



# Benjamin W. Zweifach Memorial Lecture

Wednesday, December 10 | 3-4pm

Steinman Hall, ST- 161



## Bone- Brain- Gut Axis in Alzheimer's, Diabetes, and Microbiome Reboot

Deepak Vashishth, PhD

**Co-Director** | Rensselaer-Icahn School of Medicine Center for Engineering and Precision Medicine

**Yamada Corporation Chaired Professor** | Department of Biomedical Engineering, Rensselaer Polytechnic Institute

**Adjunct Professor** | Department of Orthopedics, Icahn School of Medicine at Mount Sinai

**Abstract:** Multi-organ crosstalk is a fundamental aspect of human physiology. This Benjamin W. Zweifach Memorial Lecture presentation will present evidence for interactions among the bone, brain, and gut, supporting the concept of the Bone-Brain-Gut Axis. It will offer a mechanistic explanation of this axis and outline its role in the development and comorbidities of chronic diseases such as Alzheimer's, Osteoporosis, and Diabetes. The talk will also discuss the clinical implications and bench-to-bedside translation of these findings, covering biomarkers, diagnostic tools, current and novel therapeutics, and emerging therapies like microbial transplantation.