



Newsletter

Structural changes



Dear CABMM members

The last months have brought some changes to the CABMM again. After preventing the relocation of the CABMM Research Platform to the new laboratory facilities in Schlieren, we are now planning its continued future. Originally sponsored as a “Synthes assistant professorship”, the financial support of the CABMM Research Platform could not be maintained after Synthes was sold to Johnson & Johnson and became now DePuy Synthes. However, we were able to get funding for the position

of the Scientific Director until the year 2017 by the Loreda foundation for research in the osteoporosis field, a research path that PD Dr. Peter J. Richards has successfully established over the last 6 years as Scientific Director of the CABMM Research Platform. Negotiations were taken up with the UZH resulting in the possibility of obtaining a “junior assistant professorship” in 2017 in order to maintain the important CABMM Research Platform; however, negotiations have just started and nothing has been promised as yet, and as “mills grind slowly in the University system”, there will still be some hurdles to overcome in the near (...or not so near...) future. Time flies and the future of the CABMM Research Platform is somewhat uncertain and only a junior position is on the horizon. That is why the CABMM Steering Committee decided that Pete should be able to devote all his time to his own research and his SNF research grants, which his group was able to receive. Therefore, Pete was released from all of his duties as Scientific Director of the CABMM Research Platform, a responsibility that required a significant amount of time from both, him and his research group. Amongst other things, he successfully built up the CABMM Research Platform laboratories, established the CABMM Seminar and Journal Club and spent a considerable amount of time teaching and supervising CABMM platform users from clinics and other research groups.

CABMM Platform Coordinating Team

Pete’s duties as Scientific Director of the CABMM will be taken over by a group of people, namely by Dr. Silke Kalchofner-Mark and Marina Klawitter from the CABMM coordinating office and by two senior platform users, Dr. Flurina Clement Frey and Dr. Salim Darwiche. Silke will be the new director of the entire platform. As all members know Silke and Marina, they don’t need to be introduced. Flurina studied veterinary medicine at the VSF in Zurich and then pursued a doctorate thesis and PhD in the group of Prof. Hanspeter Nägeli at the Institute of Pharmacology and Toxicology. Salim is a mechanical engineer, studied in the USA and did his PhD at the EPFL in the laboratory of Prof. Dominique Pioletti and Prof. Lee Laurent-Applegate, the latter being a member of the CABMM. Both work for the MSRU and have been successfully involved in interdisciplinary research projects in the field of biotechnology on the CABMM Research Platform already. The Steering Committee is convinced that this group will be a great consortium to successfully continue what Pete had started.

Changes in the CABMM Steering Committee

Pete himself will continue as a CABMM platform user and member, but decided – much to the regret of the other members of the CABMM Steering Committee - to resign as member of the CABMM Steering Committee, as this position was primarily due to his appointment as Scientific Director of the CABMM.

We would like to take this opportunity to sincerely thank Pete for his important role in setting-up the CABMM and for his continuous efforts. He was one of the people, who made the CABMM what it is today! We wish Pete all the best for his very successful research and look forward to his continued contribution to the CABMM network. His official farewell as Scientific Director will take place at the CABMM Spring Seminar in June.

However, as every single end also is at the same time a new beginning, we would like to announce that we are currently looking for a new Steering Committee member to replace Pete. This position is open for all full CABMM members, preferably from the field of applied biotechnology and with a maximum of seven years experience as group leader. If you are interested in participating in the CABMM Steering Committee and thus, getting involved in shaping the translational future of the CABMM, please contact Dr. Silke Kalchofner-Mark (silke.mark@cabmm.uzh.ch) for further information.

We look forward to seeing you all at the CABMM Spring Seminar on June 12th - and hopefully also your PhD students!

Prof. Dr. med. vet. Brigitte von Rechenberg, Dipl. ECVS
Chair CABMM Steering Committee

Public relations

“Translational Research”
About translational research at the CABMM
PanEuropeanNetworks: Science & Technology, Issue 14: 112-113, Jan 2015.

“More than meets the eye”
About the research of Nicole Borel
Horizon 2020 Projects: Portal, Issue 6:40-42, 2015.

“From rupture to haemorrhage”
About the research of Serge Marbacher and Javier Fandino
Horizon 2020 Projects: Portal, Issue 5:44-45, 2015.

“The heart in motion”
About the research of Colin C Schwarzwald and Katharyn J Mitchell
Horizon 2020 Projects: Portal, Issue 5:36-39, 2015.

Congratulations

We congratulate PD Dr. Serge Marbacher on his appointment as senior lecturer (Privatdozent) at the University of Bern!



Recent publications

N-methyl pyrrolidone/bone morphogenetic protein-2 double delivery with in situ forming implants. Karfeld-Sulzer LS, Ghayor C, Siegenthaler B, de Wild M, Leroux JC, Weber FE. *J Control Release*, 2015 Apr 10; 203:181-188.

Ridge preservation after ridge expansion with simultaneous guided bone regeneration: a preclinical study. Stricker A, Fleiner J, Stübinger S, Fleiner H, Buser D, Bosshardt DD. *Clin Oral Implants Res*, 2015 Mar 9, doi: 10.1111/clr.12574. [Epub ahead of print]

Evaluation of the Modern Luque Trolley Construct for Treatment of Early Onset Scoliosis Using a Gliding Implant in an Immature Animal Model. Ouellet JA, Ferland CE, Racloz G, Klein K, Richter H, Steffen T, Rechenberg BV. *J Spinal Disord Tech*, 2015 Feb 25. [Epub ahead of print]

Osseointegration of titanium implants functionalised with phosphoserine-tethered poly(epsilon-lysine) dendrons: a comparative study with traditional surface treatments in sheep. Stübinger S, Nuss K, Bürki A, Mosch I, Sidler M, Meikle ST, von Rechenberg B, Santin M. *J Mater Sci Mater Med*, 2015 Feb; 26(2):5433.

ARTD1-induced poly-ADP-ribose formation enhances PPAR γ ligand binding and co-factor exchange. Lehmann M, Pirinen E, Mirsaidi A, Kunze FA, Richards PJ, Auwerx J, Hottiger MO. *Nucleic Acids Research*, 2015 Jan 9; 43(1):129-42.

Preliminary study on carprofen concentration measurements after transcutaneous treatment with Vetrodrop® in a microfracture joint defect model in sheep. Sidler M, Fouché N, Meth I, von Hahn F, von Rechenberg B, Kronen PW. *BMC Vet Res*, 2014 Dec 9; 10(1):268. [Epub ahead of print]

Effect of grain size and microporosity on the in vivo behavior of β -tricalcium phosphate scaffolds. Lapczynska H, Galea L, Wüst S, Bohner M, Jerban S, Sweedy A, Doebelin N, van Garderen N, Hofmann S, Baroud G, Müller R, von Rechenberg B. *Eur Cell Mater*, 2014 Oct 23; 28:299-319.

Nanostructures and hydrophilicity influence osseointegration: a biomechanical study in the rabbit tibia. Wennerberg A, Jimbo R, Stübinger S, Obrecht M, Dard M, Berner S. *Clin Oral Implants Res*, 2014 Sep; 25(9):1041-50.

Ridge preservation after ridge expansion with simultaneous guided bone regeneration: a preclinical study. Stricker A, Fleiner J, Stübinger S, Fleiner H, Buser D, Bosshardt DD. *Clin Oral Implants Res*, 2015 Mar 9, doi: 10.1111/clr.12574. [Epub ahead of print]

Bone augmentation using a synthetic hydroxyapatite/silica oxide-based and a xenogenic hydroxyapatite-based bone substitute materials with and without recombinant human bone morphogenetic protein-2. Thoma DS, Kruse A, Ghayor C, Jung RE, Weber FE. *Clin Oral Implants Res*, 2014 Aug 19; doi: 10.1111/clr.12469. [Epub ahead of print]

Deviations between placed and planned implant positions: an accuracy pilot study of skeletally supported stereolithographic surgical templates. Stübinger S, Buitrago-Tellez C, Cantelmi G. *Clin Implant Dent Relat Res*, 2014 Aug; 16(4):540-51.

Bone loss after ridge expansion with or without reflection of the periosteum. Stricker A, Fleiner J, Stübinger S, Schmelzeisen R, Dard M, Bosshardt DD. *Clin Oral Implants Res*, 2014 Jun 26; doi: 10.1111/clr.12437. [Epub ahead of print]

New members

Prof. Dr. Dr. Farhad Hafezi

ELZA Institute AG, Dietikon, University of Geneva, University of Southern California, Los Angeles, California, USA

Farhad Hafezi's main research interests are corneal wound healing, corneal infection, ocular biomechanics, and progressive myopia. The common link among these interests is a treatment modality that is now used in clinical ophthalmology for corneal diseases and dystrophies. This modality is called corneal cross-linking (CXL). CXL combines UV light and riboflavin (Vitamin B2) to modify collagen structure and biomechanics. The newest clinical application is using CXL to treat bacterial and fungal corneal infections.

PD Dr. Gian Salzmann

Joint Center, Schulthess Klinik, Zurich

As a clinician-scientist, Dr. Salzmann is optimally positioned to observe first-hand the limitations of current cartilage repair procedures and will help towards translation from bench-to-bedside. Experimental research includes the application of gene therapy and mechanical loading on articular chondrocytes in small animal models and the use of chondrocytes and stem cells in clinical applications.

Prof. Dr. Viola Vogel

Laboratory of Applied Mechanobiology, ETH Zurich

The research group of Prof. Vogel deciphers how bacteria and cells employ the stretching of proteins to switch biochemical functions (mechano-chemical signal conversion), and how such insights can be exploited for biomedical applications. A special emphasis is on understanding how the mechanobiology of extracellular matrix directs cell functions and stem cell differentiation.

Announcements

Upcoming event:

Don't forget that the 8th CABMM Plenary Meeting and the 5th CABMM Spring Seminar will take place on **Friday, June 12, 2015** and register now! Registration and further information at <http://www.cabmm.uzh.ch/Events-2.html>.

Save the date!

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

- **Thursday, November 5, 2015:**
6th 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!