Dear Members of the Biocenter

All of what could not be described and mentioned in the Biocenter Newsletter issued before Easter should now appear in the following letter. I hope, you had nice Easter holidays and returned to work safely and with good mood and laden with energy.

Ludger/Siegi

It is springtime and our CCB is immersed into a special light and odor of blossoms. Enjoy a few impressions I captured recently at 8 o’clock in the morning.

Whoever wants to use (of course free of charge!) one or more of these pictures, just contact me for a full resolutions copy!

Siegi
Division of Experimental Pathophysiology & Immunology _Lukas A. Huber (interim)

SHADAP ALLIPOUR and ROSWITHA SGONC from this Division were awarded by the Austrian Society of Rheumatology with the Best Austrian Abstract Prize for their contribution at the 2013 Annual Congress of EULAR (European League against Rheumatism) held in Madrid. The title was: Effect of VEGF121-Fibrin on the expression of VEGF Receptors in ischemic lesions of UCD-206 chickens, an animal model for systemic sclerosis. This work was then also selected as oral contribution at the Annual Meeting of the Austrian Society of Rheumatology, held in November 2013. Read more: http://www.eular.org/index.cfm?framePage=/congress_2013.cfm

Division of Medical Biochemistry _Ludger Hengst
Division of Developmental Immunology _Andreas Villunger

PIOTR TYMOSZUK from the former Division, group WOLFGANG DOPPLER, and JAN WIEGERS from the latter Division could recently publish important findings of how the immune system together with classical anticancer drugs like Doxorubicin and Lapatinib could fight cooperatively and thus better against breast cancer. This work represents also a “speaking” example of cooperation and exchange of expertise between divisions and groups within the Biocenter as well as working groups outside of it, e.g. the University Clinics of Gynecology and of Dermatology. Read more: https://www.i-med.ac.at/point/news/678635.html
A new Doctorate College granted by the FWF

In a recent session of the Kuratorium, the FWF (Austrian Research Council) has granted the Medical University of Innsbruck a 3rd Doctorate College, named HOROS (HÖst Response in Opportunistic infectionS), lead by Reinhard Würzner, as well as prolonged for the third time the 2 others, SPIN (Signal Processing In Neurons) and MCBO (Molecular Cell Biology and Oncology), which are already established at the MUI, the latter predominantly within the Biocenter. Biocenter member HUBERTUS HAAS from the Division of Molecular Biology_Peter Loidl is participating in HOROS, CHRISTINE BANDTLOW from the Division of Neurobiochemistry is participating in SPIN. Read more: https://www.i-med.ac.at/pr/presse/2013/63.html

Division of Cell Biology _Lukas A. Huber

CORNELIA THÖNI from this Division, group LUKAS A. HUBER, could recently publish important findings of how a mutation in a single gene, MYO5B, causes a major disease, called Microvillous Inclusion Disease. The MYO5B gene encodes an intracellular motor protein involved in trafficking of proteins, membranes and other cargos. If it is dysfunctional, no villi are transported to the apical membrane of intestinal cells, children will not grow since they cannot properly absorb nutrients from the gut lumen, altogether a very severe, life-threatening disease. CONNY did these studies together with Thomas Müller and Andreas R. Janecke from the MUI Childrens Clinic, Michael Hess and Kristian Pfäller from the Division of Histology, as well as with partners at the Toronto-based Hospital for Sick Children. Read more: https://www.i-med.ac.at/mypoint/news/678791.html

Soon later, CONNY had her Thesis defense on this research topic:
The topic of intracellular transport processes of vesicles is also elaborated in further detail and depth by DAVID TEIS in the group of LUKAS A. HUBER in a *Saccharomyces cerevisiae* model organism (see green picture above). Please note that similar work in other models has been done and is still so in the laboratories of this year’s 3 Nobel laureates: James E. Rothman, Randy W. Scheckman, Thomas C. Südhof. Read more: https://www.i-med.ac.at/mypoint/thema/678521.html

**Division of Biological Chemistry _Klaus Scheffzek**

On January 17, 2014, KLAUS SCHEFFZEK together with his associates TERESA DUNZENDORFER, MARIANNA BIADENE, STEFAN LECHNER and others from this Division organized a special Happy Hour: After STEFAN’s talk in the Biocenter Seminar entitled *The challenging work with the NFI giant* the following Get-together was intended to serve as the Inauguration of the Crystallization Platform at the CCB, as a special poster also shows. With wine, beer and chips, people were introduced into the various facilities and laboratories where the Scheffzek collaborators „cook“ their crystals for later structural analysis. An exciting Friday evening!

![Happy Hour Poster](image)

**Three FWF grants assigned to Biocenter members!**

On January 31, 2014, in a solemn ceremony in the Aula of the University of Innsbruck, Rector Fritsch and Vice Rector for Research CHRISTINE BANDTLOW presented the recent grantees of the MUI. Among the 12 research groups, 3 are members of the Biocenter:

**JAKIC BOJANA**, Department of Experimental Pathophysiology and Immunology, group of Emeritus Professor Georg Wick for her project *The role of Vascular Associated Lymphoid Tissue (VALT) in the Development of Atherosclerosis – Inside Out or Outside in?*

**RÜDIGER SCHWEIGREITER**, Division of Neurobiochemistry_Christine Bandtlow for his project *Nogo-B und das Verzweigungproblem von regenerativen Nerven*

**BETTINA THAUERER**, Division of Neurobiochemistry_Christine Bandtlow for her project *Use of ADORA2A knockout mice to clarify the role of the adenosine receptor in hypoxic neuronal signaling mechanism*

We congratulate and wish all of them great success with their work. Read more: https://www.i-med.ac.at/mypoint/thema/679982.html
OPEN LABs DAYs

On February 3 and 4, 2014, the CCB served once more as host for the OPEN LABs DAYS of the MUI. Some 200 school pupils visited the building in order to learn more about the Bachelor Study MOLECULAR MEDICINE. The Vice Rector for Study Affairs, PETER LOIDL, and others from the CCB showed the pupils several laboratories and explained in detail what they can or have to expect, in terms of study as well as later chances in professional work. Read more: https://www.i-med.ac.at/pr/presse/2014/10.html

Division of Developmental Immunology_ Andreas Villunger

In February 2014, a trinational research project was started, supported by the Austrian, German and Swiss Research Agencies (FWF, DFG, SNF), in which ANDREAS VILLUNGER with his associates MANUEL HASCHKA, SELMA TUZLAK and MAJA SOCHALSKA from this Division play a major part. The project centers on the Bcl2 (B cell leukemia 2) family proteins that are involved in control of apoptosis. Biophysical, cell and molecular biological, protein chemistry, genetics in mice as well as human pathology aspects and approaches are covered and tried to be coordinated in an integrative manner. ANDREAS acts as a vice speaker of this consortium of 10 single projects. It is hoped that by this approach new and better therapeutic strategies for cancer treatment can be found. We wish all of them the best. Read more: https://www.i-med.ac.at/pr/presse/2014/11.html
In March 2014, ELEONORA OTTINA from this Division, received the honorable LIECHTENSTEIN-Prize for her scientific achievements in ANDI’s group. The title of her prize-winning paper was *Targeting antiapoptotic A1/Bfl-1 by in vivo RNAi reveals multiple roles in leukocyte development in mice* which appeared in 2012 in BLOOD. Read more: https://www.i-med.ac.at/mypoint/news/681253.html
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3418769/

![Image of ELEONORA OTTINA and colleagues from the Division of Biological Chemistry](image1.jpg)

**Division of Biological Chemistry_ Klaus Scheffzek**

On February 25-28, 2014, the 33rd International Winter Workshop on Pteridines – Clinical, Chemical and Biochemical Aspects, organized by DIETMAR FUCHS, ERNST R. WERNER and their collaborators was held, this time in the CCB. Scientist from many European and extraeuropean countries attended this meeting. *Computed Biochemistry, Analytical Biochemistry, Neuropsychiatric Disorders, 5,6,7,8-Tetrahydrobiopterin, Graft Rejection, Amino Acids, Proteins and Degenerative Disorders, Pathways of Inflammation Responses, Redox Systems and Immune Activation, Predictive Laboratory diagnostic Biomarkers, Prognostic Biomarkers in Patients with Sepsis* were the headers of the various sessions showing a broad spectrum of aspects covered in this meeting. Read more: http://www.pteridines.org, http://www.neopterin.net, http://www.oeglmkc.at

![33rd International Winter-Workshop Clinical, Chemical and Biochemical Aspects of Pteridines and Related Topics](image2.jpg)

**Division of Neurochemistry_Christine Bandtlow**

BASTIAN BÄUMER and SARAH BORRIE from this Division could recently publish important findings on Nogo Receptor 2 and its connection with the glycoprotein *Versacan*. These findings could explain why NGR2-deficient mice react in a hypersensitive manner to cold and mechanical stressors. The title of the paper was: *Nogo Receptor Homolog NgR2 Expressed in Sensory DRG Neurons Controls Epidermal Innervation by Interaction with Versican*. J Neurosci. 2014 Jan 29;34(5):1633-46. Read more: https://www.i-med.ac.at/mypoint/news/680951.html
8th MCBO Science Day

On February 28, 2014, for the 8th time the MCBO Science Day was held, this time in the CCB. Many posters were displayed and a lively discussion prompted between the various colleagues from the two Doctoral Programmes: Molecular Cell Biology and Oncology. One of the 3 Best Poster Prizes received MAJA SOCHALSKA from the Division of Developmental Immunology Andreas Villunger. Read more: https://www.i-med.ac.at/mypoint/news/681325.html

„Dear MCBO Faculty and Students, thanks to Kasia Wachowicz we have really nice pictures of our MCBO Science Day. Klick here for our webalbum. Regards, Almut“ has been mailed to all members in the Biocenter by Almut Barden, administrative coordinator of the MCBO programme.
https://picasaweb.google.com/101397131403160412346/MCBOScienceDay2014?authuser=0&authkey=Gv1sRgCOb875aj65XFMs&feat=directlink

At this point a cordial word of thanks should be said to Bernhard Flucher and Almut Barden for the immense work of coordination and administration, respectively, they put into the MCBO programme.
Division of Experimental Pathophysiology & Immunology, Lukas A. Huber (interim)

On March 07, 2014, SIEGFRIED SCHWARZ from the above Division gave his Biocenter Seminar Lecture. There he presented 15 molecules that he modelled with appropriate software and explained their importance for life by showing 15 diseases arising from a mutation in each of the 15 genes. SIEGI gave these 15 examples as his personal present in the form of 50x50 cm framed foto pictures to all the group leaders of the Biocenter, as listed below, but actually to all dear members and colleagues. ALEXANDER HÜTTENHOFER and LUDGER HENGST thanked SIEGI for this present and presentation.

1. 199 D  Mitomycin + dsDNA  Lukas A. Huber, Hans Grunicke
2. 3HHR  HGH + HGH receptor dimer  David Teis
3. 1GLU  Glucocorticoid receptor dimer + dsDNA  Reinhard Kofler, Arno Helmberg, Stephan Geley, Johannes Rainer
4. 1IGT  Antibody  Andreas Villunger, Jan Wiegers
5. 1A4V  RNase inhibitor  Alexander Hüttenhofer
6. 1HRP  hCG alpha:beta dimer  Gabriele Baez-Bitterlich
7. 1BBE  Collagen triple helix  Georg Wick, Roswitha Sgonc, Günther Böck
8. 1NK3  NKX2-1 homeobox domain + dsDNA  Herbert Lindner
9. 1NPO  Vasopressin (AVP) + Neurophysin 2(NP2)  Christine Bandelow, Martin Oferdinger
10. 1OEL  GroEl chaperone  Peter Loidl, Gerald Brosch, Stefan Grässle, Hubertus Haas, Florentine Marx, Bernhard Rehl
11. 1AO7  HLA A + ß2MG + HTLV-1 Tax peptide + TCR  Klaus Schelliek
12. 1A28  Progesterone (P) receptor + P  Zlatko Trajanoski
These pictures are hanging in the northeastern corridors of the CCB, 2nd, 3rd and 4th floor, together with explanatory inscriptions.

**Division of Cell Biology, Lukas A. Huber**

In a recent Kuratoriumssitzung of the FWF (Austrian Research Fonds), LUKAS A. HUBER from the above Division received a grant for his project *Structure Function Analysis of the Late-Endosomal LAMTOR complex*. With KLAUS SCHEFFZEK from the Division of Biological Chemistry, LUKAS intends to elucidate the atomic structures of some or all of the LAMTOR partner proteins. Read more: [https://www.i-med.ac.at/mypoint/news/681466.html](https://www.i-med.ac.at/mypoint/news/681466.html)

In the April issue of FORUM MEDIZIN UNI, a MUI-elaborated Saturday addendum of the Tiroler Tageszeitung, a long article of LUKAS A. HUBER appeared, explaining gender differences in cancer medicine and other fields.
Krebsforschung: Gender Medizin

Es waren die Zellen ei-
ner Frau, die vor mehr
als 60 Jahren die me-
dame Krebsforschung
entleerten. Von den Er-
kenntnissen der onko-
gerischen Grundlagenfor-
schung profitieren heute
Frauen und Männer
gleichermassen.

In seinem Vertragnah-
men der Ringvorlesung
„Gender Medizin – Onkolo-
gie“ an der Medizin Uni
innsbruck erzählt Univ-
Prof. Lasius Huber, Zell-
biose und Grundlagen-
forschung an Innrainklinik,
von Schicksal der Afrikanerin
Hernetia Lekoa. Sie starb vor rund 60 Jahren
mit nur 31 Jahren an den
Folgen eines besonders
aggressiven Gebärmutter-
halshalskrebs im Johns
Hopkins Hospital in Bal-
timore – doch ihre Zel-
len lebten noch heute.

Denn damals gingen
Zellen aus dem untren-
nennbaren Krebgewebe
der Patientin – ihre Zumin-
zung war damals nicht
erkennbar – an den lei-
ter des Zellforschers
Johann Hopkins Hosp-
ital, George Ogey Cruy.
Der bahnbrechende Wis-
senschaftler war bereits
1951 imstande, Zellen
weiter zu kultivieren und
damit unsterblich zu ma-
chen. Seitdem wurden
die nach Hernetia Lekoa
benannten HeLa-Zellen
bei der Etablierung der
ersten Impfstoffe gegen
Einhöhere Krebserreger
und zahlreiche Forschung
zur Behandlung von Er-
krankungen wie Herpes,
Leukämie, Lepra, Par-
kinson, AIDS und Krebs
erprobt. Zehnautom
die wissenschaftliche Pu-
blikationen basieren auf
 diesen HeLa-Zellen", erzählt Prof. Huber, der
selbst Experte auf dem Gebiet der personali-
sierten Krebsmedizin ist – und damit auch das
besondere Interesse der

Frauen überle-
ben bei fast allen
erkrankungen häufiger als Män-
ner.
Geheber Gaertl

Gender Medizin vergeb
ehmlich: Erkenntnisse
aus der medizinischen Forschung für Männer
und Frauen und damit
für eine maßgeschnei-
dete Therapie notzor-
anzu machen.

Frauen in mit-
nischen Studien auf
Grund ihrer hormonell
abhängigen langen Zeit
untersucht waren, stand zu Beginn des Gender
Medizin das Thema Medikamenteneingabe
als zentral. Die Sensi-
bilität für die unterschieds-
liche Wirksamkeit von
Medikamenten bei Frau-
en und Männern ist seit
in der Medikamen-
tenforschung festgelegt.
Doch auch Erkenntnisse
aus der Grundlagenfor-
schung haben entschei-
ende Bedeutung für eine

geschlechtergerechte
Medizin. „Die vermeint-
lichen Geschlechts-
unterschiede sind oft
der Resultat von genetis-
chen und hormonellen
Faktoren“, betont Dr. Hae-
mer.

Frauen überleben bei
fast allen vergleichbaren
Krebserkrankungen häufiger
bzw. länger als Männer.
In diesem Zusammen-
hang ist es wichtig zu
bedeuten, dass Frauen
erhöhte Risiken für
gesundheitliche Probleme
haben, was wiederum
den Bedarf an spezifischer
Medizin nach sich zieht.

Die Ursachen für den
Zusammenhang von Ge-

BIOCENTER NEWSLETTER page 12 / 25 05.05.14
beginnt bereits im Labor

Licht in die Unterschiede zwischen weiblichem und männlichem Krebsverhalten, "eine wichtige Vorraussetzung für gesellschaftsspezifische und personalisierte Therapien zu entwickeln", betont Faber. Trotzdem wird die Geschlechtsunterschiede bei männlichen Krebspatienten bisher wenig beachtet, obwohl sie eine erhebliche Rolle im Krebsverlauf spielen. Der Artikel beschreibt auch die Komplexität von Biostoffen zu Verfahren und Prozesse der Tumorverhältnisse.

Lange Nacht der Forschung _The Long Science Night of Austrian Universities

On April 4, 2014, the Long Science Night took place after it had been held several times before with great Austria-wide success. Also our Biocenter participated and the CCB was again a beautiful place to show young and old(er) interested people some aspects of our work and ideas. Politicians as well as the Rector with her team visited the CCB, too.

As shown in the program below (red dots!),
- **ALEXANDER HÜTTENHOFER** with his team **MELANIE LUKASSER, MATTHIAS ERLACHER AND PIUS SCHRODE** showed a number of experiments with DNA and RNA isolation from tomatoes and other biological sources,
- **SIEGI SCHWARZ, KLAUS SCHEFFZEK & MARIANNA BIADENE** introduced the visitors into the beauty of protein structures, molecular modelling on the computer as well as demonstrating protein crystals, on the computer and in the microscope, and
- **STEPHAN GELEY** and **ELISBETH PFEIFENBERGER** explained how cells divide normally as well as pathologically and thus produce cancer.

Further pictures from the MUI homepage, see this link: https://www.i-med.ac.at/mypoint/thema/681753.html
Wie knacken wir die Nuss? - Zentrum für Gesundheitsberufe Tirol GmbH · Mitmachstation · Aula, EG · 17:00-24:00

Kanne man Gene essen? - Sektion für Genomik und RNA-Mikroskopie · Demonstration · Aula, EG · 17:00-24:00

Die spannende Welt der Moleküle - Sektion für Experimentelle Pathophysiologie und Immunologie · Demonstration · Aula, EG · 17:00-24:00

Die räumliche Struktur von Proteinen - schöne Sektion für Biologische Chemie · Demonstration · Aula, EG · 17:00-24:00

Was hat der Otzi mit Patientinnen zu tun? - Department Radiologie · Demonstration · Aula, EG · 17:00-24:00

Wie entstehen Tumoren? - Sektion für Molekulare Pathophysiologie · Demonstration · Aula, EG · 17:00-24:00

Was ist Gender Medizin? - Gemeinsame Einrichtung Frauen-Gesundheitzentrum · Test & Beratung · Aula, EG · 17:00-24:00

Das Wunder Mensch von Geburt an - Pathologie II (Neonatologie) · Führung · Neonatologie · 18:00, 19:00, 20:00 · max. 10 Teilnehmer im Vorhinein · Platzvergabe am Info-Point CCB

Der Struktur auf der Spur - Univ.-Klinik für Unfallchirurgie · Demonstration · Aula, EG · 17:00-24:00

Wunder Gehirn - und wie werde ich Hirnforscherin? - Univ.-Klinik für Neurologie · Vortrag · Hörssaal M1G 180, EG · 17:00, 20:00 Uhr · Dauer: ca. 30min

Wie ist unser Gehirn aufgebaut und wie funktioniert es? - Dep. Anatomie und Histologie, Div. Neuroanatomie · Demonstration · Aula, EG · 17:00-24:00

Navigation für alle? 3D Navigation mit Laptop und Lego-Bausteinen · Universitätsklinik für Hals-, Nasen- und Ohrenheilkunde · Demonstration · Aula, EG · 17:00-24:00

Körperpensionerinnen und -personen für die Anatomie: woran sind sie verstorben? - Sektion für Klinisch-Funktionelle Anatomie · Vortrag · Hörssaal M1G 180, EG · 18:30 · Dauer: ca. 1-1,5 Stunden

Was halt den Körper zusammen? - Sektion für Klinisch-Funktionelle Anatomie · Vortrag · Hörssaal M1G 180, EG · 18:30 · Dauer: ca. 1-1,5 Stunden

Was ist ein Lymphödem? - Sektion für Klinisch-Funktionelle Anatomie · Vortrag · Hörssaal M1G 180, EG · 18:30 · Dauer: ca. 1-1,5 Stunden
Division of Genomics and RNomics_Alexander Hüttenhofer

Recently, ANDREAS PIRCHER in the group of NORBERT POLACEK, together with MELANIE AMORT (in the CCB working until August 2014), could publish important findings on how microRNAs (noncodingRNAs, ncRNAs) directly interfere with the huge ribosome and thus regulate protein synthesis (translation). Thus, a new level of gene expression control was elucidated that could open new avenues for therapeutic interventions, in particular in cancer treatment. NORBERT is since more than a year Full Professor at the University of Bern, Department of Chemistry and Biochemistry, http://www.dcb.unibe.ch/content/forschung/forschungsgruppen/polacek/index_eng.html and ever so often visits the CCB and his collaborators. Read more: https://www.i-med.ac.at/mypoint/thema/681819.html

Division of Cell Biology_Lukas A. Huber

Recently, DAVID TEIS together with his coworkers MANUEL ALONSO Y ADELL, MEHRSHAD PAKDEL, MARTIN MÜLLER in this Division, and Georg F. Vogel and Michael Hess from the Division of Histology, could publish important findings on how cells rid their „used“ membrane proteins, membranes and waste in general. In the center of this garbage disposal mechanism is the ESCRT machinery (endosomal sorting complex required for transport) by which the „outdated“ membranes are packed into MVBs (multivesicular bodies) and thus trafficked to the lysosomes where they become finally degraded. Read more: https://www.i-med.ac.at/mypoint/news/682025.html

6th Neuroscience Day

On April 24, 2014, the traditional Neuroscience Day took place, in the CCB. A number of research groups, both in the Clinical as well as Theoretical Departments are actively involved in the Neuroscience field at the MUI. CHRISTINE BANDTLOW from the Division of Neurobiochemistry in the CCB, at the same time Vice Rector for Research and International Affairs, opened the meeting and called upon the importance of scientific cooperation and communication as key factors for success. The young scientists gave talks or presented posters and answered questions during lively discussions. Extremely stimulating and enlightening plenary lectures were given by Professor Bernhard Bettler
from the University of Basel on GABA_B receptors, and by Professor Adriano Aguzzi from the University of Zurich on Prion and other neurodegenerative diseases. This Neuroscience Day is embedded in the SPIN (Signal Processing in Neurons) Science Schwerpunkt, supported by the FWF. Read more: https://www.i-med.ac.at/mypoint/news/682100.html

Division of Molecular Biology _ Peter Loidl

Recently, i.e. March 2014, FLORENTINE MARX-LADURNER from this Division together with her partner Prof. Gyula Batta from the Department of Organic Chemistry at the University of Debrecen (Hungary) received a bilateral research grant from the FWF and the Hungarian Research Funds OTKA. The title of their project is "Structure and Function of the Antifungal Proteins PAFB and NFAP".

Biocenter Alumni

As you may remember, some time ago, I (SIEGI) have asked and motivated members of the Biocenter to write their previous coworkers to give us some information as to where they are, how they live and work and what their plans for the future look like. The short title of the email was „Let’s stay in touch!” A few of them responded and I want to convey their answers to my questions and their greetings to you all.
Katherin Patsch

The former collaborator of ILIJA VIETOR is presently a Postdoctoral Scholar mentored by Dan Ruderman at the Center for Applied Molecular Medicine, Keck School of Medicine at USC. The primary goal of her research is to study dynamics of signaling pathways relevant to prostate cancer development and progression, and ultimately to better understand emergence of drug resistance in prostate cancer patients. Katherin lives in a house in Los Angeles together with her spouse along with 2 very close friends, and 2 cats that she adores. She was recently awarded a poster prize at the NCI-sponsored Physical Sciences in Oncology Center USC Short Course. She writes: "I honestly do not feel homesick very much as I am enjoying the excitement of this diverse environment. Of course it’s important to know that I can go to Innsbruck over the Christmas holidays and that family and friends will visit me in California as well".

Her email adress is: katherinpatsch@gmail.com

Petra Mikolcevic

The former collaborator of STEPHAN GELEY is presently a Postdoctoral Scholar in the famous Institute of Research in Biomedicine in Barcelona. http://www.irbbarcelona.org/index.php/en. She is quite happy there and works in the laboratory of Angel R. Nebreda, ICREA Research Professor, whose laboratory has discovered that the protein p38 is a key regulator of colon cancer progression.

Her email adress is: petra.mikolcevic@irbbarcelona.org
Matthias Mayer

The former collaborator of Ernst R. Werner writes the following short letter to us:

My master thesis at the department of Biological Chemistry provided me with a profound skill set. Without the great support and supervision I would not have been able to continue as a postgraduate researcher. Currently I am working as a Graduate Teaching Assistant (PhD student) at the University of Kent, United Kingdom. The general interest of my working group is vitamin B12 synthesis. Personally I am working on bacterial microcompartments (metabolosomes) that sequester 1,2-propanediol degradation, a B12 dependent metabolic process from other cellular processes by a proteinaceous shell. We are able to recombinantly express these microcompartments in E.coli, target proteins into the microcompartment using signal sequences and purify these microcompartments. My PhD thesis is centered around possible transport and accumulation of B12 into the microcompartment and biotechnological applications to use artificial microcompartments to colocalize proteins inside of a synthetic microcompartment.

I live in a shared house in walking distance to the university. Due to my sport activities and my commitment as health and safety representative for the University mountaineering club time to relax and calm done is rare but well appreciated.

I plan to finish my postgraduate certificate in higher education this term and my PhD in 2 years. As most PhD students I am undecided whether to stay in academia or not. Starting a PhD in a foreign country is like starting a new life. I can only highly recommend you to be fully aware of the consequences of this decision. Although I met a lot of people struggling with this new life situation I can happily say that I enjoy living in the UK and never regretted moving to Canterbury.

His exact affiliation is: School of Biosciences, University of Kent, Giles Lane, Canterbury, Kent CT2 7NJ, UK
http://www.kent.ac.uk/bio/
His email address is: mm673@kent.ac.uk

Simon Messner

The former master-student of Ernst R. Werner is now Product Manager at the 3D-cell culture company Insphero AG in Schlieren, Switzerland.
http://www.insphero.com/
His email adress is: simon.messner@insphero.com
See also: http://ch.linkedin.com/pub/simon-messner/2b/aa1/84b to learn more about his professional career.
Florian Bock

The former collaborator of ANDREAS VILLUNGER is now working as Postdoc in the laboratory of Paul Chang at the Koch Institute for Integrative Cancer Research within the MIT (Massachusetts Institute of Technology) in Boston. Quite surprisingly, you will find Florian’s picture in the Institute’s homepage right after that of his chief!

His email address is: fbock@MIT.EDU

On October 10, 2013 he wrote the following very long letter very vividly describing his situation that I will reproduce in this BCNL:

Hello everyone,

it is finally time and I managed to scratch together a couple of minutes to give you a short update of life on the other side of the ocean. I survived my first week here without getting mugged, arrested or both and things are going relatively well. But first things first: The weather is pretty good, I was feeling bad for not bringing shorts but rather my winter jacket, but apparently winter should get tough. Let’s see what tough means around here, after all I am unfortunately not from California.

I finally managed to get an apartment, although it took longer than expected and was quite annoying (I just moved in on Monday and at least there was a bed inside). Now I live in the Fenway area next to the Baseball stadium, and it seems to be a pretty decent area, but don’t ask how high the rent is if you are not willing to contribute. After all, the last dead body in the surrounding parks was discovered several years ago. It is a little farther from my institute than I was hoping, but there’s a suitable bus close by and I will soon get a bike.

People here are generally very friendly, you even get greeted by strangers on the street (or I look famous) and I could get all my administrative things so far done pretty easily, although some of the things are rather unusual. If everybody else is as miserable dealing with checks as I am, they probably wonder how Europeans even manage to fly over here.

The people in the lab seem quite friendly too, there’s even a German exchange student in the lab but he’s even more shy than I am. My supervisor appears to be very focused, interested in what everyone is doing and wants things to be done as soon as possible, we’ll see how this will work out in the future. At least he seems to be very well equipped, experienced and knowledgeable, as are my colleagues. Luckily I can start with stuff I am already familiar with by helping a grad student finishing her project. She needs to look at cell death, which means I will look at cell death. I still have to get accustomed to some of the things here (e.g. not expecting that there are inserts to spin down FACS tubes), but over time I am sure I will find my way around. Btw, the FACS facility is amazing, if somebody is into kinky stuff involving pictures of a room full of all kinds of different FACS machines, I can provide you with pictures to fix your needs.

Apart from that they also have a social hour on Friday which seems to be pretty decent. But not only do I have to get accustomed to the beers here (In this time of the year they proudly sell beer tasting like pumpkin. In fact not only beer, you can get just about anything with pumpkin flavour), but they also tend to continue the evening with drinking bourbon. Unfortunately I could not stay too long because I had to move to a different hotel on Friday (my previous one couldn’t let me stay any longer), but I am sure this will be the last time. I will make up for that in two weeks, when the whole institute has a retreat, and I was told there will be much more of the same.
Unfortunately the pub crawl Andy gave to me for my farewell, which was supposed to happen on Saturday, was canceled. I tried to make up for that by going to a sports bar, watch the baseball playoff and grab a burger and a couple of beers. Although they didn’t serve any food, I could get a beer there. The bar was full of guys, nothing special in a sports bar, and only later I realised that I was basically the only guy drinking beer in this bar, all the others had wine or cocktails. Well, turned out they even have gay sports bars in Boston. Red Sox won, I went home. Well, that’s about all I can think of right now, so far not a lot of general importance has happened, but I will keep you informed if this should be the case. 

Looking forward to hearing how things are back in Europe, I hope everyone is well, I haven’t forgotten anyone and you had a great time at the Friday seminar and beyond.

All the best back to the mountains,

Flo

PS: I managed to get a Facebook account, so I might contact you sooner or later. For now there’s is still time to change names!

Markus Keller

The former collaborator of Ernst R. Werner is now working as Postdoc in the famous Ralser Group at the Department of Biochemistry, University of Cambridge CB2 1GA, UK. His research topic is the study of regulation of metabolic pathways.

http://www.bioc.cam.ac.uk/people/uto/ralser

His email address is: mk747@cam.ac.uk

Levent Kaya

The former collaborator of Christine Bandlow now lives in Innsbruck, studies and sends us all his best regards.
Some Biocenter Alumni
(as they have answered to my invitation)

PETRA MIKOLCEVIC: petra.mikolcevic@irbbarcelona.org
SIMON MESSNER: simon.messner@insphero.com
MATTHIAS MAYER: mm673@kent.ac.uk
MARKUS KELLER: mk747@cam.ac.uk
FLORIAN BOCK: fbock@MIT.EDU
DOMAGOJ CIKES: domagoj.cikes@imba.oeaw.ac.at
KATHERIN PATSCH: katherinpatsch@gmail.com
LEVENT KAYA: levent.kaya@student.i-med.ac.at
STEFAN WELTI: weltistefan@googlemail.com

(officially in the lab of STEPHAN GELEY)
(formerly in the lab of STEPHAN GELEY)
(formerly in the lab of ERNST R. WERNER)
(formerly in the lab of ERNST R. WERNER)
(formerly in the lab of ANDREAS VILLUNGER)
(formerly in the lab of ILIA VIETOR)
(formerly in the lab of ILIA VIETOR)
(formerly in the lab of CHRISTINE BANDTLOW)
(formerly in the lab of KLAUS SCHEFFZEK)

Please, dear group leaders in the Biocenter, ask again your former collaborators to send me information as to

• where they are,
• what they work on,
• how they feel abroad,
• what kind of achievements they got,
• what sort of perspectives they have for their future,
• etc.

It is important that we here kind of live with them according to the motto „Let’s stay in touch!“.

Thank you
Siegi

Below are shown two more pictures of the new rector’s team to which 2 members of the Biocenter belong: CHRISTINE BANDTLOW and PETER LOIDL. We are proud of them and we wish both of them all the best in their work for the MUI (and the Biocenter).

Promotion at the MUI, Congress Innsbruck, April 5, 2014
Not so serious pictures may also be included here!
Biocenter Newsletter to be continued.

Please send me informations, any „honorable material” that you want to be made known to everybody in the Biocenter, e.g. papers, grants, prizes, invited lectures, children born, other achievements. Send me this to my email adress: siegfried.schwarz@i-med.ac.at. Thanks and best regards

Siegi

CORRECTION

In the previous BC Newsletter it was said that SHANMUGAPRIYA THANGAVADIVEL belongs to REINHARD KOFLERT's group at the Tyrolean Cancer Research Institute. This has to be corrected by stating that SHANMUGAPRIYA THANGAVADIVEL is a collaborator of Karin Jöhrer's group at the Tyrolean Cancer Research Institute. Reinhard Kofler is scientific director of the TKFI.