## **D-HEST Research Day Speed Presentations**

Session I	Name		Presentation title	Research group
1	Jeroen	Brus	A tight link between sleep quality, arousal and economic success	Decision Neuroscience
2	Valeriia	Beliaeva	Modulating mood with non-invasive electrical stimulation	Decision Neuroscience
3	Alenica	Hässig	What do parents cook for their infants?	Consumer Behavior
4	Andrea	Knörr	Human – animal interaction: Impact on livestock and pets	Consumer Behavior
5	Fabian	Abiusi	Volcanic proteins	Sustainable Food Processing
6	Maja	Wolleb	In vitro models to study tendon pathology	Orthopaedic Biomechanics
7	Danilo	Menghini	Functionalized hydrogel with annulus fibrosus repair patch	Orthopaedic Biomechanics
			TMS-based motor imagery neurofeedback enhances individuation of	
8	Ingrid	Odermatt	neural finger representations	Neural Control of Movement
9	Manuel	Carro Dominguez	Sleeping with your eyes open	Neural Control of Movement
10	Paulina	Pacak	Simulating the first steps of sperm-egg fusion	Applied Mechanobiology
11	Dilara	Perver	Bone marrow niche alterations in hematological malignancies	Applied Mechanobiology
			Valorisation of olive waste – characterisation of an antioxidant-rich	
12	Yue Ling	Wong	extract derived from olive pomace	Food Biochemistry
			Learning activities of daily living from unobtrusive multimodal wearable	
13	Mehdi	Ejtehadi	sensors	Sensory-Motor Systems
14	Chiara	Basla	Textile-powered mobility	Sensory-Motor Systems
15	Sian	Duss	Locus Coeruleus firing patterns	Molecular and Behavioral Neuroscience
16	Rebecca	Waag	From acute to chronic stress	Molecular and Behavioral Neuroscience
17	Brett	Hannigan	Distributed sensing along fibres for smart clothing	Biomedical and Mobile Health Technology
			Development of flexible and stretchable strain sensors for wearable	
18	Maria	Papaefstathiou	applications	Biomedical and Mobile Health Technology
19	Fernando	Beltrami	Research at both ends of the fitness spectrum	Exercise Physiology
20	Kyle	Boyle	Optimization of non-invasive phrenic nerve stimulation	Exercise Physiology
21	Caroline	Giacomin	Ideal mucus: Hagfish?	Food Porcessing
22	Constantin	Landers	Enabling Responsible Digital Health Innovation	Bioethics
23	Mohammad	Peydayesh	Bioplastics from protein food waste	Food & Soft Materials
24	Patrick	Züblin	Exploring subzero liquid water under soft nanoconfinement	Food & Soft Materials

Session II	Name		Presentation title	Research group
25	Louis	Lukas	Data science in spinal cord injury: Tell me if I will walk again	Biomedical Data Science
26	Sarah	Brüningk	Pediatric precision oncology - Math models and data science	Biomedical Data Science
27	Marco	Burkolter	Listeria monocytogenes L-Forms as persisters under adverse conditions	Food Microbiology
28	Ellen-Aleksandra	Svorjova	Bacteriophage engineering	Food Microbiology
29	Darren	Kelly	Regulatory effects of circular RNAs on synapse development	Systems Neuroscience
30	Prakruti	Nanda	Using non-coding RNAs to modulate traumatic memories	Systems Neuroscience
31	Daniel	Paysan	Machine learning methods towards chromatin as a universal biomarker for disease and therapy	Mechano-Genomics
32	Luezhen	Yuan	Transcriptional regulation and chromatin reorganization in mechanical induced cellular reprogramming and rejuvenation	Mechano-Genomics
33	Lianggong	Ding	Theraputic strategies against hepatosteatosis	Translational Nutrition Biology
34	Tina	Dahlby	Alternative thermogenic mechanisms	Translational Nutrition Biology
35	Jinhao	Wang	Investigating knee kinematics through dual-plane fluoroscopy and automated 2D-3D pose estimation	Movement Biomechanics
36	Zhongke	Mei	Where to stimulate? Deep brain stimulation for gait improvement	Movement Biomechanics
37	Dario	Bachmann	Factors underlying variability in Alzheimer's Disease onset and progression	Anatomy
38	Leonard	Steg	Influence of the paternal epigenome on the developing embryo – Implications for epigenetic inheritance	Neuroepigenetics
39	Maria-Andreea	Dimitriu	Assessing molecular traces of glucocorticoid exposure in stem-cell derived neurons	Neuroepigenetics
40	Miriam	Kretschmer	Dad shouldn't be stressed before making babies	Epigenetics and Neuroendocrinology
41	Vincent	Fischer	Behavioral and molecular effects of paternal chronic stress across generations	Epigenetics and Neuroendocrinology
42	Noemi	Gozzi	NeuroLegs: a sensory neuroprothesis for diabetic neuropathy	Neuroengineering
43	Federico	Ciotti	In-silico to on-silico neural interface design	Neuroengineering
44	Ajda	Lenardic	Interspecies generation of muscle stem cells	Regenerative and Movement Biology
45	Christine	Ling-Li Trautmann	Deconstructing bovine myogenesis in vitro utilizing an enhanced medium for muscle fiber production	Regenerative and Movement Biology
46	Anna	Kohl	Targeting senescence in human prostate cancer using combinatorial CAR T cell therapy	Experimental Oncology and Translational Cancer Medicine

Session III	Name		Presentation title	Research group
47	Alexander	Tesmer	Contextual control of voluntary exercise	Neurobehavioural Dynamics
48	Han-Tao	Li	Explore a hypothalamic strategy for brain state control	Neurobehavioural Dynamics
49	Maja	Stevanoska	The impact of gut microbial metabolism on xenobiotic exposures	Toxicology
			In search of the root of aging: Genome-wide exploration of DNA damage	
50	Navnit Kaur	Singh	landscapes	Toxicology
51	Katrin	Dätwyler	Understanding functional deficits in hip impingement patients	Human Performance Lab, Schulthess Clinic
52	Alice	Caimi	Musculoskeletal modeling in spine research	Orthopaedic Technology
53	Jaka	Pizorn	Melt electrowriting	Orthopaedic Technology
54	Kesso	van Zutphen-Küffer	Ironing out anemia: Isotopic insights into absorption and loss	Nutrition and Metaboloic Epigenetics
55	Sarah	Date	Differentiation of region-specific Lgr5+ cells to enteroendocrine cells	Nutrition and Metaboloic Epigenetics
			High-throughput and versatile method for profiling DNA methylation in	
56	Jingran	Zhuo	bulk and single cells	Nutrition and Metaboloic Epigenetics
57	Lena	Salzmann	Neurofeedback for motor rehabilitation in Parkinson's Disease	Rehabilitation Engineering
			RELab tenoexo: a fully wearable hand exoskeleton for assistance after	
58	Margherita	Razzoli	neurological impairment	Rehabilitation Engineering
			Healthineering approach identifies HIF-1 as a molecular driver of tendon	
59	Greta	Moschini	disease	Excercise and Health
60	Moheb	Ghobrial	Muscle biology – metabolic crosstalk in the muscle	Excercise and Health
61	Julia	Boshart	Leveraging the cell surface architecture for therapeutics	Molecular Health
62	Jacqueline	Hammer	Baitless cell surfaceome capture with LUX-GLOBAL	Molecular Health
63	Amelia	Hasenauer	Milk project - mammary tissue engineering	Tissue Engineering and Biofabrication
64	Simone	Ponta	CRISPR-Cas9 gene editing for cartilage tissue engineering	Tissue Engineering and Biofabrication
65	Anton	Lavrinienko	The Microbiota Vault	Food Systems Biotechnology
66	Lena	Flörl	Linking grapevine genotype to microbiome recruitment in winegrowing	Food Systems Biotechnology
67	Michael	Christiansen	Inductive detection of magnetic microrobots	Responsive Biomedical Systems
			Swarm control of magnetic soft microrobots in treatment of micro-	
68	Yimo	Yan	vascular obstruction	Responsive Biomedical Systems
69	Charles	Ledoux	Simulations of osteoporosis and its treatments	Bone Biomechanics
			Degenerated 3D osteocyte lacuno-canalicular network in a mouse model	
70	Dilara	Yilmaz	of premature aging	Bone Biomechanics
71	Aisylu	Shaidullina	Exploring new worlds of viral molecular biology	Molecular Phage Biology