

## CABMM events



Dear CABMM members

After a hot summer and a most beautiful autumn with colored leaves like during a good Indian Summer in New England, our next **CABMM Symposium** is fast approaching. On Nov 5<sup>th</sup> we have set up an interesting program, and the first time with partners from industry. Since diagnostic imaging plays such a big role in almost all fields of research where animal experiments are conducted, we felt that having a session about

innovative imaging technologies would meet the interest of our members. The opportunity to hear about new technologies, such as the world's first spectral detector-based CT, as well as about a hybrid-photon-counting detector is exciting and hopefully rouses your interest. It may also give CABMM members the opportunity to start collaborations with the companies and establish themselves as the first groups presenting research results in this area. So make sure that you attend and get the news first-hand.

In the following sessions, CABMM members will present their interesting research fields and – like in all other previous symposia – give us the opportunity to connect and find common research grounds. We always notice that our members connect and start new collaborations after the CABMM events, although they may be engaged in seemingly very different fields. As envisioned when we started the CABMM, research groups discover that they have much more in common than expected if they pick up the opportunity to peek over the fence into the neighbor's garden. Mechanisms are often the same and another group may just do routinely what you have spent a long time searching for, but didn't find. Or by listening to their work, you may just pick up an idea for your own research that you would have otherwise missed. So come and meet your colleagues at the next CABMM Symposium, it will be worth it. Also bring your PhD and doctorate students with you and give them the opportunity for networking with graduate students from other fields.

Our **CABMM Scientific Seminar** on Friday has also changed its layout. Under the new leadership of Silke, Salim, Flurina and Marina, the seminar series has received a new focus. They have arranged mini-series, each representing one research group of the CABMM network and being dedicated to a specific topic.

The new structure started out with presentations by the Equine Research and Tendon Repair Group of Prof. Fürst from the Equine Department, University of Zurich. After an introduction about "Translational Research in Horses at the Equine Department", three PhD students presented their projects performed on the CABMM Research Platform about the use of BMP-2 in subchondral cystic lesions in horses, the search for tenogenic markers in horses as well as new concepts for cell-based tendon regeneration.

In the ongoing mini-series, the group of Prof. Marcy Zenobi-Wong (Cartilage Engineering and Regeneration, ETHZ) is giving insight into their cartilage research presenting work about bioprinting, hydrogels and scaffolds for tissue engineering as well as the creation of the CellSpring AG, a spin-off of her group.

The upcoming last mini-series of this fall semester includes my own group, where research with a non-viral drug delivery system, specifics about morphology versus flow in cardiac MRI of dogs, and finally the attempts made to identify key modulators for failures in rotator cuff repair will be presented.

You will also have the opportunity to hear the guest lecture of Prof. Sheila Laverty, our visiting Hedi Fritz-Niggli guest professor from the Veterinary School St. Hyacinthe in Montréal on November 13<sup>th</sup>. She is an experienced clinician and researcher in the cartilage field and will share her insights about the crosstalk between cartilage and bone in osteoarthritis. Don't miss the opportunity to meet her.

The CABMM is moving forward – and we look forward to seeing you all at the 6<sup>th</sup> CABMM Symposium in November and at our seminars!

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

## Announcements

### New CABMM Steering Committee member:

We are very pleased to announce that **Prof. Dr. Janine Reichenbach** from the University Children's Hospital Zurich was accepted as a new member of the CABMM Steering Committee. We would like to thank Janine for her interest in the CABMM and are looking forward to fruitful discussions and to her contribution to our center. Welcome to the team, Janine!

### Upcoming event:

Don't forget that the the 6<sup>th</sup> **CABMM Symposium** will take place on **Thursday, November 05, 2015** and register now! Registration at <http://www.cabmm.uzh.ch/Events-2.html>.

### 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, June 09, 2016:**  
8<sup>th</sup> Plenary Meeting and 6<sup>th</sup> CABMM Spring Seminar
- **Thursday, November 10, 2016:**  
7<sup>th</sup> 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!



## Recent publications

### **Establishing Corneal Cross-Linking With Riboflavin and UV-A in the Mouse Cornea In Vivo: Biomechanical Analysis.**

Hammer A, Kling S, Boldi MO, Richoz O, Tabibian D, Randleman JB, Hafezi F  
*Invest Ophthalmol Vis Sci.* 2015 Oct 1; 56(11):6581-90.

### **Plasma atrial/A-type natriuretic peptide (ANP) concentration in horses with various heart diseases.**

Trachsel DS, Grenacher B, Schwarzwald CC  
*J Vet Cardiol.* 2015 Sep 15. [Epub ahead of print]

### **Chondrogenic Priming at Reduced Cell Density Enhances Cartilage Adhesion of Equine Allogenic MSCs - a Loading Sensitive Phenomenon in an Organ Culture Study with 180 Explants.**

Spaas JH, Broeckx SY, Chiers K, Ferguson SJ, Casarosa M, Van Bruaene N, Forsyth R, Duchateau L, Franco-Obregón A, Wuertz-Kozak K  
*Cell Physiol Biochem.* 2015 Sep 8; 37(2):651-665 [Epub ahead of print]

### **Long-term Results of an Accelerated Corneal Cross-linking Protocol (18 mW/cm<sup>2</sup>) for the Treatment of Progressive Keratoconus.**

Hashemi H, MirafTAB M, Seyedian MA, Hafezi F, Bahrmandy H, Heidarian S, Amanzadeh K, Nikbin H, Fotouhi A, Asgari S  
*Am J Ophthalmol.* 2015 Aug 24. [Epub ahead of print]

### **Anabolic Steroids Reduce Muscle Degeneration Associated With Rotator Cuff Tendon Release in Sheep.**

Gerber C, Meyer DC, Flück M, Benn MC, von Rechenberg B, Wieser K.  
*Am J Sports Med.* 2015 Aug 24. [Epub ahead of print]

### **Use of biomimetic microtissue spheroids and specific growth factor supplementation to improve tenocyte differentiation and adaptation to a collagen-based scaffold in vitro.**

Theiss F, Mirsaidi A, Mhanna R, Kümmerle J, Glanz S, Bahrenberg G, Tiaden AN, Richards PJ.  
*Biomaterials.* 2015 August 10; 69:99-109. [Epub ahead of print]

### **Titanium and hydroxyapatite coating of polyetheretherketone and carbon fiber-reinforced polyetheretherketone: A pilot study in sheep.**

Stübinger S, Drechsler A, Bürki A, Klein K, Kronen P, von Rechenberg B.  
*J Biomed Mater Res B Appl Biomater.* 2015 Jun 11. [Epub ahead of print]

### **The epigenetically active small chemical N-methyl pyrrolidone (NMP) prevents estrogen depletion induced osteoporosis.**

Gjoksi B, Ghayor C, Siegenthaler B, Ruangsawasdi N, Zenobi-Wong M, Weber FE.  
*Bone.* 2015 May 7; 78:114-121.

### **Hypoxia attenuates the proinflammatory response in colon cancer cells by regulating IkB.**

Müller-Edenborn K, Léger K, Glaus Garzon JF, Oertli C, Mirsaidi A, Richards PJ, Rehrauer H, Spielmann P, Hoogewijs D, Borsig L, Hottiger MO, Wenger RH.  
*Oncotarget.* 2015 Apr 29. [Epub ahead of print]

## Public relations

### **“Transcutaneous drug delivery”**

Brigitte von Rechenberg, Michèle Sidler, Nathalie Fouché, Peter Kronen, Katja Nuss, Claudio Venzin, Friedrich von Hahn  
*Horizon 2020 Projects: Portal, Issue 8: 114-117, September 2015*

### **“More than just imaging”**

Ines Carrera, Henning Richter, Patrick Kircher  
*Horizon 2020 Projects: Portal, Issue 7: 104-107, July 2015*

### **“Everyday ethical considerations”**

Brigitte von Rechenberg  
*Horizon 2020 Projects: Portal, Issue 7: 166-167, July 2015*

### **“The path to understanding”**

Brigitta Wichert, Annette Liesegang  
*PanEuropeanNetworks: Science & Technology, Issue 16: 184-185, September 2015*

### **“BoneWelding® Technology”**

Brigitte von Rechenberg, Karina Klein, Katja Nuss, Joerg Mayer  
*PanEuropeanNetworks: Science & Technology, Issue 15: 98-99, June 2015*

### **“Requirements of anaesthesia and analgesia”**

Peter Kronen  
*PanEuropeanNetworks: Science & Technology, Issue 15: 98-99, June 2015*

## Congratulations

### **Habilitation:**

Many congratulations to **PD Dr. Dr. Benedikt Weber**, who completed his habilitation at the University of Zurich with his inaugural lecture entitled “Ersatzteile mit Eigenleben” !

### **Dissertation:**

**Gregor Bahrenberg**, member of the Bone and Stem Cell Research Group on the CABMM Research Platform, successfully passed his PhD defense “HTRA1 as a Novel Regulator of Human Mesenchymal Stem Cell Adipogenesis”.

## New member

### **Prof. Dr. Anja Kipar**

Institute of Veterinary Pathology, University of Zurich

The main interest of her group is the pathogenesis of infectious diseases with a main focus on virus infections, like Boid Inclusion Body Disease (BIBD) of boid snakes or Feline Infectious Peritonitis (FIP) in cats. The animal work covers a wide range of viral and bacterial diseases and expands to toxicopathology. To accommodate the specific requirements for morphological studies in different animal models, they established the Laboratory for Animal Model Pathology (LAMP) that provides technical service and expert pathologist input to a wide range of collaborative studies.