B. Engelhardt, U. Deutsch, and R. Lyck, Theodor Kocher Institute
- *Molecular Biological Methods in Clinical Research*, organized by V. Schröder and M. Schaller Tschan, DCR
- *Microscopy: Basic and Advanced/Special Modules*, organized and coordinated by S. Tschanz, Microscopy Imaging Center (MIC, <http://www.mic.unibe.ch/modules.php>)
- *Microscopy Applications for Immunological Research*, organized by M. Thelen, IRB Bellinzona
- *DNA Sequencing and Mutation Analysis: Basics of Sanger and Next Generation Sequencing*, organized by T. Leeb, M. Drögemüller, and V. Jagannathan, Institute of Genetics, Vetsuisse Faculty Bern
- *Flow Cytometry Course (FACSLab)*, organized by S. Müller, DCR
- *Concepts and Methods in Programmed Cell Death* (bi-annually, next course in 2016), organized by Th. Kaufmann, Institute of Pharmacology
- *International Summer School on Inflammation, Immunomodulation, Inspiration*, organized by H.-U. Simon and S. Yousefi, Institute of Pharmacology
- *Human-Animal Interactions: Impacts on Animal Welfare and Behaviour* (1-day symposium), organized by H. Würbel, Veterinary Public Health Institute, Animal Welfare Division, Vetsuisse Faculty Bern

Transferable Skills Courses

- *Scientific Writing*, organized by R. Greif, Dept. of Anaesthesiology and Pain Therapy, Inselspital, Bern University Hospital
- *Introduction to Systematic Literature Searching*, organized by G. Bissels and M. Schaffer, Bühlplatz Library FBB
- *Scientific Communications for PhD Students*, organized by S. Longnus, Dept. of Cardiovascular Surgery, Inselspital, Bern University Hospital
- *The Art of Lecturing*, organized by R. Greif, Dept. of Anaesthesiology and Pain Therapy, Inselspital, Bern University Hospital
- *Presenting with Confidence* (workshop), organized by B. Weber, lecturer in presentation competence and actor, Bern

GCB Seminars

GCB Seminars give PhD candidates the opportunity to invite internationally renowned specialists from their field of research for an interactive teaching lecture and a research seminar intended for a broad audience.

In 2015, one GCB seminar was organized and hosted by **Negahnaz Moghaddam**, PhD candidate in the group of Prof. Dr. Christian Jackowski and Dr. Sandra Lössch, Institute of Forensic Medicine, Dept. of Physical Anthropology:

October 14 & 15, 2015 **PD Dr. rer. nat. Albert Zink**, Head, Institute for Mummies and the Iceman, EURAC Research, Bolzano/Bozen, Italy
Teaching Seminar: «Modern mummy research—the application of next-generation sequencing for the study of human remains»
Public Lecture: «New findings on the life and death of the Tyrolean Iceman»
Host: Negahnaz Moghaddam, PhD candidate, Institute of Forensic Medicine, Dept. of Physical Anthropology

We still hope that in future more candidates of the GCB will take advantage of this unique opportunity of meeting distinguished scientists, learning from them and exchanging ideas, and that the number of GCB seminars hosted by GCB students will increase with time.

GCB Students' Meetings

PhD candidates have also the possibility to get financial support for the organization of workshops or small meetings among their peers on a specific topic. Submitted projects are jointly evaluated and selected by the GCB and the MVUB (Mittelbauvereinigung der Universität Bern), within their framework of the «Fund for the Promotion of Young Researchers» (Nachwuchsförderungs-Projektpool).

In 2015, two projects were supported:

1. «**2nd SCRM PhD Student Retreat**», organized by **Luca Tamò**, DCR, Pulmonary Medicine Research Group, on August 28, 2015:

Following the successful «1st SCRM PhD Student Retreat» of 2014 (SCRM = Stem Cell Research in Regenerative Medicine), **Luca Tamò** initiated the «2nd SCRM PhD Student Retreat» (Figure 4) and chaired its organization committee. Luca Tamò writes in his report:

The second PhD student retreat for students involved in stem cell research took successfully place on Friday August 28th [2015, editor's note] on the Gurten.

*The established format of the first retreat was maintained, PhD students had a chance to present their work either as an oral presentation or a poster. The number of participants was limited to 20 students and, like last year, we had two keynote speakers from the industry. **Dr Allen C. Eaves**, MD-PhD, FRSC, CEO of STEMCELL Technologies, who joined us from Canada, and **Dr Roberto Iacone**, MD-PhD, group head at pRED Roche Pharmaceuticals.*

The isolated location and the relaxed atmosphere on the Gurten helped the interaction between speakers and students, which both profited from the meeting. During presentations the keynote speakers gave very constructive feedbacks to the students.

Like last year, the main goal was to give the possibility to personally engage face-to-face with other PhD students, present our work and discuss our projects, problems and ideas in a remote and informal get together environment, without PhD advisors and mentors.

The seminar was kindly sponsored by the GCB and Emeritus Prof Dr André Haeberli, Stem Cell Research in Regenerative Medicine Platform, Bern.

*On behalf of the Organizing Committee,
Luca Tamò*



Figure 4. Participants of the «2nd SCRM PhD Student Retreat» on the Gurten, Bern.

2. «Imaris 8 Workshop», organized by **Xenia Maria Ficht** and **Ana Belén García Martín**, Theodor Kocher Institute, on March 26, 2015 and June 12, 2015:

The objectives of the project were

- to build up a Network of Imaris users at the entire University of Bern
- to organize hands-on training seminars for Imaris software given by Bitplane employees
- to initiate monthly tutorials to self-educate and connect Imaris users
- to sustain a user network long-term by employing an unibe-mailing list

The workshop consisted of an Introductory Lecture on Imaris 8, giving a general overview of Imaris features and demonstration of basic features, and two Hands-on Imaris 8 Seminars, focusing on the module «ImarisCell» and other basic functions. The workshop was supported by the GCB, BITPLANE Scientific Software, and the Microscopy Imaging Center (MIC) of the University of Bern.

GCB Students' Symposium 2015

On 28 January 2015, the GCB Students' Symposium 2015 was held once again on the premises of the Department of Chemistry and Biochemistry (DCB) and enjoyed the efficient and helpful support of its staff. During a whole day, the different research projects of the GCB doctoral candidates were presented in **48 short talks** in four parallel sessions and **157 posters** (two sessions). The presentations illustrated the wide range of topics covered by the GCB and demonstrated the candidates' high level of competence in the fields of cellular and biomedical sciences, epidemiology and biomedical engineering. As usual, the symposium offered an excellent opportunity for both GCB candidates and their supervisors to engage in a reciprocally rewarding and highly stimulating discussion on the research work going on at the GCB. The invited guest speaker, **Prof. Dr. Eckhard Wolf**, Chair, Gene Center, Ludwig Maximilians University, Munich, Germany, gave a highly acclaimed keynote lecture on «**Genetically Tailored Pig Models for Translational Biomedical Research**». The breaks were extensively used for further informal discussions and active networking.

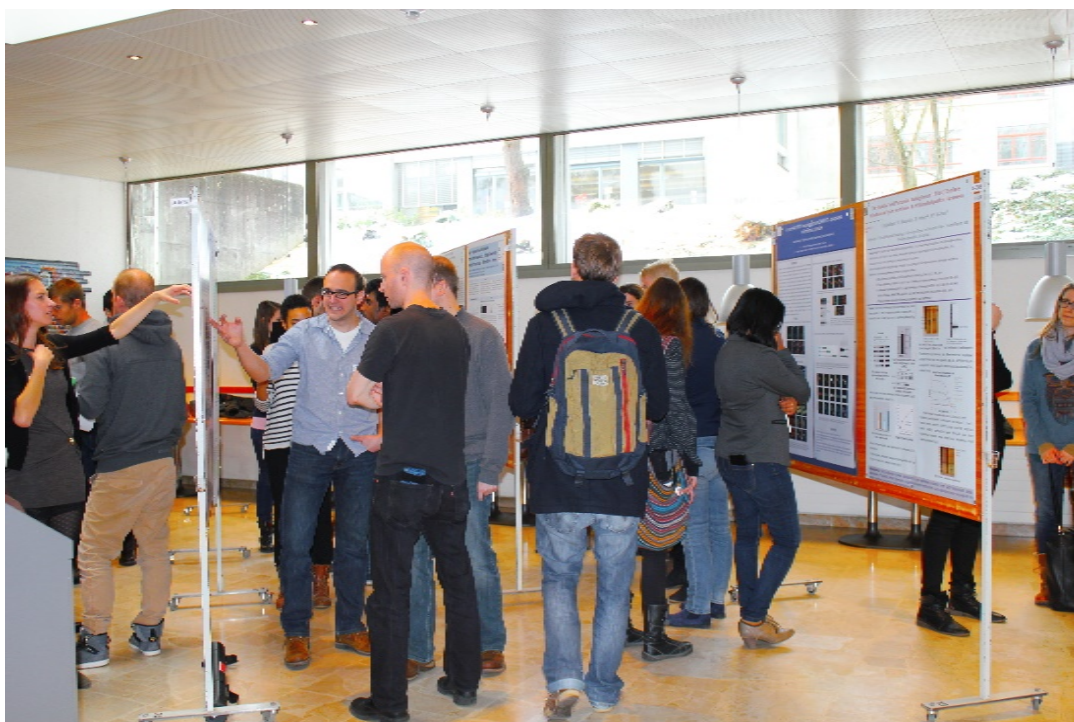


Figure 5. Foyer DCB: Poster Session at the GCB Students' Symposium 2015.



Figure 6. Mensa Bühlpplatz: Lunch Break during the GCB Students' Symposium 2015.

Graduations

In the course of 2015, **76 candidates** successfully completed the PhD program of the GCB and obtained their doctoral degree, jointly issued by the Faculty of Medicine, the Faculty of Science, and the Vetsuisse Faculty.

Of the graduates, 37 or 48.7% were candidates with a degree from a foreign university who joined the GCB for their PhD studies.

Each PhD thesis submitted by a GCB candidate is screened for plagiarism by means of a specialized plagiarism-detection system, prior to acceptance of the PhD work.

Since the start of the PhD program in 2005, 473 candidates have successfully completed their studies and obtained a doctoral degree. Figures 7 & 8 show the affiliation of the completed theses to the Faculties/Institutions, and the types of degrees obtained, respectively.

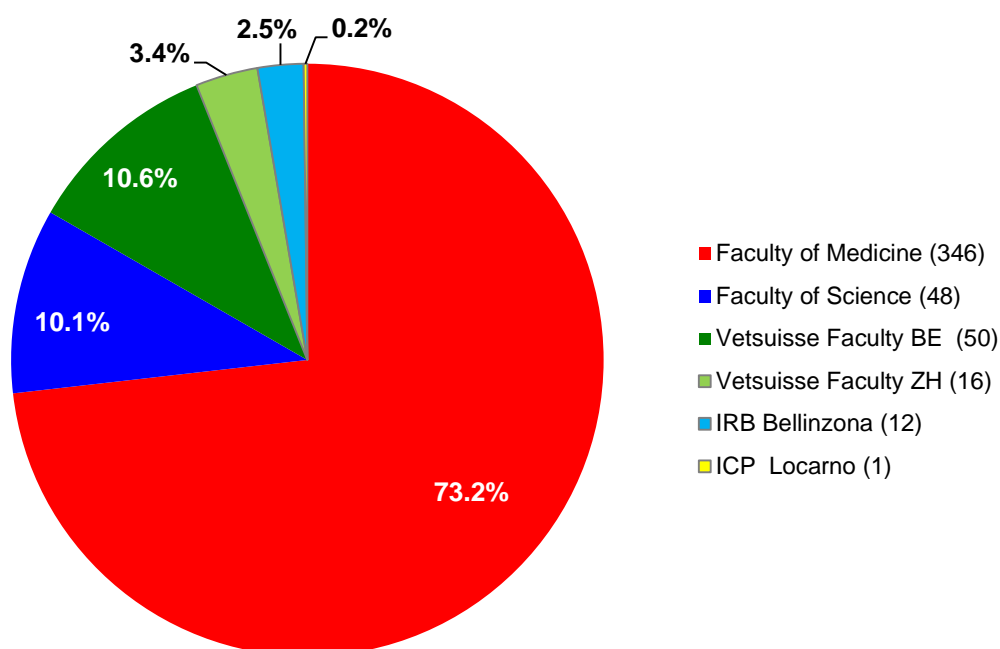


Figure 7. Distribution of completed PhD theses within the Faculties/Institutions, over the whole period of 2005-2015.

In parentheses: number of PhD theses completed at each Faculty or affiliated Institution; in chart: percentage.

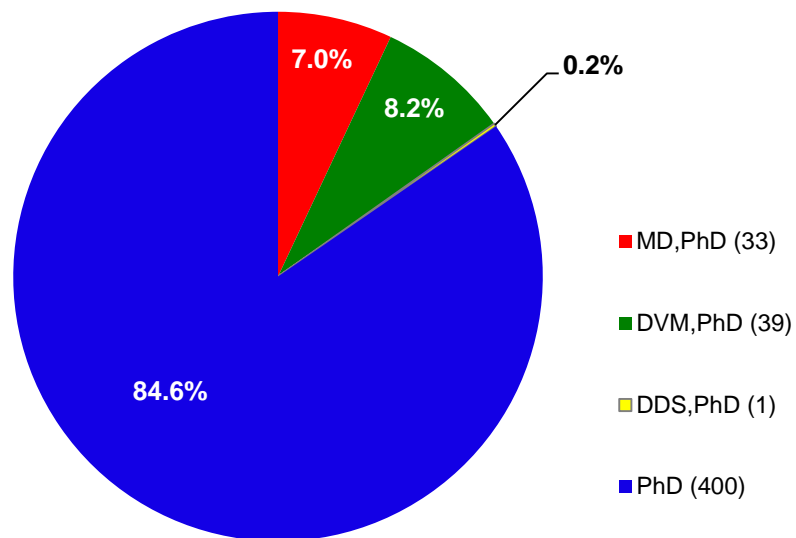


Figure 8. Degree types of the GCB graduates over the period 2005-2015.
In parentheses: number of graduates; in chart: percentage.

GCB Graduates in 2015: Alphabetical Order

Giuseppe Albano, PhD in Biomedical Sciences (16 December)

Institute of Biochemistry and Molecular Medicine, (Prof. Dr. D. G. Fuster)

«**Calcium and phosphate transport by osteoclasts: *In vitro* and *in vivo* studies**»

Paola Basilico, PhD in Immunology (6 March)

Theodor Kocher Institute (PD Dr. C. Benarafa)

«**Alteration of immune responses during smoke exposure and bacterial infection**»

Joël Beyeler, DDS, PhD (9 July)

Dept. of Orthodontics and Dentofacial Orthopedics, School of Dental Medicine

(Prof. Dr. M. Chiquet)

«**Possible Genetic Link Between Orofacial Cleft Formation and Wound Repair**»

Nello Blaser, PhD in Biomedical Sciences (8 June)

Institute of Social and Preventive Medicine (PD Dr. O. Keiser, Prof. Dr. M. Egger)

«**Scale-up of antiretroviral therapy and transmission of HIV in Southern Africa: Mathematical model**»

Sibylle Bürki, DVM, PhD (30 June)

Institute of Veterinary Bacteriology, Vetsuisse Faculty Bern (Prof. Dr. J. Frey)

«**The intracellular niche of *Mycoplasma bovis***»

Paul-Christian Burda, PhD of Science in Cell Biology (15 June)

Institute of Cell Biology (Prof. Dr. V. Heussler)

«**Membrane Alterations During *Plasmodium berghei* Liver Stage Development and Egress**»

Regula Burkhard, PhD (Doctor of Philosophy in Science) (20 August)

Institute of Pathology (PD Dr. U. Novak)

«**Molecular analyses of mature B-cell lymphomas focusing on clonal tumor evolution and familial lymphoma predisposition**»

Lisa Alexandra Cardoso Alves, DVM, PhD (13 February)

Div. of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern

(Prof. Dr. M. Vandevelde)

«**Mechanism sustaining canine distemper virus non cytolytic spread in canine brain cell cultures**»

Inés Carrera, DVM, PhD (11 December)

Dept. for Small Animals, Div. of Diagnostic Imaging, Vetsuisse Faculty Zurich

(Prof. Dr. P. Kircher)

«**Proton magnetic resonance spectroscopy in the brain of dogs**»

John Choy, PhD in Biomedical Sciences (30 March)

Dept. of Clinical Research, Bone Biology & Orthopaedic Research (Prof. Dr. W. Hofstetter)

«**Biofunctionalisation of Beta-Tricalcium Phosphate Ceramic Bone Substitute Materials**»

Sandro Ivo Sebastiano De Zanet, PhD in Biomedical Engineering (22 June)

ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology

(Dr. R. Sznitman, PD Dr. J. H. Kowal)

«**3D Modeling for Ophthalmic Diagnosis and Treatment**»

Christine Deisl, PhD in Biomedical Sciences (13 February)

Dept. of Clinical Research, Nephrology and Hypertension (Prof. Dr. D. G. Fuster)

«**The role of the sodium/hydrogen exchanger NHA2 in the endocrine pancreas**»

Valeriya Dimitrova, PhD of Science in Biochemistry and Molecular Biology (2 March)
Dept. of Clinical Research, Haematology/Oncology (Paediatrics) (PD Dr. A. Arcaro)
«**c-Myc network in Medulloblastoma**»

Pascal André Dufour, PhD in Biomedical Engineering (9 November)
ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology Laboratory
(PD Dr. J. H. Kowal)
«**Maximizing Prior Information for the Automatic Evaluation of Retinal OCT Scans of Pathologies**»

Nadine Ebert, DVM, PhD (20 February)
Div. of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern (PD Dr. P. Plattet)
«**Molecular mechanisms of morbillivirus cell entry**»

Matthias Stefan Eggel, PhD of Science in Biochemistry and Molecular Biology (4 May)
Institute of Cell Biology (Prof. Dr. E. Moreno)
«**Swis and Fu2, Two Novel, Dedicated Components of Cell Competition and the Flower Code**»

Nicole Eisele, PhD in Biomedical Sciences (18 August)
Dept. of Clinical Research, Nephrology and Hypertension (Prof. Dr. M. G. Mohaupt)
«**Aldosterone and Salt Availability in Pregnancy**»

Marcel Felder, PhD in Biomedical Sciences (13 May)
ARTORG Center for Biomedical Engineering Research, Lung Regeneration Technologies
(Prof. Dr. O. T. Guenat)
«**Advanced *in vitro* Models for the Investigation of Pulmonary Fibrosis**»

Marc Fellmann, PhD in Immunology (12 June)
Dept. of Immunology, Inselspital, Bern University Hospital (Dr. M. Vogel,
Prof. Dr. B. M. Stadler)
«**The Regulatory Role of CD23 in Human IgE Synthesis**»

Marie-Christine Franz, PhD in Biomedical Sciences (22 April)
Institute of Biochemistry and Molecular Medicine (Prof. Dr. M. Hediger)
«**Functional Characterization of the Human Zinc Transporter ZIP2 (SLC39A2)**»

Kayluz Frias Boligán, PhD in Immunology (12 May)
Institute of Pharmacology (Prof. Dr. S. von Gunten)
«**Siglec-7 and -9 interactions with their ligands inhibit the NK cell-mediated tumor immunosurveillance**»

Mirjam Frischknecht, PhD in Biomedical Sciences (9 October)
Institute of Genetics, DCR-VPH, Vetsuisse Faculty Bern (Prof. Dr. T. Leeb)
«**Genetic analyses in horses using high-density genotype data**»

Stefanie Grafmüller, PhD in Biomedical Sciences (20 January)
EMPA St. Gallen (Prof. Dr. H. Krug)
«**Nanoparticle transport across the human placenta**»

Stefan Haemmig, PhD of Science in Biochemistry and Molecular Biology (26 June)
Institute of Pathology (Prof. Dr. E. Vassella)
«**The role of microRNAs in the regulation of chemoresistance in glioblastomas**»

Neda Haghighy Jahromi, PhD in Immunology (20 November)
Theodor Kocher Institute (Prof. Dr. B. Engelhardt)
«**Involvement of ICAM-1 and ICAM-2 in the pathogenesis of experimental autoimmune encephalomyelitis (EAE)**»

Björn Hagmann, PhD in Immunology (14 August)

Dept. of Immunology, Inselspital, Bern University Hospital (Prof. Dr. C. A. Dahinden)

«The Balance Between IFN- α , IL-10 and IL-3 Differently Dictates Nature of Human Basophils»

Stefan Hahnewald, PhD in Biomedical Sciences (21 October)

Dept. of Clinical Research, Audiology (PD Dr. P. Senn)

«Development of an *in vitro* Bioassay to Study Response Profiles of Auditory Neurons»

Aladin Haimovici, PhD of Science in Cell Biology (20 November)

Institute of Pathology (Prof. Dr. M. P. Tschan)

«The ETS-transcription factor PU.1 functions in autophagy and resistance mechanisms against TRAIL treatment»

Ali Hashemi Gheinani, PhD of Science in Cell Biology (17 August)

Dept. of Clinical Research, Urology (Prof. Dr. K. Monastyrskaya)

«The Role of microRNAs in Organ Remodeling in Lower Urinary Tract Dysfunction»

Stefanie Hofer, PhD in Neuroscience (24 March)

Institute of Biochemistry and Molecular Medicine (Prof. Dr. J. Gertsch)

«Peptide endocannabinoids (pepcans)—Their localization in the rodent CNS and possible implications in pain»

Xiao Huang, PhD in Biomedical Sciences (20 August)

Institute of Biochemistry and Molecular Medicine (Prof. Dr. C. Albrecht)

«Nutrient Transport Across the Epithelial Cell Barriers in the Perinatal Period»

Simon Imhof, PhD of Science in Cell Biology (2 April)

Institute of Cell Biology (Prof. Dr. I. Roditi)

«The Social Life of African Trypanosomes»

Mojtaba Khosravi, DVM, PhD (21 July)

Div. of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern (PD Dr. P. Plattet, Prof. Dr. A. Zurbriggen)

«Dynamics of canine distemper virus cell entry»

Sonja Kittl, DVM, PhD (22 October)

Institute of Veterinary Bacteriology, Vetsuisse Faculty Bern (Prof. Dr. P. Kuhnert)

«Molecular epidemiology and host-pathogen interaction of *Campylobacter*»

Karina Klein, DVM, PhD (1 July)

Equine Department, Musculoskeletal Research Unit (MSRU), Vetsuisse Faculty Zurich (Prof. Dr. B. von Rechenberg)

«Bone Augmentation for Cancellous Bone Using Variable Injectable Composites as Biomimetic Agents»

Yasmin Köller, PhD in Immunology (15 December)

Dept. of Clinical Research, Gastroenterology/Mucosal Immunology (Prof. Dr. K. McCoy, Prof. Dr. A. J. Macpherson)

«Microbial Education of the Immune System»

Cheong Kwet Choy Kwong Chung, PhD in Immunology (22 June)

Dept. of Clinical Research, Gastroenterology/Mucosal Immunology (Prof. Dr. K. McCoy, Prof. Dr. A. J. Macpherson)

«Role of antigen-specific antimicrobial CD4⁺ T cell responses in host-microbial mutualism»

Stephanie Langsch, PhD of Science in Biochemistry and Molecular Biology

(18 December)

Institute of Pathology (Prof. Dr. E. Vassella)

«miR-29b is a mediator of *KRAS*-induced NF-κB activation in non-small cell lung cancer»

Ivana Lazarevic, PhD in Immunology (20 November)

Theodor Kocher Institute (Prof. Dr. B. Engelhardt)

«T cell trafficking across the blood cerebrospinal fluid barrier»

Zaira Leni, PhD in Biomedical Sciences (30 June)

Dept. of Clinical Research, Haematology/Oncology (Paediatrics) (PD Dr. A. Arcaro)

«Novel targeted therapies in childhood cancer—from metabolism to drug therapy»

Fabian Dominik Liechti, MD, PhD (6 March)

Institute for Infectious Diseases (Prof. Dr. S. Leib)

«Protection and Regeneration of the Hippocampal Stem Cell Niche in Pneumococcal Meningitis»

Giulio Loforese, PhD in Biomedical Sciences (16 December)

Dept. of Clinical Research, Visceral and Transplantation Surgery (PD Dr. D. Stroka)

«Hippo in the regenerating liver»

Lukas F. Mager, MD, PhD (25 August)

Institute of Pathology (Dr. P. Krebs, Prof. Dr. C. Müller)

«Molecular Dissection of Inflammation-induced Immunopathologies»

Niran Maharjan, PhD in Neuroscience (27 November)

Institute of Cell Biology (Prof. Dr. S. Saxena)

«Investigating the function of C9ORF72; protein product of a novel gene implicated in Amyotrophic Lateral Sclerosis (ALS) and Frontotemporal Lobar Degeneration (FTLD)»

Irene Cristina Marcu, PhD in Biomedical Sciences (25 November)

Dept. of Physiology (Dr. N. Ullrich, Prof. Dr. E. Niggli)

«Functional Characterization of Stem Cell-derived Cardiomyocytes for Cardiac Regenerative Medicine»

Sarah Moyle, PhD in Biomedical Sciences (2 April)

Dept. of Physiology (Prof. Dr. S. Rohr)

«Optogenetic Modulation of Stromal-Parenchymal Cell Interaction in Cardiac Tissue»

Birgit Nachbauer, PhD of Science in Biochemistry and Molecular Biology (19 June)

Dept. of Chemistry and Biochemistry (Prof. Dr. N. Polacek)

«Expression of the vault RNA protects cells from undergoing apoptosis»

Philipp Odermatt, PhD of Science in Biochemistry and Molecular Biology (3 July)

Institute of Cell Biology (Prof. Dr. D. Schümperli)

«Spinal Muscular Atrophy: The Contribution of microRNAs and the Development of a Somatic Gene Therapy by *SMN2* Splicing Correction»

Aleksandra Joanna Ozga, PhD in Immunology (15 December)

Theodor Kocher Institute (Prof. Dr. J. V. Stein)

«The Impact of pMHC Affinity on Differentiation and Expansion of CD8⁺ T Cells»

Alicja Elżbieta Pacholewska, PhD in Biomedical Sciences (19 June)

Institute of Genetics, DCR-VPH, Vetsuisse Faculty Bern (Dr. V. Jagannathan, Prof. Dr. T. Leeb)

«Whole Transcriptome Analysis of PBMCs to Unravel the Molecular Pathophysiology of 'Equine Asthma' (Recurrent Airway Obstruction)»

Oleksandr Pastukhov, PhD in Biomedical Sciences (27 March)

Institute of Pharmacology (Prof. Dr. A. Huwiler)

«The role of ceramide kinase and its product ceramide-1-phosphate in proliferative and inflammatory diseases»

Simona Pfister, PhD in Immunology (11 December)

Institute for Infectious Diseases (Prof. Dr. S. Hapfelmeier)

«Study of Induction Mechanisms of Intestinal Protective Immunity Against Non-Typhoidal Salmonellosis in a Novel Gnotobiotic Reversible Colonization Model»

Thi Ngoc Thao (Anna) Pham, PhD in Biomedical Sciences (27 November)

Dept. of Clinical Research, Hematology (Adults) (PD Dr. E. Oppliger Leibundgut)

«Role of Endothelial Cells and Mutational Status in Patients with Polycythemia Vera»

Andreas Pircher, PhD of Science in Biochemistry and Molecular Biology (26 June)

Dept. of Chemistry and Biochemistry (Prof. Dr. N. Polacek)

«Functional characterization of an mRNA derived ncRNA that targets and regulates the yeast ribosome»

Silvan Röthlisberger, PhD in Immunology (18 June)

Dept. of Immunology, Inselspital, Bern University Hospital (Dr. M. Vogel)

«Regulation of IgE-mediated Reactions»

Valentina Romeo, PhD of Science in Biochemistry and Molecular Biology (18 June)

Institute of Cell Biology (Prof. Dr. D. Schümperli)

«Changing RNA 3' ends—regulatory roles of CstF64 in proliferating cells and developing neurons»

Céline Rueggsegger, PhD in Neuroscience (19 June)

Institute of Cell Biology (Prof. Dr. S. Saxena)

«Unraveling mechanisms of selective neuronal vulnerability in neurodegenerative diseases»

Janine Ruppen, PhD in Biomedical Sciences (10 June)

ARTORG Center for Biomedical Engineering Research, Lung Regeneration Technologies (Prof. Dr. O. T. Guenat)

«Microfluidic Platform for Personalized Oncology Applications»

Luisa Salazar-Vizcaya, PhD in Biomedical Sciences (26 October)

Institute of Social and Preventive Medicine (PD Dr. O. Keiser, Prof. Dr. M. Egger)

«Mathematical modelling of HIV and hepatitis C virus in times of highly effective treatments»

Aline Schögler, PhD in Biomedical Sciences (25 June)

Dept. of Clinical Research, Pneumology (Paediatrics) (Dr. M. Alves, Prof. Dr. T. Geiser)

«Mechanisms and modulation of the antiviral response in the cystic fibrosis airway epithelium»

Maryam Seif, PhD in Biomedical Sciences (1 December)

Dept. of Clinical Research, Magnetic Resonance Spectroscopy and Methodology (Prof. Dr. P. Vermathen)

«Advanced Multi-modal MR Imaging Methods and Analysis Tools for Reliable Determination of Renal Function in Native and Transplanted Kidneys»

Salome Nadja Seiffert, PhD of Science in Biochemistry and Molecular Biology

(4 September)

Institute for Infectious Diseases (Prof. Dr. V. Perreten)

«Genetic properties of extended cephalosporin-resistant *Escherichia coli* in humans and animals»

Stefanie Seiler, PhD in Biomedical Sciences (15 December)
 Dept. of Neurosurgery, Inselspital, Bern University Hospital (Prof. Dr. H. R. Widmer)
«The potential of Nogo-A neutralization as a novel treatment strategy for Parkinson's disease»

Stefania Sgroi, PhD in Neuroscience (21 December)
 Dept. of Clinical Research, Neurology (Prof. Dr. A. Kaelin)
«Role of striatal opioidergic neuropeptides on locomotor hypersensitivity and dyskinesia in Parkinsonian rats»

Rahul Sharma, PhD of Science in Cell Biology (4 December)
 Institute of Cell Biology (Prof. Dr. P. Meister)
«Sex-specific Chromosome Organization and Dosage Compensation in *C. elegans*»

Diana Amy Shy, PhD in Biomedical Sciences (25 September)
 Dept. of Clinical Research, Ion Channels and Channelopathies (Prof. Dr. H. Abriel)
«Nav1.5 regulation via interacting proteins and subcellular localization»

Valentin Sottas, PhD in Biomedical Sciences (30 October)
 Dept. of Clinical Research, Ion Channels and Channelopathies (Prof. Dr. H. Abriel)
«Characterization of Nav1.5 genetic variants leading to different cardiac arrhythmias»

Patrick Steiner, PhD in Biomedical Engineering (22 April)
 ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology Laboratory (PD Dr. J. H. Kowal)
«Ultra-high Resolution Optical Coherence Tomography Retinal Tissue Monitoring for Dosimetry Control During Selective Retina Therapy Laser Treatment»

Felix Theiss, DVM, PhD (19 November)
 Equine Department, Clinic for Equine Surgery, Vetsuisse Faculty Zurich (Dr. P. J. Richards)
«Evaluation of new concepts for cell based tendon regeneration»

Grzegorz Toporek, PhD in Biomedical Engineering (29 June)
 ARTORG Center for Biomedical Engineering Research, Image-guided Therapy (Prof. Dr. S. Weber)
«Improving the safety and efficiency of stereotactic CT-guided percutaneous ablation of liver tumours»

Xiaoliang Wang, PhD in Biomedical Sciences (15 December)
 Institute of Pharmacology (Prof. Dr. H.-U. Simon)
«Adhesion molecules in neutrophil death signaling»

Tom Williamson, PhD in Biomedical Engineering (7 August)
 ARTORG Center for Biomedical Engineering Research, Image-guided Therapy (Prof. Dr. S. Weber)
«Integrated Sensing & Control for Robotic Microsurgery on the Lateral Skull Base»

Wilhelm Wimmer, PhD in Biomedical Engineering (8 December)
 ARTORG Center for Biomedical Engineering Research, Artificial Hearing Research (Prof. Dr. M. Kompis)
«Multidisciplinary Approaches Toward an Improved Efficacy of Cochlear Implants»

Sophie Yammine, MD, PhD (16 December)
 Department of Pediatrics (Pneumology), Inselspital, Bern University Hospital (Prof. Dr. P. Latzin)
«Transition of inert gas washout measurements from research into clinics»

Adrian Zurbuchen, PhD in Biomedical Engineering (9 November)

ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering
(Prof. Dr. R. Vogel)

«Intracorporeal Energy Harvesting from the Beating Heart by a Mass-Imbalance Oscillation Generator»

Daniel Zysset, PhD in Immunology (10 September)

Institute of Pathology (Prof. Dr. C. Müller)

«TREM-1 and its role in non-infectious inflammatory conditions»

We congratulate all graduates on their achievement and wish them all the very best for their future careers. Many of them have already moved on to new, challenging postdoctoral positions at universities all over the world.

Tables 2 and 3 show the distribution of the graduations in 2015 within the five GCB Expert Committees and within the Faculties/Institutions, respectively.

Degree	Biological Systems	Biomedical Engineering	Biomedical Sciences	Cell Biology	Molecular Biology & Biochemistry	Total
PhD in Biomedical Engineering	0	7	0	0	0	7
PhD in Biomedical Sciences	15	2	4	3	3	27
PhD in Immunology	3	0	0	9	0	12
PhD in Neuroscience	2	0	0	1	1	4
PhD of Science in Biochemistry & Molecular Biology	0	0	0	0	9	9
PhD of Science in Cell Biology	1	0	0	2	2	5
MD,PhD	1	0	1	1	0	3
DVM,PhD	0	0	3	1	4	8
DDS,PhD	1	0	0	0	0	1
Total	23	19	8	17	19	76
Total in %	30.0	11.8	10.5	22.4	25.0	100.0

Table 2. Graduations per GCB Expert Committee in 2015.

Degree	Faculty of Medicine	Faculty of Science	Vetsuisse Faculty BE	Vetsuisse Faculty ZH	IRB Bellinzona	Total
PhD in Biomedical Engineering	7	0	0	0	0	7
PhD in Biomedical Sciences	25	0	2	0	0	27
PhD in Immunology	12	0	0	0	0	12
PhD in Neuroscience	2	2	0	0	0	4
PhD of Science in Biochemistry & Molecular Biology	3	5	1	0	0	9
PhD of Science in Cell Biology	2	3	0	0	0	5
MD,PhD	3	0	0	0	0	3
DVM,PhD	0	0	5	3	0	8
DDS,PhD	1	0	0	0	0	1
Total	55	10	8	3	0	76
Total in %	72.4	13.2	10.5	3.9	0.0	100.0

Table 3. Graduations in 2015, according to Faculties/Institutions.

Congratulations

GCB Award for Best PhD Thesis

The **2015 GCB Award for «Best PhD Thesis»** (CHF 3.000.–) was awarded to **Céline Ruegsegger, PhD in Neuroscience**, in February 2016 during the GCB 10th Anniversary Symposium for her work entitled **«Unraveling mechanisms of selective neuronal vulnerability in neurodegenerative diseases»**. She performed her PhD work under the supervision of Prof. Dr. Smita Saxena at the Institute of Cell Biology, University of Bern, and defended her thesis successfully on June 19, 2015.—Since Céline Ruegsegger was travelling in Australia at the time of the prize ceremony, her supervisor Prof. Dr. Smita Saxena took over to give a short talk on the work of the laureate.



Figure 9, right: Céline Ruegsegger travelling in Australia after having successfully defended her thesis (Illustration by Crazy David).

Our warmest congratulations go to Céline Ruegsegger, PhD in Neuroscience, for her outstanding success. After her graduation, the laureate took a short time-out for travelling before planning her career as a post-doctoral fellow.

Additional Prizes Awarded to GCB Candidates and Graduates in 2015

We are very pleased to report that in the course of 2015, a number of GCB candidates and graduates received various important prizes and awards. Listed are the ones of which we have obtained direct knowledge.

Day of Clinical Research 2015 DCR Poster Prizes

On the occasion of the **Day of Clinical Research 2015** (November 4, 2015), organized by the Department of Clinical Research, University of Bern, the prize for the best pre-clinical project was awarded to **Paola Francica**, Department of Clinical Research, Radiation Oncology Research Group, University of Bern, for her work **«FOX M1 is a critical mediator of DNA damage-induced senescence in gastric cancer models following targeting the MET receptor tyrosine kinase»**.

Paola Francica, PhD in Biomedical Sciences, performed her PhD work under the supervision of PD Dr. Yitzhak Zimmer and Dr. Michaela Medová at the Department of Clinical Research, within the framework of the GCB and defended her PhD thesis successfully in March 2016.

Benoît Pochon Award for 2015

The Benoît Pochon Award for 2015 for a PhD thesis was shared by two graduates of the GCB:

- **Stefanie Seiler**, PhD in Biomedical Sciences, Department of Neurosurgery, Inselspital, Bern University Hospital, for her PhD thesis **«The potential of Nogo-A neutralization as a novel treatment strategy for Parkinson's disease»**, performed under the supervision of Prof. Dr. Hans-Rudolf Widmer. Stefanie defended her PhD thesis successfully in December 2015
Stefanie was also awarded the «Synapsis Best Poster Prize» of the Swiss Society for Neuroscience (SSN) and the Synapsis Foundation.
- **Aline Schögl**, PhD in Biomedical Sciences, Department of Clinical Research, Pneumology (Paediatrics) Research Group, University of Bern, for her PhD thesis **«Mechanisms and modulation of the antiviral response in the cystic fibrosis airway epithelium»**, performed under the supervision of Dr. Marco Alves and Prof. Dr. Thomas Geiser. Aline defended her PhD thesis successfully in May 2015.

Pfizer Research Prize Foundation in Switzerland

The Pfizer Research Prize Foundation in Switzerland awarded an annual prize for cutting-edge research to nine young scientists. Among the laureates, two PhD candidates of the GCB were each awarded a research prize for their work:

- **Moana Mika**, currently performing her PhD research work under the supervision of PD Dr. Markus Hilty at the Institute for Infectious Diseases; her work is entitled **«Dysregulation of the lung microbiota in chronic obstructive pulmonary disease»**.
- **Insa Korten**, MD, currently performing her PhD research work under the supervision of Prof. Dr. Philipp Latzin at the Department of Pediatrics (Pneumology), Inselspital, Bern University Hospital; her work is entitled **«Mechanisms and factors regulating and influencing the dynamics of the nasopharyngeal microbiome in the first year of life in infants with CF and healthy controls»**.

We congratulate all laureates very warmly on their outstanding success and wish them all the very best for the continuation of their career.

MD-PhD Program and MD-PhD Fellowships

The MD-PhD program is intended for medical graduates interested in experimental research and aiming at an academic career. A structured training program within the framework of the GCB enables them to acquire a high standard of knowledge in natural sciences and physiology. According to the guidelines of the National MD-PhD Program, candidates should already start their training in the course of their medical studies and follow relevant courses simultaneously with their medical curriculum.

The National MD-PhD Program, which is supported by the Swiss National Science Foundation (SNSF), the Swiss Academy of Medical Sciences (SAMW), and several other foundations, awards 9 to 13 fellowships every year to outstanding medical candidates (Human as well as Veterinary Medicine) studying at Swiss Universities. For information, see <http://www.samw.ch/de/Forschung/MD-PhD-Programm.html> (website in German).

In 2015, **Thomas Gschwend**, from the Laboratory of Prof. Dr. Adrian Ochsenbein, Department of Clinical Research, Tumor Immunology Research Group, was awarded one of the prestigious 3-year MD-PhD Fellowships.

We deeply regret to report that Thomas' very promising career has been brutally cut short on May 21, 2016, when he was killed in a mountaineering accident in the Bernese Alps. Words cannot convey our feelings of shock and consternation at receiving the sad news, and our thoughts of deep sympathy go to Thomas' family and friends.

Support and Acknowledgments

The GCB is supported by the University of Bern and by the Faculty of Medicine of the University of Bern.

Since its inception in September 2005, the GCB has been offered the generous hospitality of the Theodor Kocher Institute (TKI): The GCB program coordination and administration are located in dedicated rooms of the TKI and its members are allowed to share the full infrastructure of the institute. Moreover, the GCB Expert Committees, the PhD Committee, and PhD candidates are frequent guests at the TKI Clubroom and TKI labs for meetings, interviews, tutorials, practical courses, exams, and PhD thesis defenses. Our special thanks go to the director, Prof. Dr. Britta Engelhardt, and the whole team of the TKI, for their continuous support, for making this «joint venture» possible, and for giving the GCB a perfectly suitable «home» and center for many of its activities.

Information

www.gcb.unibe.ch/



PD Dr. Marlene Wolf



Gabrielle Favre

June 23, 2016

