



University
of Basel

Department of
Biomedical Engineering

Translational Spine Research and Biomechanics



05th September 2024.
10 years anniversary: Clinic for Spine Surgery
at the DBE Campus showing spine surgeons and spine researchers (picture: Cordula Netzer)



20th of August 2024.
SAB Site visit at CADENCE This state-of-the-art facility combines expertise from multiple disciplines, including clinical practice, radiology, biomechanics, and engineering, to foster innovation in spinal surgery and rehabilitation



In 2024, the Clinic of Spine Surgery marks its 10th anniversary, coinciding with the 10th DBE Research Day and the opening of the CADENCE facility in Allschwil.

Research Highlights

The Translational Spine Research and Biomechanics group has achieved significant advancements in understanding pathogenesis of lumbar spinal stenosis. Our research combines clinical, radiological, functional, and biomechanical data to create personalized treatment strategies for patients. Concluding patient recruitment and continuing follow-up measurements in our core project RoLLSroice will support to establish the largest and most comprehensive global data bank on this specific condition.

Collaborations and Achievements

Us being part of the CADENCE facility will play a crucial role in promoting interdisciplinary collaboration, which enhances innovation in spinal surgery and rehabilitation. This collaborative environment is expected to lead to more effective treatment methods and improved patient outcomes. Looking ahead, the group plans to refine their models further, extend their research to include other spinal conditions, and strengthen international collaborations. These efforts aim to continue improving patient care and outcomes in the field of spinal health.

Future Directions

Overall, the Clinic of Spine Surgery and its associated research groups are at the forefront of spinal health innovation, leveraging data and interdisciplinary collaboration to advance the understanding and treatment of spinal conditions. The upcoming years hold promise for further breakthroughs and enhanced global partnerships, ultimately benefiting patients worldwide.

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Funding



Group Leaders

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Collaborators

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