UNIVERSITÄT BERN

University of Bern / Switzerland
Faculty of Medicine
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Report 2008

gcb
Graduate School
for Cellular and
Biomedical Sciences

Graduate School for Cellular and Biomedical Sciences

Ph. D. Program

- Biochemistry
- Biomedical Engineering
- Cell and Molecular Biology
- Clinical Research
- Immunology
- Pharmacology
- Physiology
- Structural Biology

Detailed information: www. gcb.unibe.ch

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University of Bern

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Preface

The *Graduate School for Cellular and Biomedical Sciences* (GCB) was officially launched on 1 September 2005. Since then, doctoral students from three faculties (Science, Medicine, Vetsuisse) working in various fields of cellular and biomedical sciences have obtained an interfaculty doctorate in a program that involves training as well as research work, both of which are individualised but conform to common, high quality standards. Research training is available in the areas of Biochemistry, Biomedical Engineering, Cell and Molecular Biology, Clinical Research, Immunology, Neurosciences, Pharmacology, Physiology and Structural Biology being assigned to four competence areas (Molecular Biology, Biomedical Sciences, Cell Biology and Biological Systems), each administered by an Expert Committee.

Overall, the Graduate School for Cellular and Biomedical Sciences of the University of Bern offers structured, experimental research training programmes leading to a PhD or MD-PhD degree. Important to stress, in order to promote clinical research MD-PhD candidates may be admitted to the PhD programme already during the medical studies, subject to a selection procedure.

Actually over 230 PhD students have been admitted to the program. Thus, the expected final size of the GCB will be about 250 students. It is therefore not surprising that the GCB plays a central role in the efforts of the university directorate to coordinate the teaching and research activities of these three faculties, to strengthen existing contacts and to foster the establishment of focal areas of research of national and international significance.

The GCB has its own seminar series which allows the students to have personal discussions with excellent scientists and not only to learn more about their projects but also to clarify their points of view relating to scientific, career-related and social issues. Moreover, on 28 January 2009, the third GCB student symposium took place where all the more advanced PhD students presented their work in oral and poster presentations. Without any doubt it was a great success to all of us!

The fact that all this could be realised is, on the one hand, due to the active support by the university directorate. On the other hand, it would not have been possible without the enormous and competent efforts of the program coordinator, Mrs. PD Dr. Marlene Wolf, and her administrative collaborator, Mrs. Gabrielle Favre. Before handing over the presidency to my colleague Prof. Ulrich Baumann, I would like to express the warmest gratitude to both of them in the name of the entire GCB directing committee. I am quite certain that this appreciation is also shared by our students.

Bern, 9 July 2009

Prof. Primus-E. Mullis, President,
February 2008 – February 2009

Organisation

The *Graduate School for Cellular and Biomedical Sciences of the University of Bern (GCB)* offers structured training in experimental research in the fields of cell biology and biomedical sciences, 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 Faculties of Bern and Zurich.

By the end of 2008, 235 students were enrolled in the PhD program. The thesis projects are carried out at laboratories of the three participating faculties or at affiliated institutions (currently the Institute of Virology and Immunoprophylaxis (IVI) in Mittelhäusern, the Institute for Research in Biomedicine (IRB) in Bellinzona, and the Cantonal Laboratory of Pathology in Locarno).

Research projects include topics in the areas of biochemistry, biomedical engineering, cell and molecular biology, clinical research, immunology, pharmacology, physiology and structural biology.

Each student is supervised by a **thesis advisor,** a **co-referee** and a member of the appropriate expert committee **(mentor).**
The **thesis advisor** is responsible for the research project, adequate supervision, the laboratory infrastructure and the salary of the student.
The **co-referee** must not be affiliated with the same institute as the thesis advisor and not be a collaborator on the project. He/she should be well acquainted with the subject area of the research project. The co-referee meets with the student 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 student and the thesis advisor, on the individual training program, taking into account the student's previous education

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 pass two exams: (I) End of the first year, documenting an adequate knowledge of cell and/or medical biology or physiology. (II) End of the second year, documenting an in-depth knowledge of the research field.

Committees

The GCB is headed by the PhD Committee, which is composed of two members each of the Faculty of Medicine, the Faculty of Science, and the Vetsuisse Faculty, and the program coordinator. Taking turns, each faculty member acts as president for a one-year period.
Four expert committees (Molecular Biology, Cell Biology, Biological Systems, and Biomedical Sciences) ensure that the different research fields are represented by experts in the respective areas.

PhD Committee 2008
Primus Mullis, Paediatric Endocrinology (Med), President
Ulrich Baumann, Department of Chemistry and Biochemistry (Sci)
Thomas Brunner, Institute of Pathology (Med), since May 2008
Oliver Mühlemann, Institute of Cell Biology (Sci)
Ernst Peterhans, Institute of Virology (Vet)
Petra Roosje, Department of Clinical Veterinary Medicine (Vet)
Andrew Ziemiecki, Department of Clinical Research (Med), until April 2008
Marlene Wolf, Coordinator

Expert Committee "Molecular Biology" 2008
Ulrich Baumann, Department of Chemistry and Biochemistry (Sci), Head
Peter Bütikofer, Institute of Biochemistry and Molecular Medicine (Med)
Sabina Gallati, Department of Clinical Research (Med)
Tosso Leeb, Institute of Genetics (Vet), since October 2008
Daniel Lottaz, Rheumatology (Med), since October 2008
Pascal Mäser, Institute of Cell Biology (Sci)
Oliver Mühlemann, Institute of Cell Biology (Sci), since May 2008
Hanspeter Nägeli, Institute of Veterinary Pharmacology and Toxicology, Zurich (Vet)
Isabel Roditi, Institute of Cell Biology (Sci)
Daniel Schümperli, Institute of Cell Biology (Sci)
Beat Trueb, Department of Clinical Research (Med)

Expert Committee "Cell Biology" 2008
Oliver Mühlemann, Institute of Cell Biology (Sci), Head, until May 2008
Ernst Peterhans, Institute of Virology (Vet), Head since May 2008
Thomas Brunner, Institute of Pathology (Med)
Clemens Dahinden, Institute of Immunology (Med)
Andrew Hemphill, Institute of Parasitology (Vet)
Kenneth McCullough, IVI Mittelhäusern
Thomas Seebeck, Institute of Cell Biology (Sci), until April 2008
Erwin Sigel, Institute of Biochemistry and Molecular Medicine (Med)
Jens Stein, Theodor Kocher Institute (Med)
Beat Suter, Institute of Cell Biology (Sci)
Marcus Thelen, IRB Bellinzona

Expert Committee "Biological Systems" 2008
Andrew Ziemiecki, Department of Clinical Research (Med), Head, until April 2008
Petra Roosje, Department of Clinical Veterinary Medicine (Vet), Head since May 2008
Jean-François Dufour, Institute of Clinical Pharmacology (Med), since May 2008
Britta Engelhardt, Theodor Kocher Institute (Sci and Med)
Brigitte Frey, Department of Clinical Research (Med)
Urs Frey, Department of Clinical Research (Med)
Peter Gehr, Institute of Anatomy (Med)
Thomas Lutz, Institute of Veterinary Physiology, Zurich (Vet)
Kathrin Mühlemann, Institute for Infectious Diseases (Med), until October 2008
Christoph Müller, Institute of Pathology (Med)
Ernst Niggli, Institute of Physiology (Med)
Jürg Streit, Institute of Physiology (Med), since February 2008
Deborah Stroka, Department of Clinical Research (Med)
Marc Vandevelde, Division of Animal Neurology (Vet)

Expert Committee "Biomedical Sciences" 2008
Primus Mullis, Paediatric Endocrinology (Med), Head
Anne-Catherine Andres, Department of Clinical Research (Med)
Marco Caversaccio, Clinic of ENT, Head and Neck Surgery (Med), since May 2008
Matthias Egger, Institute of Social and Preventive Medicine (Med)
Stephen Ferguson, ARTORG Center, ISTB (Med)
Martin Frenz, Institute of Applied Physics (Sci)
Klaus-Arno Siebenrock, Clinic for Orthopaedic Surgery (Med)
Hans-Uwe Simon, Institute of Pharmacology (Med)
Jukka Takala, Department of Intensive Care Medicine (Med)
Brigitte von Rechenberg, Equine Hospital, Zurich (Vet)

The GCB deeply regrets the loss of Prof. Andrew Ziemiecki, one of its prominent PhD committee members, who passed away on April 13, 2008. The GCB is indebted to Prof. Ziemiecki for his essential contributions as a committee member and more so for his central role in the establishment of the PhD program itself. Throughout the years, Prof. Ziemiecki unselfishly devoted his time and energy to students, colleagues and committees and as a result, many have benefited from his personal support and his competent and professional advice. His kindness, creative personality and humorous character will always be remembered.

Office

Marlene Wolf, Coordinator, Theodor Kocher Institute
Gabrielle Favre, Secretary, Theodor Kocher Institute

Med: Medical Faculty
Sci: Faculty of Science
Vet: Vetsuisse Faculties of Bern and Zurich

Doctoral Students

Students could apply for admission to the Graduate School on 15 March, 15 June, 15 September, and 15 December.

At the end of 2008, 235 doctoral students were registered with the GCB, almost equally distributed among the four expert committees:

Expert committee	Number of students
Molecular Biology	51
Cell Biology	59
Biological Systems	63
Biomedical Sciences	62

The experimental work is carried out in research groups of the Medical Faculty (170 students), the Faculty of Science (19), the Vetsuisse Faculties in Bern (21) and Zurich (11), the Institute for Research in Biomedicine in Bellinzona (8), the Institute of Virology and Immunoprophylaxis in Mittelhäusern (5), and the Cantonal Laboratory of Pathology in Locarno (1).

The GCB is internationally oriented and represented by doctoral students with master diplomas from 30 different countries; therefore 46% of the GCB students have a degree from a foreign university. 56% of the doctoral students are women.

Seminars and Courses

The PhD program involves theoretical training, in addition to the experimental work on the research project. For each student, seminars and courses are individually selected from the teaching units of the faculties. The GCB organizes tutorials during which a relevant textbook is studied and discussed in monthly sessions in small groups, chaired by a senior scientist, and supports advanced courses for the doctoral students.

Tutorials

- Tutorial in *Immunology* (Abul K. Abbas, *Cellular and Molecular Immunology*), organized by the GCB
- Tutorial in *Cellular and Molecular Biology* (Happy Cell), (Bruce Alberts et al., *Molecular Biology of the Cell*), organized by the GCB
- Topics in Tumor Biology (organized by D. Stroka, M. Tschan, and Y. Zimmer, DKF)

Furthermore, the students of the GCB may select among numerous specialized practical courses. Participation at international workshops and in summer schools is encouraged and accepted as training units.

Practical Courses, Workshops, Summer School

- Bioinformatics (M. Solioz, Institute of Clinical Pharmacology)
- Cell migration (B. Engelhardt, R. Lyck, and J. Stein, Theodor Kocher Institute)
- DNA sequencing and mutation analysis (T. Leeb and B. Haase, Vetsuisse Faculty)
- Epidemiology & Biostatistics (M. Doherr, Vetsuisse Faculty)
- Genetic mapping with microsatellites (C. Drögemüller, Vetsuisse Faculty)
- Immunology (A. Zurbriggen, G. Bertoni, and E. Marti, Vetsuisse Faculty)
- Immunofluorescent staining (S. Yousefi, Institute of Pharmacology)
- Molecular biological methods in clinical research (A.-C. Andres, DKF)
- Vascular cell biology (B. Engelhardt, U. Deutsch and R. Lyck, Theodor Kocher Institute)
- Summer school on Inflammation, Immunomodulation, Inspiration (H.-U. Simon and S. Yousefi, Institute of Pharmacology)
- Workshop on recent stereology (M. Ochs, Institute of Anatomy)

Graduate School Seminar Series

The Graduate School seminar series is organized by the students who have 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.

22 February 2008: **Hugh Montgomery,** Institute for Human Health and Performance, University College London, UK
Survival: Who lives, who dies, and why

30 May 2008: **Anant K. Menon,** Weill Cornell Medical College, New York, USA
Phospholipid flip-flops

26 August 2008: **Marc Lipsitch,** Harvard School of Public Health, Boston, USA
How do people become immune to pneumococcal carriage and disease?

31 October 2008: **Ed Palmer,** Laboratory of Transplantation Immunology and Nephrology, Department of Biomedicine, University Hospital Basel
A simplified explanation of self-tolerance: Is it possible?

28 November 2008: **Lukas Sommer,** Institute of Anatomy, Division Cell and Development Biology, University of Zurich
Neural crest stem cells in development and disease

Students' Symposium

On 31 January 2008, the 2nd Graduate School Students' Symposium was held on the premises of the Department of Chemistry and Biochemistry: During a whole day, the different research projects of the GCB doctoral students were presented in 18 short talks and over 90 posters. They illustrated the wide range of topics covered by the GCB and demonstrated the students' consistently high level of competence in the fields of cell biology and biomedical sciences. The symposium offered an excellent opportunity for both GCB students 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, PD Dr. Stephen Ferguson (MEM Research Center), gave a talk on "Spine Research: From Biomechanics to Mechanobiology". The breaks were extensively used for further informal discussions and active networking. The generous sponsoring of coffee and lunch by the Faculty of Medicine was much appreciated by everybody present,

Graduations

In the course of 2008, 10 students 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.
Seven of the graduates are foreign students who joined the GCB for their PhD studies.

2008 GCB Graduates (alphabetical order) and List of their Publications

Nicola Andina (19 December)
Institute of Pharmacology (Prof. H.-U. Simon)
The role of Bim and Pim-1 in granulocyte survival

Andina, N., S. Conus, E. M. Schneider, M. F. Fey, and H. U. Simon. 2009. Induction of Bim limits cytokine-mediated prolonged survival of neutrophils. *Cell Death Differ*.

Andina, N., S. Didichenko, J. Schmidt-Mende, C. A. Dahinden, and H. U. Simon. 2009. Proviral integration site for Moloney murine leukemia virus 1, but not phosphatidylinositol-3 kinase, is essential in the antiapoptotic signaling cascade initiated by IL-5 in eosinophils. *J Allergy Clin Immunol* 123:603-611.

Yousefi, S., J. A. Gold, N. Andina, J. J. Lee, A. M. Kelly, E. Kozlowski, I. Schmid, A. Straumann, J. Reichenbach, G. J. Gleich, and H. U. Simon. 2008. Catapult-like release of mitochondrial DNA by eosinophils contributes to antibacterial defense. *Nat Med* 14:949-953.

Tito Calì (19 December)
Institute for Research in Biomedicine IRB, Bellinzona (Dr. M. Molinari)
Tuning endoplasmic reticulum associated degradation

Cali, T., O. Vanoni, and M. Molinari. 2008. The endoplasmic reticulum crossroads for newly synthesized polypeptide chains. *Prog Mol Biol Transl Sci* 83:135-179.

Cali, T., C. Galli, S. Olivari, and M. Molinari. 2008. Segregation and rapid turnover of EDEM1 by an autophagy-like mechanism modulates standard ERAD and folding activities. *Biochem Biophys Res Commun* 371:405-410.

Olivari, S., T. Cali, K. E. Salo, P. Paganetti, L. W. Ruddock, and M. Molinari. 2006. EDEM1 regulates ER-associated degradation by accelerating de-mannosylation of folding-defective polypeptides and by inhibiting their covalent aggregation. *Biochem Biophys Res Commun* 349:1278-1284.

Kuldeep Kaur (17 December)
Institute of Biochemistry and Molecular Medicine (Prof. E. Sigel)
Architecture of δ subunit containing $GABA_A$ receptors

Kaur, K. H., R. Baur, and E. Sigel. 2009. Unanticipated structural and functional properties of delta-subunit-containing GABAA receptors. *J Biol Chem* 284:7889-7896.

Katrin Kuscher (17 July)
Institute for Research in Biomedicine IRB, Bellinzona (Dr. M. Uguccioni)
Synergy-inducing chemokines enhance CCR2 ligand activity on monocytes

Kuscher, K., G. Danelon, S. Paoletti, L. Stefano, M. Schiraldi, V. Petkovic, M. Locati, B. O. Gerber, and M. Uguccioni. 2009. Synergy-inducing chemokines enhance CCR2 ligand activities on monocytes. *Eur J Immunol* 39:1118-1128.

Foivos Markopoulos (6 June)
Institute of Anatomy (PD Dr. A. Scotti
Reassembling a system from the sensor to cerebral representation: The olfactory system in vitro

Markopoulos, F., F. B. Neubauer, T. Berger, and A. L. Scotti. 2008. Reassembling a system from the sensor to cerebral representation: The olfactory system in vitro. *Neuroscience* 156:1048-1063.

Lukas Stalder (5 December)
Institute of Cell Biology (PD Dr. O. Mühlemann)
About nonsense-mediated quality control mechanisms in mammals

Stalder, L., and O. Muhlemann. 2009. Processing bodies are not required for mammalian nonsense-mediated mRNA decay. *Rna* 15:1265-1273.

Muhlemann, O., A. B. Eberle, L. Stalder, and R. Zamudio Orozco. 2008. Recognition and elimination of nonsense mRNA. *Biochim Biophys Acta* 1779:538-549.

Stalder, L., and O. Muhlemann. 2008. The meaning of nonsense. *Trends Cell Biol* 18:315-321.

Eberle, A. B., L. Stalder, H. Mathys, R. Z. Orozco, and O. Muhlemann. 2008. Posttranscriptional gene regulation by spatial rearrangement of the 3' untranslated region. *PLoS Biol* 6:e92.

Stalder, L., and O. Muhlemann. 2007. Transcriptional silencing of nonsense codon-containing immunoglobulin micro genes requires translation of its mRNA. *J Biol Chem* 282:16079-16085.

Buhler, M., F. Mohn, L. Stalder, and O. Muhlemann. 2005. Transcriptional silencing of nonsense codon-containing immunoglobulin minigenes. *Mol Cell* 18:307-317.

Sasa Stefanic (8 July)
Institute of Parasitology, Vetsuisse Faculty Zürich (Prof. A.B. Hehl)
Biogenesis and dynamics of Golgi equivalents in Giardia lamblia

Stefanic, S., D. Palm, S. G. Svard, and A. B. Hehl. 2006. Organelle proteomics reveals cargo maturation mechanisms associated with Golgi-like encystation vesicles in the early-diverged protozoan Giardia lamblia. *J Biol Chem* 281:7595-7604.

Bottova, I., A. B. Hehl, S. Stefanic, G. Fabrias, J. Casas, E. Schraner, J. Pieters, and S. Sonda. 2009. Host Cell P-glycoprotein Is Essential for Cholesterol Uptake and Replication of Toxoplasma gondii. *J Biol Chem* 284:17438-17448.

Sonda, S., S. Stefanic, and A. B. Hehl. 2008. A sphingolipid inhibitor induces a cytokinesis arrest and blocks stage differentiation in Giardia lamblia. *Antimicrob Agents Chemother* 52:563-569.

Esther Steiner (22 September)
Federal Institute of Virology and Immunoprophylaxis (Dr. K. McCullough)
Porcine circovirus type 2: Cell tropism and interaction with the immune system

Steiner, E., C. Balmelli, B. Herrmann, A. Summerfield, and K. McCullough. 2008. Porcine circovirus type 2 displays pluripotency in cell targeting. *Virology* 378:311-322.

Balmelli, C., M. P. Alves, E. Steiner, D. Zingg, N. Peduto, N. Ruggli, H. Gerber, K. McCullough, and A. Summerfield. 2007. Responsiveness of fibrocytes to toll-like receptor danger signals. *Immunobiology* 212:693-699.

Maria Strohbusch (24 November)
Institute of Parasitology, Vetsuisse Faculty Bern (Prof. B. Gottstein)
Neospora caninum: Killing the survival artist

Strohbusch, M., N. Muller, A. Hemphill, M. Margos, D. Grandgirard, S. Leib, G. Greif, and B. Gottstein. 2009. Neospora caninum and bone marrow-derived dendritic cells: parasite survival, proliferation, and induction of cytokine expression. *Parasite Immunol* 31:366-372.

Debache, K., F. Alaeddine, C. Guionaud, T. Monney, J. Muller, M. Strohbusch, S. L. Leib, D. Grandgirard, and A. Hemphill. 2009. Vaccination with recombinant NcROP2 combined with recombinant NcMIC1 and NcMIC3 reduces cerebral infection and vertical transmission in mice experimentally infected with Neospora caninum tachyzoites. *Int J Parasitol*.

Strohbusch, M., N. Muller, A. Hemphill, R. Krebber, G. Greif, and B. Gottstein. 2009. Toltrazuril treatment of congenitally acquired Neospora caninum infection in newborn mice. *Parasitol Res* 104:1335-1343.

Strohbusch, M., N. Muller, A. Hemphill, G. Greif, and B. Gottstein. 2008. NcGRA2 as a molecular target to assess the parasiticidal activity of toltrazuril against Neospora caninum. *Parasitology* 135:1065-1073.

Kay Thurley (5 December)
Institute of Physiology (Prof. H.R. Lüscher
Dopamine in the prefrontal cortex and its relevance for working memory

Thurley, K., W. Senn, and H. R. Luscher. 2008. Dopamine increases the gain of the input-output response of rat prefrontal pyramidal neurons. *J Neurophysiol* 99:2985-2997.

Thurley, K., C. Leibold, A. Gundlfinger, D. Schmitz, and R. Kempter. 2008. Phase precession through synaptic facilitation. *Neural Comput* 20:1285-1324.

Nazaret, C., M. Heiske, K. Thurley, and J. P. Mazat. 2009. Mitochondrial energetic metabolism: a simplified model of TCA cycle with ATP production. *J Theor Biol* 258:455-464.

Leibold, C., A. Gundlfinger, R. Schmidt, K. Thurley, D. Schmitz, and R. Kempter. 2008. Temporal compression mediated by short-term synaptic plasticity. *Proc Natl Acad Sci U S A* 105:4417-4422.

The graduations were distributed among the Expert Committees as follows:

Degree	**Number of students from expert committees**			
	Molecular Biology	**Cell Biology**	**Biological Systems**	**Biomedical Sciences**
PhD	3	1	3	
MD-PhD[1)]		1		
DVM-PhD[2)]		1	1	

[1)] Doctor of Medicine and Philosophy

[2)] Doctor of Veterinary Medicine and Philosophy

The graduates' research work was carried out at the participating faculties and institutions as follows:

Faculty/Institution	**Number of graduations**		
	PhD	**MD-PhD**	**DVM-PhD**
Faculty of Medicine	3	1	
Faculty of Science	1		
Vetsuisse Faculty Bern	1		
Vetsuisse Faculty Zurich			1
IRB Bellinzona	2		
IVI Mittelhäusern			1

The GCB prize for the "Best Doctoral Thesis 2008" (CHF 3'000.–) was awarded to Lukas Stalder for his work entitled *"About nonsense-mediated quality control mechanisms in mammals"*. He performed his thesis work under the supervision of PD Dr. Oliver Mühlemann at the Institute of Cell Biology, with Prof. Dr. Witold Filipowicz (FMI Basel) acting as co-referee and Prof. Dr. Ulrich Baumann as mentor. Our special congratulations go to Dr. Lukas Stalder for his success.

Dr. Lukas Stalder (right), receives the GCB prize for the "Best Doctoral Thesis 2008", from the hands of Prof. Primus-E. Mullis, President of the GCB (left), during the 3rd Graduate School Students' Symposium in January 2009.

Furthermore, 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 postdoc positions at universities all over the world.

MD-PhD Program

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 and exams in cell and molecular biology or other related fields simultaneously with their medical curriculum.
In 2008, we interviewed seven medical students in their second to fourth year. An individual training program was put together for each of them. They now attend basic science courses.
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 10 to 12 fellowships every year to outstanding medical candidates studying at Swiss Universities (http://www.samw.ch/de/Forschung/MD-PhD-Programm.html). Two students of the Graduate School, Maria Luisa Balmer and Amadé Bregy, were each awarded one of these prestigious fellowships and are currently pursuing their MD-PhD studies in the laboratories of Prof. Jean-François Dufour and PD Dr. Michael Reinert, respectively.

Support

The GCB is supported by the University of Bern.

Information

www.gcb.unibe.ch.

M. Wolf, G. Favre

July 2009