

Time of changes



Dear CABMM members and friends,

During the next years, the CABMM will face a time of changes: the retirement of Prof. Dr. Brigitte von Rechenberg is getting closer and closer. As co-founder of the CABMM, chairwoman of the CABMM Steering Committee and one of its key members, Brigitte plays a central role in the current structure of the CABMM. We all know her as a wise person and thus, she already started in good time with the promotion of

suitable successors and to surrender the reins, in order to make the transition as smooth as possible. That is also the reason why I have the honor to write the leading article of the CABMM Newsletter from now on. Of course, you will be informed about all other changes as soon as everything is set-up and agreed upon.

For the moment, it only remains for me to thank you for your support during the year 2016! The CABMM is looking back to a very successful year: At the beginning of 2016, the CABMM was re-evaluated by the University of Zurich and received renewed approval as official competence center of the UZH for the next four years. Both CABMM events in spring and autumn were very well attended and also the changed structure of our lecture series, the CABMM Scientific Seminar, was well received, reflected by a larger attendance. Last, but not least, we are happy to see that the CABMM network has been continuously growing. An increasing number of active CABMM members as well as CABMM-affiliated publications were noted during the year 2016. All this was possible thanks to your contribution only!

We wish all of you a Merry Christmas and we are looking forward to working with you in the New Year 2017!

With my best regards,

Silke Kalchofner-Mark, PhD
Managing Director of the CABMM

Announcements

Save the dates!

Don't miss the opportunity to discuss scientific questions and find new collaborations in the stimulating environment of the CABMM and reserve the following dates in your calendar:

- **Thursday, May 11, 2017:**
9th Plenary Meeting and 7th CABMM Spring Seminar
- **Thursday, November 09, 2017:**
8th CABMM Symposium

We are looking forward to your participation!

Call for information:

Please inform us about your CABMM-affiliated publications, awards, career development and any other information related to the CABMM, so we can continue to keep our records up-to-date. Thank you!

New members

Dr. Yvonne Achermann

Department of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich

Dr. Achermann is a medical doctor specialized in internal medicine and infectious disease with scientific focus on implant-associated infections. With the support of the program "filling the gap" by the UZH, she combines basic research in the field of "diagnostic and prevention of implant-associated infections" and clinical research in collaboration with the University Hospital Balgrist.

Dr. Sufian S. Ahmad

Department of Orthopaedic Surgery and Traumatology, Inselspital, University of Bern

Sufian S. Ahmed research focus is on mechanobiology of cruciate ligaments, cellular biology for treatment of ligament ruptures as well as clinical studies. As a clinician, he emphasizes the need for providing clinically relevant research questions to the basic research laboratory, which would subsequently allow for smooth translation back into clinical practice.

Prof. Dr. Cornel Fraefel

Experimental Virology, Institute of Virology, Vetsuisse Faculty, University of Zurich

Viruses are potent tools to address specific questions in cell biology, immunology, and molecular biology. They are effective vehicles for applications in molecular medicine, such as vaccination and gene therapy. The focus of Prof. Fraefel's research group is the analysis of the molecular mechanisms of virus replication and the use of this information for applying viruses in biomedical research.

PD Dr. Dr. Zsolt Kulcsár

Service of Diagnostic and Interventional Neuroradiology, Geneva University Hospitals

Dr. Kulcsar is leading the neurointerventional unit at the Geneva University Hospitals. Besides the clinical work in minimally invasive management of neurovascular and spinal diseases, his major scientific research interest focuses on the development and evolution, hemodynamic aspects and treatment modalities of cerebral aneurysms and also on imaging and invasive management of acute ischemic stroke.

Prof. Dr. Antonio Pozzi

Clinic for Small Animal Surgery, Vetsuisse Faculty, University of Zurich

As director of the Small Animal Surgery Clinic, the major goal of Prof. Pozzi is to foster and build a strong clinical and translational research program. Research focuses are in the field of 1) Disc degeneration, discogenic pain, disc regeneration 2) Knee, meniscus and tibial osteotomies, 3) Shoulder rotator cuff fixation 4) Fixation of ilial and tibial fractures and 5) Reconstructive and oncologic surgery.

Prof. Dr. Carla Rohrer Bley

Division of Radiation Oncology, Vetsuisse Faculty, University of Zurich

The group works in one of the most state-of-the-art veterinary cancer treatment facility in Europe. To treat cancer in animals, many of the same methods available in humans are used, e.g. radiation, chemotherapy and surgery. Additionally, innovative treatments such as interventional radiology, immunotherapy, stereotactic radiosurgery, and intensity modulated radiotherapy, are offered.



Publications

Stromal Demarcation Line in Pulsed Versus Continuous Light Accelerated Corneal-Cross-linking for Keratoconus. Peyman A, Nouralishahi A, Hafezi F, Kling S, Peyman M. *J Refract Surg.* 2016 Mar;33(3):206-8

Measuring Rabbit (*Oryctolagus cuniculus*) Tooth Growth and Eruption by Fluorescence Markers and Bur Marks. Wyss F, Müller J, Clauss M, Kircher P, Geyer H, von Rechenberg B, Hatt JM. *J Vet Dent.* 2016 Mar;33(1):39-46

Influence of N-methyl pyrrolidone on the activity of the pulp-dentine complex and bone integrity during osteoporosis. Gjoksi B, Ruangsawasdi N, Ghayor C, Siegenthaler B, Zenobi-Wong M, Weber FE. *Int Endod J.* 2016 Feb 23 [Epub ahead of print]

ARTD1 regulates osteoclastogenesis and bone homeostasis by dampening NF- κ B-dependent transcription of IL-1 β . Robaszekiewicz A, Qu C, Wisnik E, Ploszaj T, Mirsaidi A, Kunze FA, Richards PJ, Cinelli P, Mbalaviele G, Hottiger MO. *Sci Rep.* 2016 Feb 17;6:21131

Novel function of serine protease HTRA1 in inhibiting adipogenic differentiation of human mesenchymal stem cells via MAP kinase-mediated MMP upregulation. Tladen AN, Bahrenberg G, Mirsaidi A, Glanz S, Blüher M, Richards PJ. *Stem Cells.* 2016 Feb 10 [Epub ahead of print]

Safety and effectiveness of large volume coils in the treatment of small aneurysms. Kulcsár Z, Wanke I, Rüfenacht D, Wetzel SG, Görlicke S, Kolia K, Quarfordt S, Calvert J, Hawk H, Baxter B. *J Neurointerv Surg.* 2016 Jan 20 [Epub ahead of print]

Non-integrating episomal plasmid-based reprogramming of human amniotic fluid stem cells into induced pluripotent stem cells in chemically defined conditions. Slamecka J, Salimova L, McClellan S, van Kelle M, Kehl D, Laurini J, Cinelli P, Owen L, Hoerstrup SP, Weber B. *Cell Cycle.* 2016 Jan 17;15(2):234-49

In vitro fabrication of autologous living tissue-engineered vascular grafts based on prenatally harvested ovine amniotic fluid-derived stem cells. Weber B, Kehl D, Bleul U, Behr L, Sammut S, Frese L, Książek A, Achermann J, Stranzinger G, Robert J, Sanders B, Sidler M, Brokopp CE, Proulx ST, Frauenfelder T, Schoenauer R, Emmert MY, Falk V, Hoerstrup SP. *J Tissue Eng Regen Med.* 2016 Jan;10(1):52-70

Neutrophil oxidative burst activates ATM to regulate cytokine production and apoptosis. Harbort CJ, Soeiro-Pereira PV, von Bernuth H, Kaindl AM, Costa-Carvalho BT, Condino-Neto A, Reichenbach J, Roesler J, Zychlinsky A, Amulic B. *Blood.* 2015 Dec 24; 126(26):2842-51

Corneal cross-linking. Randleman JB, Khandewal SS, Hafezi F. *Surv Ophthalmol.* 2015 Nov-Dec;60(6):509-23

Dietary nitrogen and calcium modulate bone metabolism in young goats. Elfers K, Liesegang A, Wilkens MR, Breves G, Muscher-Banse AS. *J Steroid Biochem Mol Biol.* 2015 Nov 14. [Epub ahead of print]

TALEN-mediated functional correction of X-linked chronic granulomatous disease in patient-derived induced pluripotent stem cells. Dreyer AK, Hoffmann D, Lachmann N, Ackermann M, Steinemann D, Timm B, Siler U, Reichenbach J, Grez M, Moritz T, Schambach A, Cathomen T. *Biomaterials.* 2015 Nov; 69:191-200. [Epub 2015 Aug 3]

Influence of UVB exposure on the vitamin D status and calcium homeostasis of growing sheep and goats. Kovács S, Wilkens MR, Liesegang A. *J Anim Physiol Anim Nutr (Berlin).*, 2015 Apr, 99 Suppl S1:1-12

Public relations

“Repairing rotator cuff tendons” - Michael Künzler
PanEuropeanNetworks: Science and Technology, Issue 20:196-199, September 2016

“More than meets the Eye”
“Everyday ethical considerations”
“Transcutaneous drug delivery”
“Translational Research”
“The path to understanding”
PanEuropeanNetworks: Science and Technology, Issue 18:277-294, March 2016, Issue 19:311-328, Jun 2016

“Transcutaneous drug delivery” - Brigitte von Rechenberg, Michèle Sidler, Nathalie Fouché, Peter Kronen, Katja Nuss, Claudio Venzin, Friedrich von Hahn
PanEuropeanNetworks: Government, Issue 17:212-215, March 2016

“Using light to save sight” - Simon Pot, Farhad Hafezi
PanEuropeanNetworks: Science and Technology, Issue 17:216-217, December 2015; Government, Issue 16:48-49, November 2015

“Bonestone® for posterolateral fusion” - Brigitte von Rechenberg, Karina Klein, Jean Ouellet
Horizon2020 Projects:Portal, Issue 12:124-125, October 2016

“Transcutaneous drug delivery” - Brigitte von Rechenberg, Michèle Sidler, Nathalie Fouché, Peter Kronen, Katja Nuss, Claudio Venzin, Friedrich von Hahn
Horizon2020 Projects:Portal, Issue 12:138-141, October 2016

“From Bench to bedside and back again” - Brigitte von Rechenberg
Horizon 2020 Projects:Portal, Issue 10:271, April 2016

“Translational Research” - Brigitte von Rechenberg, Simon P. Hoerstrup, Michael O. Hottiger
Horizon 2020 Projects:Portal, Issue 9:112-113, January 2016

“Augmenting cancellous bone” - Karina Klein, Brigitte von Rechenberg, Thomas Steffen
Horizon 2020 Projects:Portal, Issue 9:169, January 2016

Congratulations

CABMM member **Gian Salzmann** from the Schulthess Clinic in Zurich was appointed professor at the University of Freiburg, Germany in March of this year. Congratulations!

We would like to cordially congratulate PD Dr. **Raffaella Santoro** on her election as new member of the European Molecular Biology Organization (EMBO) in recognition of her research and contribution to scientific excellence.

Many congratulations to **Felix Theiss**, member of the Tendon Repair Group on the CABMM Research Platform, who successfully passed his PhD defense “Evaluation of new concepts for cell based tendon regeneration”.

Karin Würtz-Kozak was recently awarded a SNF professorship grant on the topic “Unlocking the mechanisms of mechanotransduction in degenerative disc disease (TRIPDISC)”. We congratulate on the great success!