



Friedrich-Alexander-Universität
Department Artificial Intelligence
in Biomedical Engineering | AIBE



Digital Health

LUNCH SERIES

24.05.2022 12.30^{AM}
d.hip • Henkestraße 127 • Erlangen

Prof. Dr. James Finley

»Identifying Principles of Motor Skill Learning to Improve
Mobility during Neurological Rehabilitation«

**The Digital Health Lunch Series (DiHLS) is a networking platform
to inspire and generate innovation!**

To shape the future of Digital Health, connecting and moving knowledge is as essential as exchanging data. Initiated by FAU, Medical Valley, dmac, d.hip, and Zollhof, DiHLS invites visionaries, deciders, and makers in Digital Health to meet on a regular basis. In each event, international leading experts will present current questions and challenges, and inspire discussions.

We invite you to be a part of these events, to share your ideas for innovations and to challenge the status quo!





Prof. Dr. James Finley is an Associate Professor in the Division of Biokinesiology and Physical Therapy, the Department of Biomedical Engineering, and the Neuroscience Graduate Program at the University of Southern California.

He and his team in the Locomotor Control Lab at USC use experimental studies and computational models to understand how mobility is controlled in healthy individuals and individuals with neuromotor impairments such as stroke and Parkinson's disease. Dr. Finley is also one of the founding directors of the USC SensoriMotor Assessment and Rehabilitation Training Center (SMART-VR Center). The Center's mission is to be an interdisciplinary center of excellence harnessing innovative advances in virtual reality to improve motor and cognitive function across multiple clinical populations such as stroke, Alzheimer's, Parkinson's disease.



PROGRAMM

12.30 – 14.00

Presentation of
Prof. Dr. James Finley

OR JOIN ONLINE:



URL REGISTRATION

www.aibe.tf.fau.de/dihls/

MOTOR SKILL ACQUISITION IS THE BASIS OF A BROAD CLASS OF REHABILITATION INTERVENTIONS FOR PEOPLE POST-STROKE, INDIVIDUALS WITH SPINAL CORD INJURY, AND PEOPLE WITH PARKINSON'S DISEASE. HERE, I WILL DESCRIBE OUR RECENT WORK IN WHICH WE :

- **ASSESS HOW ENERGETIC COST AND DYNAMIC BALANCE INTERACT TO REGULATE THE ACQUISITION OF NOVEL WALKING PATTERNS AND**
- **DEVELOP NOVEL, VR-BASED APPROACHES FOR ENHANCING SKILL ACQUISITION DURING LOCOMOTOR TRAINING.**