



**u<sup>b</sup>**

b  
**UNIVERSITÄT  
BERN**

**UNIVERSITY OF BERN / SWITZERLAND**  
**FACULTY OF MEDICINE**  
**FACULTY OF SCIENCE**  
**VETSUISSE FACULTY**

# REPORT 2014

**gcb**

Graduate School  
for Cellular and  
Biomedical Sciences

## GRADUATE SCHOOL FOR CELLULAR AND BIOMEDICAL SCIENCES

### PHD PROGRAM

- ▶ CELL BIOLOGY
- ▶ MOLECULAR BIOLOGY & BIOCHEMISTRY
- ▶ IMMUNOLOGY
- ▶ NEUROSCIENCE
- ▶ EPIDEMIOLOGY
- ▶ BIOMEDICAL SCIENCES
- ▶ BIOMEDICAL ENGINEERING

DETAILED INFORMATION: [www.gcb.unibe.ch](http://www.gcb.unibe.ch)





Graduate School  
for Cellular and  
Biomedical Sciences



---

<sup>b</sup>  
UNIVERSITÄT  
BERN

# ANNUAL REPORT 2014

## OFFICE ADDRESS:

Graduate School for Cellular and Biomedical Sciences  
c/o Theodor Kocher Institute, University of Bern  
Freiestrasse 1  
CH-3012 Bern  
Switzerland  
[www.gcb.unibe.ch/](http://www.gcb.unibe.ch/)

PD Dr. Marlene Wolf, Coordinator  
[marlene.wolf@tki.unibe.ch](mailto:marlene.wolf@tki.unibe.ch), Tel +41 31 631 41 50

Gabrielle Favre, Secretary  
[gabrielle.favre@gcb.unibe.ch](mailto:gabrielle.favre@gcb.unibe.ch), Tel +41 31 631 53 77

Corina Moser, Secretary  
[corina.moser@gcb.unibe.ch](mailto:corina.moser@gcb.unibe.ch), Tel +41 31 631 53 77

Melanie Künzli, Office Assistant  
[melanie.kuenzli@gcb.unibe.ch](mailto:melanie.kuenzli@gcb.unibe.ch), Tel +41 31 631 53 77

(Staff December 2014)

**IMPRINT**

**Publisher:** Graduate School for Cellular and Biomedical Sciences

**Layout:** Roland Hirter, Hirtergrafik (front page), Gabrielle Favre

**Editing:** Gabrielle Favre, Marlene Wolf

**Photographs:** Schloss Münchenwiler (p. 15); Marlene Wolf (p. 26)

**Print:** Kopierzentrale, Universität Bern

**Edition:** 100

**Address:**

Graduate School for Cellular and Biomedical Sciences

Universität Bern

c/o Theodor Kocher Institute

Freiestrasse 1

3012 Bern

Tel. +41 31 631 53 77

info@gcb.unibe.ch

**Website:** [www.gcb.unibe.ch/](http://www.gcb.unibe.ch/)

© 2015 Graduate School for Cellular and Biomedical Sciences, University of Bern

## TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	<b>5</b>
<b>PHD PROGRAM</b> .....	<b>7</b>
<b>ORGANIZATION</b> .....	<b>8</b>
<b>GCB ORGANIZATION CHART</b> .....	<b>9</b>
<b>CHANGES IN COMMITTEE MEMBERSHIPS DURING 2014</b> .....	<b>10</b>
<b>DOCTORAL STUDENTS</b> .....	<b>11</b>
<b>COURSES AND SEMINARS</b> .....	<b>13</b>
<b>SPECIAL COURSES FOR GCB STUDENTS</b> .....	<b>13</b>
<b>LECTURES, TUTORIALS AND BOOK CLUBS</b> .....	<b>13</b>
<b>PRACTICAL COURSES, WORKSHOPS, SUMMER SCHOOLS</b> .....	<b>14</b>
<b>GCB SEMINAR SERIES</b> .....	<b>14</b>
<b>GCB STUDENTS' MEETINGS</b> .....	<b>15</b>
<b>GCB STUDENTS' SYMPOSIUM 2014</b> .....	<b>16</b>
<b>GRADUATIONS</b> .....	<b>17</b>
<b>GCB GRADUATES IN 2014: ALPHABETICAL ORDER</b> .....	<b>18</b>
<b>CONGRATULATIONS</b> .....	<b>26</b>
<b>GCB AWARD FOR BEST PHD THESIS</b> .....	<b>26</b>
<b>FURTHER PRIZES AWARDED TO GCB STUDENTS IN 2014</b> .....	<b>27</b>
<b>MD-PHD PROGRAM AND MD-PHD FELLOWSHIPS</b> .....	<b>28</b>
<b>2<sup>ND</sup> BERNESE MD-PHD MEETING</b> .....	<b>28</b>
<b>3<sup>RD</sup> EUROPEAN MD/PHD CONFERENCE</b> .....	<b>28</b>
<b>SUPPORT AND ACKNOWLEDGMENTS</b> .....	<b>29</b>
<b>INFORMATION</b> .....	<b>29</b>



## INTRODUCTION

2014 was quite a successful year for the Graduate School for Cellular and Biomedical Sciences (GCB). The school has continued to grow and showed 389 graduate students enrolled by the end of the year. A desirable high proportion of female students has become reality as well: 53.2% of students enrolled are women. Thus, the GCB as the merger of three different faculties continues to educate significant numbers of young scientists at the beginning of their careers. Many theses undertaken are financed by major Swiss research funding institutions like the Swiss National Science Foundation (SNSF/SNF) or the Commission for Technology and Innovation (CTI/KTI). The interface of the biomedical and cellular disciplines towards technical engineering disciplines has developed steadily.

The spirit of successful collaborative work again culminates in the annual symposium of the GCB allowing a platform for students to present their work and themselves as well as discussing theirs and other projects with peers. The teaching staff of the GCB, mentors and supervisors gather on this occasion and gain insight into different research fields of interest.

This annual report is also a great opportunity to thank all those who make the GCB happen! There is an enthusiastic staff with great experience and knowledge to run and further develop this school. There are senior scientists with major and genuine interest in assessing and teaching the next generation. There are decision makers who keep providing funding.

Thank you very much indeed to you All! The result of your engagement is remarkable!

Best regards

A handwritten signature in blue ink, appearing to read 'Frank Stüber', with a stylized flourish at the end.

Prof. Dr. med. Frank Stüber,  
GCB President

Bern, June 12, 2015



## 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 2014, **389 students** were enrolled in the PhD program, which in comparison with 2013 is equivalent to a further increase of 8.7%. The thesis projects are carried out at laboratories of the three participating faculties or at affiliated institutions; in 2014, these included the Institute of Virology and Immunology (IVI) in Mittelhäusern (merged with the Institute of Veterinary Virology at the Vetsuisse Faculty on January 1, 2014), the Institute for Research in Biomedicine (IRB) in Bellinzona, the EMPA in St. Gallen, and the Swiss Paraplegic Research in Nottwil.

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

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

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 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 supervisor, 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 **(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 students 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 students and supervisors; accordingly, the budget for this support was again used up in 2014.

A further aim of the structured doctoral program of the GCB lies in the promotion of a lively scientific exchange between PhD students 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 students have the opportunity to attend external courses and conferences, as well as to invite internationally renowned scientists for a seminar, or to organize an independent 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.

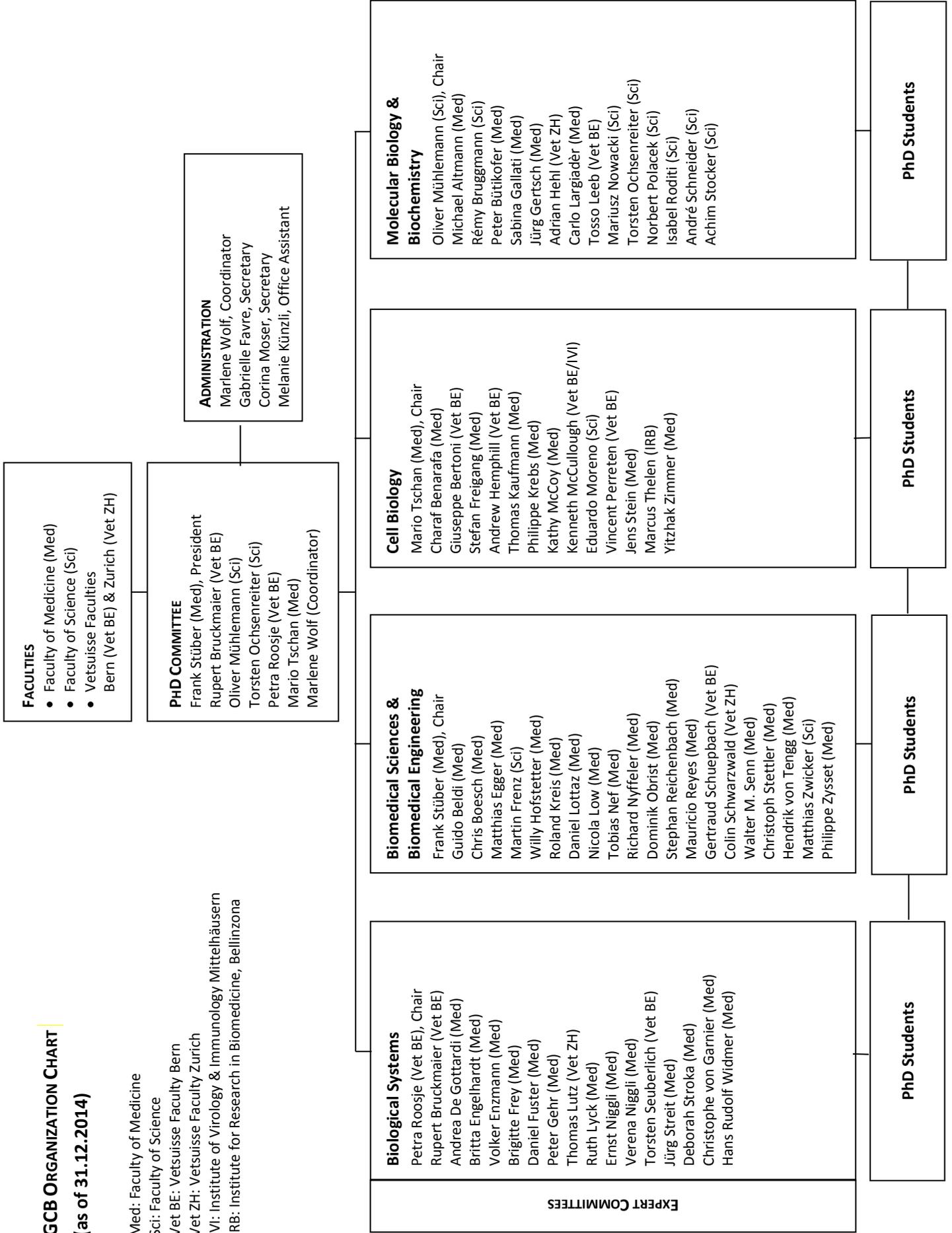
**Prof. Dr. med. Frank Stüber** (Faculty of Medicine) is acting as GCB President since August 2013. Under his judicious leadership, and with the active support of the Coordinator PD Dr. Marlene Wolf, the pending tasks within the GCB have been tackled with much energy and brought to best possible conclusion, serving students' and senior scientists' needs and concerns alike. Our warmest thanks go to both Frank's and Marlene's dedicated commitment to the GCB. We are very pleased to be able to continue the important work of the GCB under their guidance, leading into the tenth year of the GCB's existence.

Four Expert Committees—Molecular Biology & Biochemistry, Cell Biology, Biological Systems, and Biomedical Sciences & Biomedical Engineering—ensure that the different research fields are represented by experts in the respective areas.

In August 2014, **Melanie Künzli**—Master student in Psychology—joined the administrative team at the GCB office in a 40% position, while **Corina Moser** gradually reduced her activities from 60% to 40%.

## GCB ORGANIZATION CHART (as of 31.12.2014)

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



## CHANGES IN COMMITTEE MEMBERSHIPS DURING 2014

### PhD Committee

No changes

### Expert Committee Biological Systems

<b>Joined:</b>	PD Dr. Ruth Lyck (Med)	August 2014
	PD Dr. Andrea De Gottardi (Med)	September 2014

### Expert Committee Biomedical Sciences & Biomedical Engineering

<b>Resigned:</b>	PD Dr. Jens Kowal (Med)	May 2014
	Prof. Dr. Chris Boesch (Med)	December 2014
<b>Joined:</b>	PD Dr. Daniel Lottaz (Med)	January 2014
	Prof. Dr. Getraud Schuepbach (Vet BE)	January 2014
	Prof. Dr. Roland Kreis (Med)	May 2014
	Prof Dr. Tobias Nef (Med)	May 2014
	Prof. Dr. Dominik Obrist (Med)	May 2014
	Prof. Dr. Guido Beldi (Med)	August 2014
	PD Dr. Hendrik von Tengg (Med)	October 2014

### Expert Committee Cell Biology

<b>Joined:</b>	PD Dr. Stefan Freigang (Med)	March 2014
----------------	------------------------------	------------

### Expert Committee Molecular Biology & Biochemistry

<b>Resigned:</b>	Prof. Dr. Beat Trueb (Med)	January 2014
<b>Joined:</b>	Dr. Rémy Bruggmann (Sci)	January 2014
	Prof. Dr. André Schneider (Sci)	January 2014
	Prof. Dr. Carlo R. Largiadèr (Med)	August 2014
	Prof. Dr. Achim Stocker (Sci)	August 2014

Parallel to the higher number of PhD students enrolled in the GCB, each Expert Committee of the GCB has also experienced a rise in the number of its members.

## DOCTORAL STUDENTS

Students can apply three times per year for admission to the GCB: on 15 April, 15 August, and 15 December.

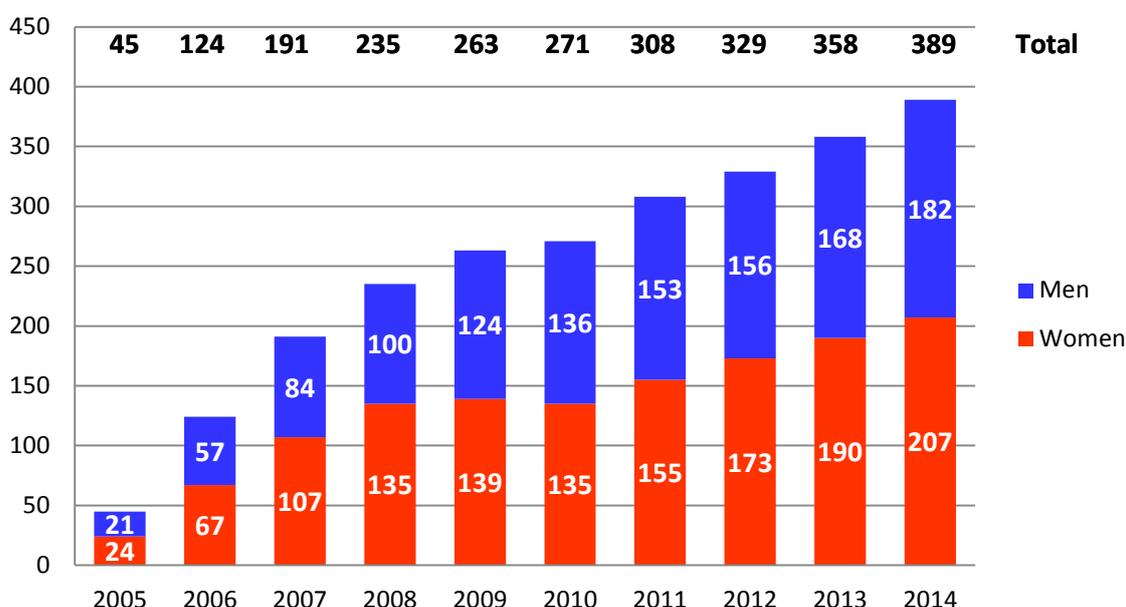
The GCB is internationally oriented and currently represented by doctoral students with master diplomas from 37 different countries.

Degree	University of Bern	Other Swiss Universities	Foreign Universities	Total	in %
Medical Degree	6	0	3	9	7.4
Vet. Medical Degree	6	2	6	14	11.6
Master Degree	33	19	46	98	81.0
<b>Total</b>	<b>45</b>	<b>21</b>	<b>55</b>	<b>121</b>	100.0
in %	37.2	17.4	45.4	100.0	

**Table 1.** In the course of 2014, 121 new PhD students enrolled in the PhD program of the GCB. Out of them, 45.4% were holding a degree from a foreign university.

At the end of 2014, **389 students** were enrolled in the GCB. 193 students (49.6%) were holding a degree from a foreign university, and 53.2% of the doctoral students were women.

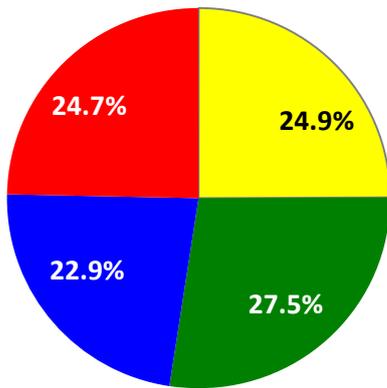
**PhD Students 2005-2014**



**Figure 1.** Since the start of the PhD program in 2005, the GCB has experienced an 8.6-fold increase of doctoral students.

In 2014, the GCB has started a pilot project involving a central recruitment system for PhD students, by offering PIs a possibility to advertise their open PhD positions via an online application platform (<https://unibegcb.glowbase.com/>). Two application calls per year are scheduled, and future evaluations will show whether this new tool will fulfill expectations as an instrument for reaching a wider pool of outstanding candidates in the research fields represented by the GCB. Individual PhD job offers continue to be possible as well, and participation in the central recruitment procedure remains completely at the discretion of each supervisor.

### PhD Students per Expert Committee in 2014



	Expert Committee	F	M	Total
<span style="color: yellow;">■</span>	Biological Systems	54	43	97
<span style="color: green;">■</span>	Biomedical Sciences & Biomedical Engineering	46	61	107
<span style="color: blue;">■</span>	Cell Biology	49	40	89
<span style="color: red;">■</span>	Molecular Biology & Biochemistry	58	38	96
	<b>Total</b>	<b>207</b>	<b>182</b>	<b>389</b>

Figure 2 and Table 2. As in previous years, the students were distributed equally among the four Expert Committees (F = women, M= men).

### Research of PhD Students at the Involved Faculties/Institutions

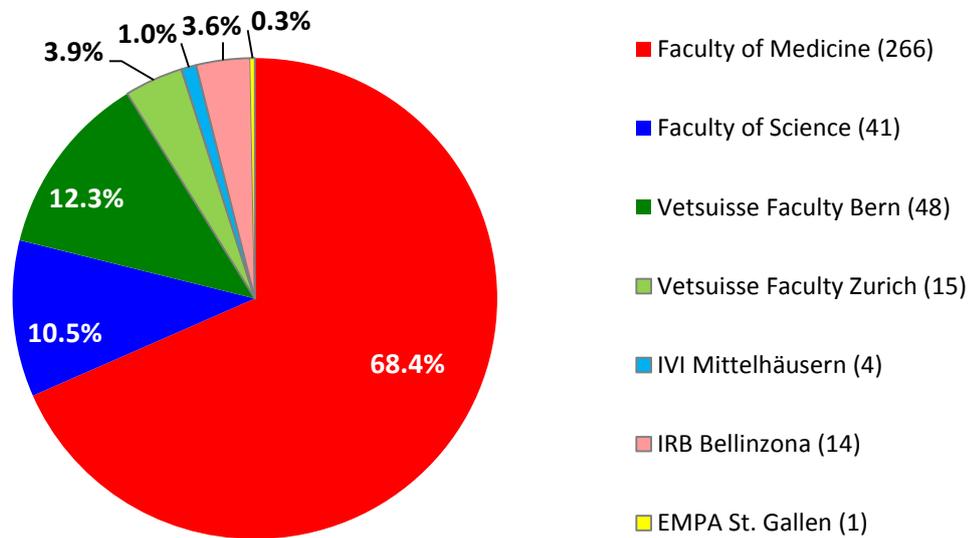


Figure 3. In parentheses: number of students; in chart: students' ratio (%).

## COURSES AND SEMINARS

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 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», StarOmics (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 students 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 students)
- *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
- *Transgenic Mouse Technology*, organized by C. Benarafa and U. Deutsch, Theodor Kocher Institute
- *Stem Cells & Regenerative Medicine* (lecture), organized by V. Enzmann, DCR
- *Topics in Tumor Biology* (lectures and discussions of scientific publications), organized by D. Stroka, M. Tschan, 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 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 and J. Stein, 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
- *Stereology Workshop*, organized by S. Tschanz, Microscopy Imaging Center (MIC) and Institute of Anatomy
- *Microscopy: Basic and Advanced/Special Modules*, organized and coordinated by S. Tschanz, Microscopy Imaging Center (MIC)
- *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 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, last course in 2014), organized by Th. Kaufmann, Institute of Pharmacology, and N. Corazza, Institute of Pathology
- *International Summer School on Inflammation, Immunomodulation, Inspiration*, organized by H.-U. Simon and S. Yousefi, Institute of Pharmacology
- *Scientific Writing*, organized by R. Greif, Dept. of Anaesthesiology and Pain Therapy, Inselspital, Bern University Hospital

#### **GCB SEMINAR SERIES**

The GCB Seminar Series gives PhD students 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 2014, one GCB seminar was organized and hosted by **Regula Burkhard**, PhD student in the group of PD Dr. Urban Novak, Department of Clinical Research, Oncology/Haematology (Adults):

October 13 & 14, 2014 **Prof. Riccardo Dalla-Favera, M.D.**, Director, Institute for Cancer Genetics at Columbia University Medical Center, New York, USA  
**Teaching Seminar:** «Molecular mechanism of B cell lymphomagenesis»  
**Public Lecture:** «Molecular Pathogenesis of Diffuse Large B Cell Lymphoma»  
**Host:** Regula Burkhard, PhD student, DCR, Oncology/Haematology (Adults)

*It is to be hoped that in future more students of the GCB will take advantage of this great 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

For the first time in 2014, PhD students had the opportunity to organize 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). The first GCB student supported was **Luca Tamò**, PhD student in the group of Prof. Dr. Thomas Geiser, Dept. of Clinical Research, Pulmonary Medicine, who organized a PhD seminar/retreat in the field of stem cell biology and regenerative medicine. The retreat took place at Schloss Münchenwiler near Murten on Friday, August 29, 2015. Luca Tamò reports:

*«The Münchenwiler PhD retreat took successfully place on Friday August 29<sup>th</sup>. The objective of this project was to launch a PhD retreat for the students of the Graduate School for Cellular and Biomedical Sciences (GCB) of the University of Bern working in the field of stem cell biology and regenerative medicine. Ideally, the retreat will take place on a yearly basis. 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. This location outside our normal working environment has been specifically chosen to facilitate interactions between all the students.*



**Figure 4. Schloss Münchenwiler** (© Schloss Münchenwiler).

*The program included 20 minutes oral presentations from PhD students, and a lecture from an international keynote speaker, Prof. Mariusz Ratajczak from the University of Louisville (US), who also gave constructive feedback and suggestions during the whole day.*

*The Organizing Committee trusts that not only did the students find the seminar to be instructive and fulfilling, but that they enjoyed the relaxed atmosphere around the meeting which favored the establishment of future collaborations and interdisciplinary projects.*

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

*On behalf of the Organizing Committee,*

*Luca Tamò»*

## GCB STUDENTS' SYMPOSIUM 2014

On 29 January 2014, the GCB Students' Symposium 2014 was held once again on the premises of the Department of Chemistry and Biochemistry and enjoyed the efficient and helpful support of its staff. During a whole day, the different research projects of the GCB doctoral students were presented in **48 short talks** in four parallel sessions and **145 posters** (two sessions). The presentations illustrated the wide range of topics covered by the GCB and demonstrated the students' consistently high level of competence in the fields of cellular and biomedical sciences, epidemiology and biomedical engineering. 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, **Prof. Dr. Bernhard Horsthemke**, Chair, Institute of Human Genetics, Universitätsklinikum Essen, Germany, gave a highly acclaimed keynote lecture on **«Epigenetic Control of Gene Expression—Genomic Imprinting and Imprinting Defects»**. The breaks were extensively used for further informal discussions and active networking, and the Symposium closed again with an Apéro during the second poster session, which gave further opportunity for lively exchange among participants.

**gcb**  
Graduate School  
for Cellular and  
Biomedical Sciences

**u<sup>b</sup>**  
UNIVERSITÄT  
BERN

### GCB Students' Symposium 2014

Wednesday, January 29, 2014  
09h00 – 17h30

Department of Chemistry and Biochemistry  
Freiestrasse 3, 3012 Bern

09.00 – 10.30	Student Presentations Part I (four parallel sessions)
10.30 – 11.00	Coffee Break
11.00 – 12.30	Student Presentations Part II (four parallel sessions)
12.30 – 14.00	Poster Session A & Lunch Break
14.15 – 14.30	GCB Award for Best Thesis
14.30 – 15.30	Keynote Lecture: Prof. Dr. Bernhard Horsthemke Prof. & Chair, Institute of Human Genetics, Universitätsklinikum Essen, Germany: "Epigenetic Control of Gene Expression — Genomic Imprinting and Imprinting Defects"
15.30 – 17.30	Poster Session B & Apéro

Guests welcome

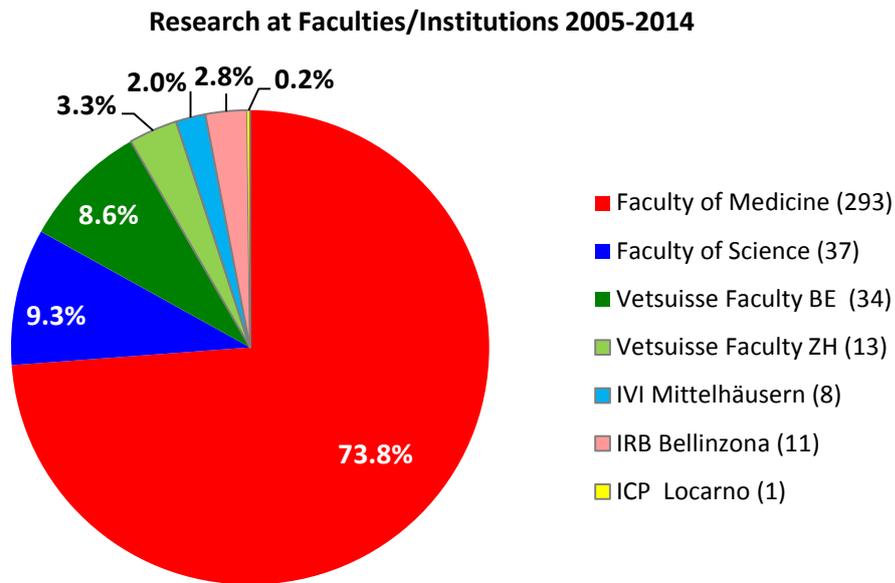
<http://www.gcb.unibe.ch>

Figure 5. Flyer of the GCB Students' Symposium 2014.

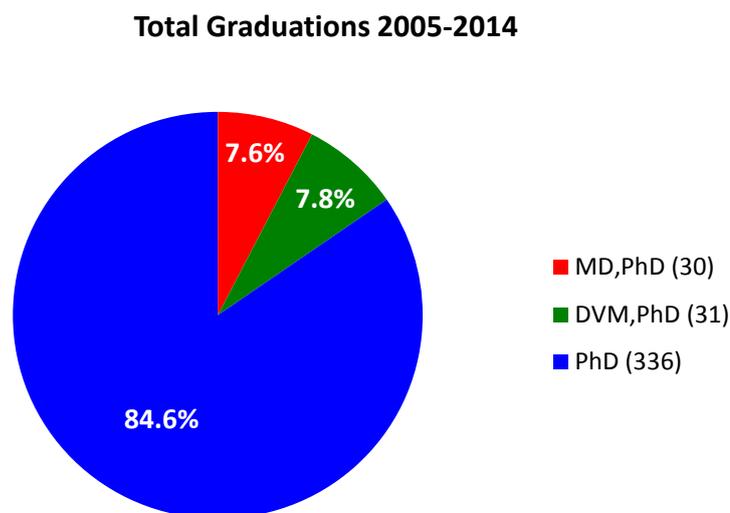
## GRADUATIONS

In the course of 2014, **82 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.

Of the graduates, 44—i.e., 53.7%—were students with a master diploma from a foreign university who joined the GCB for their PhD studies.



**Figure 6.** In parentheses: number of research projects completed at each Faculty or affiliated institution since the start of the GCB in 2005; in chart: research projects' ratio (%).



**Figure 7.** Since the start of the PhD program of the GCB in 2005, 397 students have successfully completed their studies and obtained a doctoral degree. In parentheses: number of graduates; in chart: graduates' ratio (%).

## GCB GRADUATES IN 2014: ALPHABETICAL ORDER

**Michael Abadier, PhD in Immunology** (12 September)

Theodor Kocher Institute (PD Dr. R. Lyck & Prof. Dr. B. Engelhardt)

«**Mechanistic insights into the extravasation of CD4<sup>+</sup> effector/memory T cells across the blood-brain barrier**»

**Markus Ackerknecht, PhD (Doctor of Philosophy in Science)** (10 December)

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

«***In vivo* analysis of motility-inducing factors governing CD4<sup>+</sup> T cell migration and activation**»

**Ruth Claire Diana Amann, PhD (Doctor of Philosophy in Science)** (18 June)

Dept. of Clinical Research, Rheumatology (Prof. Dr. B. Trueb)

«**Role of Fibroblast Growth Factor Receptor Like1 (FgfrL1) During Muscle Development**»

**Miroslav Arambasic, PhD of Science in Biochemistry and Molecular Biology** (22 May)

Institute of Cell Biology (Prof. Dr. M. Nowacki)

«**Characterization of *Paramecium tetraurelia* Factors Involved in Macronuclear Development**»

**Mislay Avila Sánchez, PhD of Science in Biochemistry and Molecular Biology** (10 June)

Division of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern (PD Dr. P. Plattet)

«**Molecular determinants of Morbillivirus-induced non-cytolytic cell-to-cell spread**»

**Jasmin Balmer, PhD (Doctor of Philosophy in Science)** (20 January)

Dept. of Clinical Research, Ophthalmology (PD Dr. V. Enzmann)

«**Cell death pathways in sodium iodate-induced retinal degeneration *in vivo* and *in vitro***»

**Sébastien F. Barré, PhD in Biomedical Engineering** (22 July)

Institute of Anatomy (Prof. Dr. J. C. Schittny)

«**X-ray Tomography: An Imaging Aid for Stereological Analysis of Lung Development**»

**Arnaud Baumann, PhD in Immunology** (11 February)

Institute of Virology and Immunology, Mittelhäusern (Prof. Dr. A. Summerfield)

«**Influences of porcine circo-, arteriviruses and cathelicidins on plasmacytoid dendritic cell-derived interferon-alpha responses**»

**Sigrid Marie Blom, PhD in Neuroscience** (27 June)

Dept. of Physiology (Prof. Dr. T. Nevian)

«**Neuronal Excitability and Synaptic Plasticity of Cortical Neurons in Neuropathic Pain**»

**Rajendra Boggavarapu V R N, PhD of Science in Biochemistry and Molecular Biology** (16 December)

Institute of Biochemistry and Molecular Medicine (Prof. Dr. D. Fotiadis)

«**Structural and functional characterization of a prokaryotic peptide transporter and mammalian membrane transport proteins expressed in *Xenopus laevis* oocytes**»

**Christin Saskia Bolze, PhD of Science in Biochemistry and Molecular Biology** (16 June)

Dept. of Chemistry and Biochemistry (Prof. Dr. A. Stocker)

«**The cellular retinaldehyde-binding protein—a cis-retinoid chaperone**»

**Ghalia Boubaker, PhD in Immunology** (20 June)

Institute of Parasitology, Vetsuisse Faculty Bern (joint supervision doctorate: Prof. Dr. B. Gottstein, University of Bern, Switzerland, & Prof. Dr. H. Babba, University of Monastir, Tunisia)

«**Molecular, biological and immunological characterization of the protein P29 within the genus of *Echinococcus***»

**Daniel Brigger, PhD (Doctor of Philosophy in Science)** (21 February)

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

«**The Regulation and Mechanism of ATRA-Induced Autophagy in Acute Myeloid Leukemia and Breast Cancer Pathology**»

**Patrick José Buschor, PhD (Doctor of Philosophy in Science)** (15 August)  
University Institute of Immunology (Prof. Dr. B. M. Stadler)  
«**Targeting Fc receptors on allergic effector cells**»

**Valentina Carta, PhD (Doctor of Philosophy in Science)** (31 October)  
Institute of Biochemistry and Molecular Medicine (Prof. Dr. E. Sigel)  
«**A novel open channel blocker of GABA<sub>A</sub> receptors**»

**Paulina Cwiek, PhD of Science in Cell Biology** (7 November)  
Dept. of Clinical Research, Haematology/Oncology (Paediatrics) (PD Dr. A. Arcaro)  
«**Identification of new targeted therapies for cancers of the nervous system**»

**Chen Dai, DVM, PhD** (19 December)  
Theodor Kocher Institute (PD Dr. M. Wolf)  
«**Antimicrobial functions of CXCL14 and derived peptides against respiratory bacteria *in vitro* and in a mouse model of pulmonary infection**»

**Dirk de Beer, PhD (Doctor of Philosophy in Science)** (2 December)  
Dept. of Clinical Research, Haematology (Adults) (Prof. Dr. G. Baerlocher)  
«**Telomere biology in normal and pathological haematopoiesis**»

**Sara El-Gebali, PhD of Science in Biochemistry and Molecular Biology** (29 July)  
Institute of Biochemistry and Molecular Medicine (Dr. P. Anderle)  
«**The role of amino acid transporters SLC7A5 and SLC38A5 in colon cancer progression**»

**Stefan Essig, MD, PhD** (2 July)  
Institute of Social and Preventive Medicine (Prof. Dr. C. Kuehni)  
«**Survivorship and long-term follow-up care in pediatric oncology: Qualitative and quantitative analyses**»

**Luce Farine, PhD of Science in Biochemistry and Molecular Biology** (31 October)  
Institute of Biochemistry and Molecular Medicine (Prof. Dr. P. Bütikofer)  
«**PE: A crossroads in phospholipid biosynthesis in *Trypanosoma brucei***»

**Audrey Filézac de L'Etang, PhD in Neuroscience** (8 August)  
Institute of Cell Biology (Prof. Dr. S. Saxena)  
«**SIL1 a double-edged sword: From Marinesco-Sjögren Syndrome to Amyotrophic Lateral Sclerosis**»

**Kate Gavaghan, PhD in Biomedical Engineering** (28 January)  
ARTORG Center for Biomedical Engineering Research, Image Guided Therapy (Prof. Dr. S. Weber)  
«**Man-machine interfaces for the advancement of image guided surgery**»

**Jennifer Gebetsberger, PhD of Science in Biochemistry and Molecular Biology** (15 April)  
Dept. of Chemistry and Biochemistry (Prof. Dr. N. Polacek)  
«**Genomic screens for regulatory non-coding RNA targeting the ribosome**»

**Andreas David Heinrich Häberlin, MD, PhD** (27 June)  
ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (Prof. Dr. R. Vogel)  
«**Esophageal electrocardiography—Towards clinical implementation with focus on long-term rhythm monitoring**»

**Stefan Halbherr, PhD of Science in Biochemistry and Molecular Biology** (15 December)  
Institute of Virology and Immunology, Mittelhäusern (Dr. G. Zimmer)  
«**RNA replicons addressing the requirements of high-quality influenza virus vaccines for poultry**»

**Martina Heidemann, PhD in Neuroscience** (26 June)  
Dept. of Physiology (Prof. Dr. J. Streit)  
«**Development of a New *in vitro* Model to Study Functional Regeneration in the Spinal Cord**»

**Janine Hensel, PhD (Doctor of Philosophy in Science)** (11 November)

Dept. of Clinical Research, Urology (Prof. Dr. G. Thalmann)

«**The stroma response in bone metastasis**»

**Andreas Hogg, PhD in Biomedical Engineering** (20 August)

Institute for Surgical Technology & Biomechanics (Prof. Dr. J. Burger)

«**Development and Characterisation of Ultrathin Layer Packaging for Implantable Medical Devices**»

**Michael Ignarski, PhD of Science in Biochemistry and Molecular Biology** (1 July)

Institute of Cell Biology (Prof. Dr. M. Nowacki)

«**Identification and analysis of proteins involved in genome rearrangements in *Paramecium tetraurelia***»

**Faik Imeri, PhD (Doctor of Philosophy in Science)** (28 October)

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

«**Development and characterization of novel oxazolo-oxazole derivatives of FTY720 *in vitro* and in experimental autoimmune-induced encephalomyelitis mice**»

**Michael Jäger, PhD in Biomedical Engineering** (11 November)

ARTORG Center for Biomedical Engineering Research, Gerontechnology and Rehabilitation (Prof. Dr. T. Nef)

«**Development and evaluation of technical systems to quantify driving performance in the elderly**»

**Edouard Jaumouillé, PhD (Doctor of Philosophy in Science)** (22 August)

Institute of Cell Biology (Dr. E. Nagoshi)

«**Investigation of the nuclear receptors role in the *Drosophila melanogaster* circadian circuitry *unf* and *E75* are controlling the free-running rhythms**»

**Natalie Jeannet, PhD (Doctor of Philosophy in Science)** (24 September)

Institute of Anatomy (Prof. Dr. M. Geiser)

«**Risks of Inhaled Nanoparticles in Health and Disease—Studied by In Vitro Technology**»

**Victor Johann Raul Jeger, MD, PhD** (23 June)

Dept. of Clinical Research, Intensive Care Medicine (Prof. Dr. S. Jakob)

«**Angiotensin and mitochondrial function in septic shock**»

**Raphael Joncourt, PhD (Doctor of Philosophy in Science)** (8 August)

Dept. of Chemistry and Biochemistry (Prof. Dr. O. Mühlemann)

«**Recognition of premature translation termination codons in nonsense-mediated mRNA decay**»

**Sebastian Knüsel, PhD (Doctor of Philosophy in Science)** (14 February)

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

«**Insights into the Regulation of GPEET Procyclin: The Differentiation from Early to Late Procyclic Forms of *Trypanosoma brucei***»

**Stefanie Kochinger, DVM, PhD** (17 July)

Institute of Virology and Immunology, Mittelhäusern (Dr. G. Zimmer)

«**Development of a novel marker vaccine platform for protection against Bluetongue Virus (BTV)**»

**Eliane Küng, PhD (Doctor of Philosophy in Science)** (31 January)

Institute for Infectious Diseases (Dr. L. J. Hathaway & PD Dr. M. Hilty)

«**The importance of pneumococcal capsule in innate immunity and biofilm formation**»

**Anja Kurz, PhD in Biomedical Engineering** (8 December)

ARTORG Center for Biomedical Engineering Research, Artificial Hearing Research (Prof. Dr. M. Kompis)

«**Osseointegrated auditory implants: Investigations of factors enhancing speech perception**»

**Torsten Lüdge, PhD (Doctor of Philosophy in Science)** (23 June)

Dept. of Physiology (Prof. Dr. W. Senn)

«**Motion induced modulation in the visual cortex**»

**Min Ma, PhD of Science in Cell Biology** (9 May)

Experimental Infectious Diseases and Cancer Research, Children's University Hospital Zurich & University of Zurich (PD Dr. M. Baumgartner)

«**The role of MAP4K4 in cell motility regulation: from a host-pathogen system to human cancer cells**»

**Maria Luisa Martinez Merino, PhD (Doctor of Philosophy in Science)** (11 June)

Institute of Cell Biology (Prof. Dr. E. Moreno)

«**"Fingerprints" and downstream signaling in fitness-based cell selection**»

**Jessica Merulla, PhD of Science in Biochemistry and Molecular Biology** (28 March)

Institute for Research in Biomedicine, Bellinzona (Dr. M. Molinari)

«**Deciphering the complexity of mammalian ER quality control and ERAD pathways**»

**Marcel Meury, PhD (Doctor of Philosophy in Science)** (20 January)

Institute of Biochemistry and Molecular Medicine (Prof. Dr. D. Fotiadis)

«**Insights into the Structure and Supramolecular Organization of Amino Acids and Peptide Transporters**»

**Simon Middendorp, PhD of Science in Biochemistry and Molecular Biology** (15 April)

Institute of Biochemistry and Molecular Medicine (Prof. Dr. E. Sigel)

«**Relative Orientation of Ligands in the Benzodiazepine Binding Site of GABA<sub>A</sub> Receptors**»

**Kei Mikami, PhD in Biomedical Sciences** (17 October)

Dept. of Clinical Research, Radiation Oncology (PD Dr. Y. Zimmer)

«**Impact of p53 Status on Radiosensitization of Tumor Cells by MET Inhibition-Associated Checkpoint Abrogation**»

**Maria Consolata Miletta, PhD of Science in Cell Biology** (22 December)

Dept. of Clinical Research, Endocrinology/Diabetology/Metabolism (Paediatrics) (Dr. V. Petkovic & Prof. Dr. P. Mullis)

«**Variable Effects of Butyrate on GH Secretion**»

**Sheida Moghadamrad, PhD in Biomedical Sciences** (1 April)

Dept. of Clinical Research, Hepatology (PD Dr. A. De Gottardi)

«**Investigations on the development of portal hypertension in the absence of microbial intestinal flora in mice**»

**Anuja Neve, PhD (Doctor of Philosophy in Science)** (15 August)

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

«**Functional consequences of Spinal Muscular Atrophy at the neuromuscular junction**»

**Simon Nicolussi, PhD of Science in Biochemistry and Molecular Biology** (25 April)

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

«**Identification and characterization of potent and selective inhibitors of endocannabinoid uptake**»

**Thomas Niederhauser, PhD in Biomedical Engineering** (24 September)

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

«**Oesophageal ECG signal processing algorithms for energy- and space-optimized long-term recording systems**»

- Juan Pereira de Macêdo, PhD (Doctor of Philosophy in Science)** (23 June)  
Institute of Biochemistry and Molecular Medicine (Prof. Dr. P. Bütikofer)  
«**Characterization of choline uptake in *Trypanosoma brucei* and involvement of a mitochondrial carrier in resistance to choline analogs**»
- Ramesh Periasamy, PhD in Biomedical Sciences** (3 June)  
Dept. of Clinical Research, Prenatal Medicine (Prof. Dr. D. Surbek & PD Dr. A. Schoeberlein)  
«**Preconditioning of chorion-derived mesenchymal stem cells for subsequent neural differentiation**»
- Anina Maria Mamaila Pescatore, PhD (Doctor of Philosophy in Science)** (3 July)  
Institute of Social and Preventive Medicine (Prof. Dr. C. Kuehni & Prof. Dr. L. Dümbgen)  
«**Childhood wheezing: Clinical Presentation Throughout Childhood and Predicting Persistent Wheeze**»
- Kseniia Poliakova, PhD of Science in Biochemistry and Molecular Biology** (24 June)  
Dept. of Clinical Research, Dermatology (Prof. Dr. L. Borradori & Dr. B. Favre)  
«**Localization and function of Bullous Pemphigoid Antigen 1 in C2.7 myoblasts**»
- Ravish Rashpa, PhD (Doctor of Philosophy in Science)** (30 May)  
Institute of Cell Biology (Prof. Dr. B. Suter)  
«**Roles of Cbp80 in translation repression of transported mRNAs and in the piRNA pathway**»
- Saša Rožman, PhD in Immunology** (19 December)  
Institute of Pharmacology (Prof. Dr. H.-U. Simon)  
«**The role of autophagy in neutrophil differentiation and function**»
- Michael Benjamin Rügsegger, PhD in Biomedical Engineering** (11 June)  
ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology (PD Dr. J. H. Kowal)  
«**Computer Assisted External Beam Radiation Therapy of Intraocular Tumors**»
- Karthik Sathiyandan, PhD in Immunology** (30 January)  
Theodor Kocher Institute (Prof. Dr. B. Engelhardt)  
«**In vivo analysis of the multistep-recruitment of different leukocyte subpopulations across the blood-brain-barrier: Molecular cues beyond  $\alpha 4$ -integrins and anatomical routes**»
- Manisha Saxena, PhD of Science in Biochemistry and Molecular Biology** (14 January)  
Institute of Biochemistry and Molecular Medicine (Prof. Dr. M. Altmann)  
«**Functional Characterization of Yeast eIF4E Post-translational Modifications**»
- Thierry Oliver Schaffner, PhD (Doctor of Philosophy in Science)** (27 June)  
Institute for Infectious Diseases (Dr. L. J. Hathaway & PD Dr. M. Hilty)  
«**The Influence of Carbon Source on *Streptococcus pneumoniae* Phenotype**»
- Anna Magdalena Schläfli, PhD (Doctor of Philosophy in Science)** (26 August)  
Institute of Pathology (PD Dr. M. P. Tschan)  
«**Retinoic acid-induced autophagy in acute myeloid leukemia and breast cancer: Implications for therapy**»
- Felix Schnarwiler, PhD of Science in Biochemistry and Molecular Biology** (23 October)  
Dept. of Chemistry and Biochemistry (Prof. Dr. A. Schneider)  
«**Discovery of Novel Factors Mediating Mitochondrial DNA Inheritance and Protein Import in *Trypanosoma brucei***»
- Johann Jakob Schwiedrzik, PhD in Biomedical Engineering** (2 October)  
Institute for Surgical Technology & Biomechanics (Prof. Dr. P. Zysset)  
«**Experimental, theoretical and numerical investigation of the nonlinear micromechanical properties of bone**»

**Emilie Seydoux, PhD in Biomedical Sciences** (20 October)

Dept. of Clinical Research, Pulmonary Medicine (Adults) (PD Dr. C. von Garnier & Prof. Dr. B. Rothen-Rutishauser)

**«Biomedical nanoparticles as immune modulators—*In vitro* and *in vivo* investigation of intrinsic immunomodulatory properties of polystyrene and gold nanoparticles»**

**Michèle Sidler, DVM, PhD** (3 July)

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

**«Healing of cartilage lesions in sheep after micro-fracturing technique and transcutaneous application of non-steroidal anti-inflammatory or chondro-protective medication»**

**Heidi Signer-Hasler, PhD (Doctor of Philosophy in Science)** (28 February)

Institute of Genetics, Vetsuisse Faculty Bern, & School of Agricultural, Forest and Food Sciences HAFL, Bern University of Applied Sciences (Prof. Dr. T. Leeb & Dr. S. Rieder)

**«Analysis of large scale SNP data for breeding, diversity and selection purposes in the Swiss Franches-Montagnes horse breed»**

**Michael Steinmann, PhD (Doctor of Philosophy in Science)** (6 March)

Institute of Biochemistry and Molecular Medicine (Prof. Dr. E. Sigel)

**«Ion channels in *Trypanosoma brucei*»**

**Ninda R. M. Syam, PhD in Biomedical Sciences** (30 June)

Dept. of Clinical Research, Ion Channels and Channelopathies (Prof. Dr. H. Abriel)

**«Biochemical analyses of ion channels regulation and their role in channelopathies»**

**Adel Tekari, PhD in Biomedical Sciences** (26 May)

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

**«Roles of collagen type II and transforming growth factor-beta in the formation of cartilage-like tissues»**

**Sameer Sopanrao Udhane, PhD of Science in Biochemistry and Molecular Biology** (27 October)

Dept. of Clinical Research, Endocrinology/Diabetology/Metabolism (Paediatrics) (Prof. Dr. C. E. Flück)

**«Regulation of Human Adrenal Androgen Production»**

**Nina M. Waldern, DVM, PhD** (3 October)

Equine Department, Division of Equine Sports Medicine, Vetsuisse Faculty Zurich (PD Dr. M. Weishaupt)

**«Kinetics and kinematics of the tölt: Effects of rider interaction and shoeing style»**

**Laura Wengenroth, PhD in Biomedical Sciences** (17 December)

Institute of Social and Preventive Medicine (Prof. Dr. C. Kuehni)

**«Social Outcomes in Childhood Cancer Survivors»**

**Olga Wiens, PhD (Doctor of Philosophy in Science)** (28 August)

Division of Molecular Pathobiology, DCR-VPH, Vetsuisse Faculty Bern (Prof. Dr. D. Dobbelaere †, Prof. Dr. V. Heussler)

**«Phospho-proteome analysis and studies on host cell Plk1 interaction with the *Theileria annulata* schizont»**

**Heidi Annemarie Wolfmeier, PhD of Science in Cell Biology** (18 December)

Institute of Anatomy (Prof. Dr. A. Draeger)

**«Host Cellular Defense Strategies against Bacterial Toxin Attack: Pneumolysin Pores Trigger Repair and Signaling»**

**Weiguo Xie, PhD in Biomedical Engineering** (30 June)

Institute for Surgical Technology & Biomechanics (Prof. Dr. G. Zheng)

**«Development and Validation of Novel Image-free Navigation Techniques Based on Intraoperative Reference Plane (IRP)»**

**Mousa Zarrin, PhD in Biomedical Sciences** (1 September)

Division of Veterinary Physiology, DCR-VPH, Vetsuisse Faculty Bern (Prof. Dr. R. Bruckmaier)

**«Metabolic adaptations and changes of the mammary immune response during beta-hydroxybutyrate administration»**

**Xianghong Zhang, MD, PhD** (29 October)

Dept. of Clinical Research, Anaesthesiology (Prof. Dr. F. Stüber)

**«8p23 Beta-Defensin Copy Number Variation in Severe Sepsis»**

**David Zünd, PhD of Science in Biochemistry and Molecular Biology** (10 June)

Dept. of Chemistry and Biochemistry (Prof. Dr. O. Mühlemann)

**«The RNA Helicase UPF1—At the Heart of NMD»**

**Christoph Zürcher, PhD (Doctor of Philosophy in Science)** (8 July)

Institute of Virology and Immunology, Vetsuisse Faculty Bern (PD Dr. M. Schweizer)

**«The role of glycoprotein E<sup>rns</sup> in persistent infections of bovine viral diarrhoea virus»**

**Line Cristel Kim Zurkinden (-Berset), PhD in Biomedical Sciences** (3 July)

Dept. of Clinical Research, Nephrology and Hypertension (PD Dr. G. Escher)

**«Role of Sterol 27-Hydroxylase in Reverse Cholesterol Transport and Atherosclerosis: Regulation by Bile Acids»**

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.

Degree	Biological Systems	Biomedical Sciences & Biomedical Engineering	Cell Biology	Molecular Biology & Biochemistry	Total
Doctor of Philosophy in Science (PhD)	5	2	7	13	27
PhD in Biomedical Engineering	0	9	0	0	9
PhD in Biomedical Sciences	5	2	1	1	9
PhD in Immunology	2	0	2	1	5
PhD in Neuroscience	2	1	0	0	3
PhD in Biochemistry & Molecular Biology	1	0	1	15	17
PhD in Cell Biology	0	0	4	0	4
MD,PhD	0	3	0	1	4
DVM,PhD	0	2	2	0	4
<b>Total</b>	<b>15</b>	<b>19</b>	<b>17</b>	<b>31</b>	<b>82</b>

Table 3. Number of graduations per GCB Expert Committee in 2014.

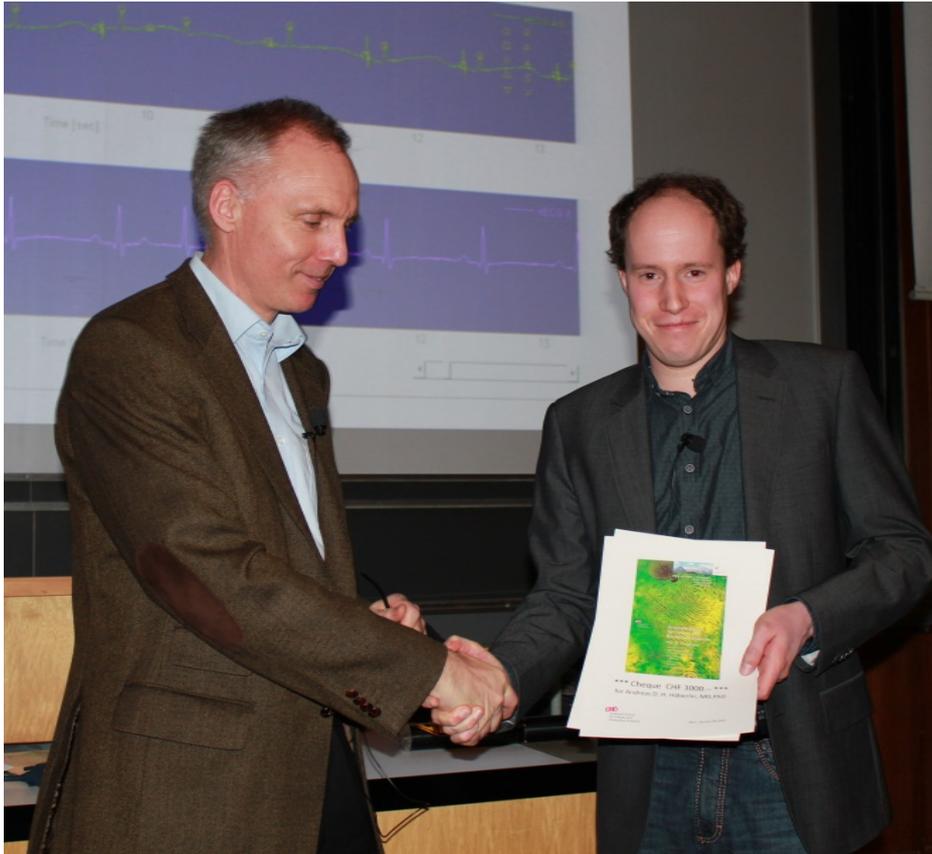
Degree	Faculty of Medicine	Faculty of Science	Vetsuisse Faculty BE	Vetsuisse Faculty ZH	IRB Bellinzona	Total
Doctor of Philosophy in Science (PhD)	18	7	2	0	0	27
PhD in Biomedical Engineering	9	0	0	0	0	9
PhD in Biomedical Sciences	8	0	1	0	0	9
PhD in Immunology	3	0	2	0	0	5
PhD in Neuroscience	2	1	0	0	0	3
PhD in Biochemistry & Molecular Biology	8	6	2	0	1	17
PhD in Cell Biology	3	0	1	0	0	4
MD,PhD	4	0	0	0	0	4
DVM,PhD	1	0	1	2	0	4
<b>Total</b>	<b>56</b>	<b>14</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>82</b>
in %	68.3	17.1	11.0	2.4	1.2	100.0

Table 4. Graduations in 2014, according to Faculties/Institutions.

## CONGRATULATIONS

### GCB AWARD FOR BEST PHD THESIS

The **2014 GCB Award for «Best PhD Thesis»** (CHF 3.000.–) was awarded to **Andreas D. H. Haeberlin, MD,PhD**, in January 2015 during the GCB Students' Symposium for his work entitled **«Esophageal electrocardiography—Towards clinical implementation with focus on long-term rhythm monitoring»**. He performed his PhD work under the supervision of Prof. Dr. med. Rolf Vogel at the ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (CVE), University of Bern, and defended his thesis successfully on June 27, 2014.



**Figure 8: Andreas Haeberlin, MD,PhD (right), receiving the «GCB Award for Best PhD Thesis» for 2014 from the hands of Prof. Dr. Frank Stüber, President of the GCB (left) on occasion of the GCB Students' Symposium 2015.**

Our warmest congratulations go to Andreas Haeberlin, MD,PhD, for his outstanding success. After his graduation, the laureate pursues his medical career at the Department of General Internal Medicine at the Inselspital, Bern University Hospital.

#### **FURTHER PRIZES AWARDED TO GCB STUDENTS IN 2014**

We are very pleased to report that in the course of 2014, a number of GCB students received various important prizes and awards. Here, we are only presenting one of which we obtained direct knowledge.

#### **Day of Clinical Research 2014: DCR Poster Prizes**

On the occasion of the **Day of Clinical Research 2014** (November 5, 2014), organized by the Department of Clinical Research, University of Bern, the prize for the best pre-clinical project (CHF 2.000.–) was awarded to **Giulio Loforese**, Department of Clinical Research, University of Bern, Visceral and Transplantation Surgery Research Group, for his work «**Regulation of hippo pathway during liver regeneration**».

Giulio Loforese is currently performing his PhD under the supervision of PD Dr. Deborah Stroka at the Department of Clinical Research, within the framework of the GCB.

We congratulate Giulio Loforese very warmly on this success and wish him all the very best for the continuation of his 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.

In 2014, the Coordinator Marlene Wolf interviewed and advised about 10 medical students in their second to fourth year. For each of those interested in the MD-PhD program, an individual training program was put together.

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>.

In 2014, the following four MD-PhD students have been awarded one of the prestigious 3-year MD-PhD Fellowships:

- **Sohvi Blatter**, Laboratory of Prof. Dr. Sven Rottenberg, Institute of Animal Pathology, Vetsuisse Faculty Bern
- **Michel Dosch**, Laboratory of Prof. Dr. Guido Beldi, Dept. of Clinical Research, Visceral and Transplantation Surgery
- **Catherine Mooser**, Laboratory of Prof. Dr. Kathy McCoy & Prof. Dr. Andrew J. Macpherson, Dept. of Clinical Research, Gastroenterology/Mucosal Immunology
- **Catrina Andrea Mugglin**, Laboratory of PD Dr. Olivia Keiser & Prof. Dr. Matthias Egger, Institute of Social and Preventive Medicine

### 2<sup>ND</sup> BERNESE MD-PHD MEETING

Following the successful first Bernese MD-PhD Meeting in the fall of 2013, its «2<sup>nd</sup> edition» was organized by **Fabian Liechti**, and took place on November 14, 2014, at the Institute for Infectious Diseases. The program included a welcome note by the Rector, **Prof. Dr. Martin Täuber**, a keynote lecture by **Prof. Dr. Martin Fey**, a lecture by GCB alumnus **Dr. Christoph Schlapbach, MD,PhD**, and abstract presentations by MD,PhD students. During the Apéro the participants had the opportunity for extensive MD,PhD-networking. An additional, important goal of the Bernese MD-PhD Meetings is to invite advanced medical students from their 3<sup>rd</sup> year of study onwards and inspire them to consider a career in research.

### 3<sup>RD</sup> EUROPEAN MD/PHD CONFERENCE

Bernese MD,PhD students also participated in the 3<sup>rd</sup> European MD/PhD Conference, which was financially supported by GCB and took place in Brunnen, Switzerland, from July 11 to the 13, 2014.

## 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 are allowed to share the full infrastructure of the institute. Moreover, the GCB committees and PhD students are frequent guests at the TKI Clubroom and TKI labs for meetings, interviews, tutorials, practical courses, and exams. Our special thanks go to the director, Prof. Dr. Britta Engelhardt, and the whole team of the TKI, 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](http://www.gcb.unibe.ch)



PD Dr. Marlene Wolf



Gabrielle Favre

June 17, 2015

