“The aging spine”, musculoskeletal research and Wyss Zurich – this interesting program attracted many participants to the 8th CABMM Symposium that took place on November 9th, 2017, at the University of Zurich. Especially amongst young scientists, our events enjoy growing popularity. But also well-known professors joined the event and enjoyed the presentations and the lively discussions.

Prof. Brigitte von Rechenberg opened the meeting by introducing the first speaker, Prof. Max Aebi, in a very personal way, followed by his formal introduction by Dr. Silke Kalchofner-Mark, the moderator of the meeting. In his talk entitled “The aging spine”, Prof. Aebi summarized the advances in spine surgery over the last 40 years. Despite of groundbreaking developments such as magnetic resonance imaging (MRI), further research is needed, in particular due to the aging population and the associated increase in spinal disorders. Furthermore, he emphasized the importance of teaching and training of professionals in the field.

The topic was of great interest and generated a lively discussion that was continued during the following coffee break.

In the second part, new findings of CABMM Start-up Grant projects were discussed. Dr. Luc Smolders, member of Prof. Frank Steffen’s group, presented his work “Identification of inflammatory and pain markers in degenerative spinal disease”. Gene expression analysis revealed plenty of differences in dogs with spinal disease when compared to healthy animals. Future studies will focus on selected signaling pathways. Subsequently, Dr. Alessandro Bertolo from PD Dr. Jivko Stoyanov’s group discussed the use of stem cell motility as marker for their differentiation capacity. In dogs, high motility of mesenchymal stem correlated with their osteogenic potential. Finally, Emma Cavalli presented a new strategy for cartilage repair using an injectable, adhesive and stable hydrogel with positive effects on chondroprogenitor cells. The gel was developed in an interdisciplinary, collaborative project of Prof. Gian Salzmann and Prof. Marcy Zenobi Wong.

The last session was about Wyss Zurich, a joint research and development center of UZH and ETHZ. Following its slogan “Translating science into life”, Wyss Zurich supports technology transfer of innovative projects in the fields of regenerative medicine and robotics. Subsequent to an overview talk by the founding co-director Simon Hoerstrup, four projects were presented: Dr. Simone Bottan talked about “HYLOMORPH”, a project developing a new surgical membrane that can reduce fibrosis around medical implants and thus, the risk of revision surgeries. The basic idea behind the second project “hemotune”, presented by Lukas Langenegger, is a more effective treatment of sepsis. Using magnetic beads, endotoxins are removed from the patient’s blood outside of the body in a dialysis machine. Dr. Martin Schuler presented his project “Liver4Life” that uses the high regenerative potential of this organ: a healthy piece of a diseased liver is removed, grown to a sufficient size in a perfusion machine and finally re-transplanted into the patient. Finally, Dr. Roman Willi introduced the project “CeNeReg” using an antibody against the growth inhibitor Nogo-A for the regeneration of nerve fibers. After promising results in a phase I clinical trial, the antibody is currently prepared for Phase II studies. The following discussion was continued at the final apéro in a pleasant atmosphere.

We would like to thank Prof. Gian Salzmann and Prof. Marcy Zenobi Wong for the organization of the session about Wyss Zurich.

We would like to thank all participants of our 8th CABMM Symposium!