## TECHNISCHE UNIVERSITÄT WIEN WIEN





## **Opening of PLFDoc – Programme**

9:00 am	Opening and Welcome Address Otto Doblhoff-Dier, Vicerector for Research and International Relations Vetmeduni Peter Ertl Vicerector Research, Innovation, International Affairs TU Wien Johann Kastner Vice President FH OÖ Forschungs & Entwicklungs GmbH University of Applied Sciences Upper Austria	The doctoral program PLFDoc is a collaborative project involving the TU Wien, the University of Applied Sciences Upper Austria (Campus Hagenberg), and the University of Veterinary Medicine Vienna. Recent advancements in sensor technologies and data science provide the potential for continuous, real-time monitoring of the health status and well-being of animals, both at the herd and individual level. The application of these tools thus holds the potential to detect behavioral and/or physiological deviations in animals early and to initiate appropriate countermeasures to maintain or enhance health and well-being. This is not only relevant for farmers and veterinarians but also of societal significance. This interdisciplinary training program offers five PhD candidates the opportunity to work as a team on contributing to a more sustainable agriculture with improved livestock farming. The research focus consists of applied basic research, particularly in the application of methods of Explainable Artificial Intelligence (XAI) as well as image and video analysis (Computer Vision, CV), to be used for monitoring livestock.
09:30 am	<b>Keynote Lecture</b> Precision Livestock Farming – from current applications to future possibilities Tomas Norton <i>M3-BIORES, KU Leuven</i>	
10:00 am	PresentationsCurrent challenges in animal husbandryJohannes BaumgartnerVetmeduniPresentation of PLFDoc and affiliated institutionsMichael IwersenVetmeduniMargrit GelautzTU Wien	<b>Our Guest Speaker</b> Tomas Norton is leading a research group in Precision Livestock Farming (PLF) in the Division of Animal and Human and Health Engineering (group of M3-BIORES) at the KU Leuven. He holds a PhD in Biosystems Engineering from University College Dublin (Ireland) and is a Fellow of both the Institute of Agricultural Engineers (FIAgrE) and the International Academy of Agricultural and Biosystems Engineers (FiAABE). His current research focus is on PLF applications, focussing on modelling and monitoring of animal responses for improved welfare, health and productivity. He is PI and co-PI on collaborative National and International projects funded by the Belgium government, H2020 and USA. He is author of 80+ SCI publications, 50+ conference proceedings, 10 book chapters and co-editor of one book. He has given 20+ keynotes/ invited presentations on his research. Currently he is co- coordinator of courses on Measuring, Modelling and Managing Bio-responses and Sustainable PLF at the KU Leuven. Since 2018 he is Chair of Section 2 of International Commission of Agricultural and Biosystems Engineering (CIGR). He also acts as Editor-in-
11:00 am Date Time Location	Viktoria Dorfer and Stephan Winkler University of Applied Sciences Upper Austria, Campus Hagenberg Get-together & Buffet December, 7 <sup>th</sup> 2023 09:00 to 12:00 Vetmeduni Vienna, "Festsaal" (Building CA, 1 <sup>st</sup> floor) Veterinärplatz 1	

Please register by 01.12.23 via email to anna.grasser@vetmeduni.ac.at

1210 Vienna

## PLFDoc – Precision Livestock Farming (PLFDoc)

stock Farming (PLF) in the p of M3-BIORES) at the KU rsity College Dublin (Ireland) IAgrE) and the International His current research focus is ig of animal responses for on collaborative National and 20 and USA. He is author of napters and co-editor of one research. Currently he is conaging Bio-responses and of Section 2 of International R). He also acts as Editor-in-Chief at the Elsevier journal Computers and Electronics in Agriculture. He is a series editor for the upcoming Springer Nature Book Series: Smart Animal Production and Springer Nature Encyclopedia of Smart Agricultural Technologies.