#### Prof. Adriana Tavares

Prof. Adriana Tavares graduated from the School of Health Technology of Porto (ESTSP-IPP), Portugal, with a Nuclear Medicine BSc (Hons.) degree in 2007. She has worked for over 15 years in clinical and preclinical radionuclide imaging and obtained a Master's degree in Biomedical Engineering from the Faculty of Engineering of the University of Porto, Portugal, in 2009, as well as, a PhD degree in radiotracer development from the Faculty of Medicine of the University of Glasgow, UK, in 2011. Post-completion of her PhD, Adriana took on a position as Image Processing Analyst and later Imaging Consultant at Molecular NeuroImaging (MNI), New



Haven, USA. Currently, Adriana is a Chancellor's fellow in Positron Emission Tomography (PET) imaging and the head of the preclinical PET facility at the University of Edinburgh, UK. Her research is focused on developing new PET radiotracers and novel methods of analysis of PET data. Adriana is the co-chair of the STANDARD group of the European Society of Molecular Imaging (ESMI), founder of the "PET is Wonderful" group (<u>www.petiswonderful.org</u>), and member of the Molecular Imaging Committee of the Scottish Imaging Network: A Platform for Scientific Excellence (SINAPSE).

#### Dr. Claudia Calcagno Mani

Claudia Calcagno Mani, M.D., Ph.D., is an employee of Tunnell Government Services (TGS), tasked as Associate Supervisor/Study Director of Immunology and Imaging (contractor) at NIH NIAID Division of Clinical Research (DCR) biosafety level 4 (BSL-4) facility, the Integrated Research Facility at Fort Detrick (IRF-Frederick) in Frederick, MD, USA. Dr. Calcagno comes from a highly interdisciplinary background in medicine, computational biology, and medical imaging that stemmed from a very early interest in applying engineering, computational, and mathematical methods to achieve a



better understanding of disease mechanisms. Her doctor of medicine thesis (University of Genoa, Italy) investigated the development of a cellular automata-based computational model of T CD8 cell memory to investigate antigen cross-reactivity and attrition. During her doctor of philosophy degree work in Computational Biology at the Mount Sinai Graduate School of Biological Sciences/New York University and post doctoral and junior faculty years at Mount Sinai, she focused her research on in vivo, non-invasive, quantitative imaging of inflammation. Her research has mainly focused on developing, validating and applying novel, multi-modality, image acquisition and quantitative analysis methods for non-invasive assessment of endothelial permeability, inflammation and the immune response in atherosclerosis and cardiovascular disease. In terms of imaging modalities, these studies employed magnetic resonance imaging (MRI) and positron emission tomography (PET), either combined with computed tomography (CT) or MRI in animal models ranging from mouse to rat, rabbits, sheep, pigs and nonhuman primates. At the IRF-Frederick, Dr. Calcagno will apply her extensive knowledge of quantitative multi-modality pre clinical imaging to aid in the characterization of the pathophysiology and evaluation of countermeasures of pathogens in the BSL-4 environment.

# Dr. Elisabeth Kugler

Dr Elisabeth Kugler is a scientist at the interface of biology, advanced microscopy, and biomedical image analysis. Her interests are to understand the basic cellular processes in neuroscience and how different cell types spatially and functionally integrate. As University College London Research Fellow, she develops the 3D glia analysis tool GliaMorph and established an image-based computational model of retinal neurovascular unit development using advanced in vivo imaging data. For her PhD at the University of Sheffield, she developed ZVQ an image analysis pipelines for the zebrafish brain vasculature. In addition to this she characterised a previously undescribed cell membrane behaviour in brain vessels, termed kugeln.



# Dr. Enzo Terreno

Prof. Enzo Terreno is currently full professor of General and Inorganic Chemistry at the Department of Molecular Biotechnology and Health Sciences at the University of Torino, leading the research activities at the Centers of Molecular and Preclinical Imaging. He is the coordinator of the Multi Modal Molecular Imaging (MMMI) Italian Node within the Euro-Bioimaging European Infrastructure. His research interests are mainly focused on the design and preclinical validation of imaging probes for in vivo diagnostic and theranostic applications, with a special attention on nanotechnology. He is co-author of more than 150 papers on peer-reviewed journals, several book chapters and international patents.



## Prof. Freek Beekman heads

Prof. Freek Beekman heads the section Biomedical Imaging at TU Delft and is Founder/CEO/CSO of MILabs B.V. He (co-)authored 165 peer reviewed journal papers and several book chapters and is the inventor of 16 life patent families. He was presented with several national & international awards for scientific and innovative contributions to biomedical imaging. His research interests include the development of imaging detectors, image reconstruction and imaging systems (SPECT, PET, Optical Imaging, X-ray CT). Recent awards include the 2013 NWO Physics Valorization Award, both the 2015 and 2018 World Molecular Imaging Society Innovation



Award, the 2017 SNMMI Edward Hoffman Memorial Award and the 2021 UCSF Hasegawa Memorial Award. Under Freek's leadership MILabs (<u>www.milabs.com</u>) became a leader in SPECT, PET, CT, Optical and hybrid imaging systems with an unsurpassed performance, used world-wide in many high ranked research institutes. Today MILabs is part of the Rigaku group.

#### Dr. Giannis Zacharakis

Dr. Giannis Zacharakis is a Principal Researcher at the Institute of Electronic Structure and Laser – Foundation for Research and Technology (FORTH – IESL) and the Head of the Laboratory for Biophotonics and Molecular Imaging. He has served as the Vice President (2018 –2019) and President (2019–2020) of the European Society for Molecular Imaging (ESMI) and he has served two terms as a Member of the Council of the same Society (2014–2018). He is also the elected vice-president of the board of researchers at FORTH. He received his BSc in Physics in 1997 and his PhD in Biomedical Imaging in 2002 from the University of Crete. During



2003 and 2004 he has been a Research Fellow in Radiology at Harvard University, Cambridge MA USA. Between 2005 and 2009 he has been a Research Associate at FORTH-IESL and was promoted to Research Scientist between 2009 and 2016. In 2017 he was elected in his current position. His main fields of interest are Biophotonics, Biomedical and Optical Imaging focusing on developing novel tools and key enabling technologies for imaging biological processes in living systems, ranging from cells to organs to whole organisms.

#### Prof. Kristen M.Meiburger

Prof. Kristen M. Meiburger received her Master's Degree in Biomedical Engineering from the Politecnico di Torino, Torino, Italy, in 2010. In 2012 she began her Ph.D. in Biomedical Engineering at the Politecnico di Torino and obtained her Ph.D. degree in March 2015 with a thesis entitled "Quantitative ultrasound and photoacoustic imaging for the assessment of vascular parameters". In 2013/2014 she was a visiting Ph.D. student at the Ultrasound Imaging and Therapeutics Research Laboratory at the University of Texas at Austin, Austin, Texas under the supervision of Prof. Stanislav Emelianov where she began her research on photoacoustic imaging. In 2015 she was a visiting research



scholar at the Biomedical Simulation Laboratory at the University of Toronto, Toronto, Ontario. She is mainly active in the field of biomedical image processing, with a main focus on vascular network analysis using biomedical optical imaging methods (i.e., optical coherence tomography angiography, photoacoustics) and radiomics and deep learning applications.

# Dr. Linda Chaabane

Dr. Linda Chaabane received her Master's in Phiysics at the NMR unit at the University of Lyon (France). She started to develop high resolution MRI and home built radiofrequency coils for assessing atherosclerosis plaques as part of her PhD training in collaboration with radiologists from the Hospices Civils de Lyon. Since 2009, she moved to a scientific research institute, one of the largest in Italy, where her role was to develop a new MRI approach both as a researcher but also to implement advanced imaging services for a large spectrum of disease-related models to support user's scientific projects. The past 25 years she has worked within research centres and pharmaceutical companies.



# Dr Luca Menichetti

Starting from a background in the radiochemistry of Transition Metals at JRC-Institute for Transuranium Elements (Karlsruhe, Germany), LM moved his interests in the field of tracer chemistry for medical applications for the development of radiopharmaceuticals at the National Research Council Institute of Clinical Physiology (CNR IFC) in Pisa. LM achieved the PhD in "Design, Drug Development and Bio- Pharmaceutical Testing" at the University of Pisa, and the Specialization in Clinical Biochemistry at the Faculty of Medicine of the University of Pisa. LM started his independent research career as a Researcher at CNR IFC (2009): now LM leads a research



group with expertise in nuclear and molecular imaging, MRI/MRS and nanotherapeutics. LM is contract Professor for Material Science and Nanotechnology at University of Pisa and since 2015 is a contract Professor at the Master in Drug Design at the University of Siena.

## Prof. Nicola Belcari

Prof. Nicola Belcari has been conducting his scientific research in the field of Medical Physics since the year 2000. His activity has been mainly focused on the development of new radiation detectors and their application to in-vivo molecular imaging. In particular, these applications have been focused on the construction of positron emission tomography (PET) systems dedicated to pre-clinical imaging (PET/CT), brain imaging (PET/MR) and monitoring of hadrontherapy treatments. He had an active role in various national (CoFIN, PRIN) and international projects (FP7) dedicated to the



development of novel nuclear medicine imaging systems and related technologies. His major research achievements have been the development of the PET component of the TRMAGE PET/MR/EEG brain scanner and the design of next generation TOF-PET detectors achieving sub-mm resolution and sub-200 ps time resolution (UTOFPET). A peculiarity of his work has always been the attention to the possible spin-offs in the industrial field, evidenced by technology transfer contracts with national and international companies for which he was and is responsible for research. These collaborations have led to the commercialization of various products of the research carried out such as the preclinical tomograph called IRIS PET/CT which is today distributed worldwide by the French company Inviscan s.a.s.

## Dr. Patricia lozzo

Dr. Patricia lozzo, MD, PhD, Certified Specialist in Endocrinology-Metabolism and in Nuclear Medicine, holds the position of Research Director, leading The Endocrinology-Metabolism & Nuclear Medicine Unit and the Centre of Experimental Biomedicine at CNR-Pisa. She has conducted her research on obesity, diabetes, and related diseases for 30 years, and has long worked abroad in USA (University of Texas), UK (Imperial College, Hammersmith Hospital, London), Finland (University of Turku), where she keeps active collaborations, docent position, and supervising tasks. Her research interest focuses on the imaging of tissue metabolism and function in human and animal models, to understand the



pathogenesis and mechanisms of obesity, diabetes and related complications, and to identify new treatment targets. For the introduction of innovative research tools/results in diabetes research, she has been recipient of the EFSD/Lilly Fellowship 2005, the Novartis Prize in Diabetes 2007, and habilitation as Full Professor of Diagnostic Imaging in 2012. She has been and/or is principal investigator of 30 funded projects/activities (including Coordination of 2 European Consortia), member of 16 Expert Panels of Funding Bodies (e.g., MIUR, MISE, EU– H2020, and UK, NL, AT, FR Entities), member of Scientific Society Commissions (SIO, EASO, CODHy), founding member of the DIAB–IMAGE Study Group (EASD), Advisor, Task–Force and Organizing Committee member of ILSI–Europe (public–private interaction), tutor/supervisor of 41 Master/PhD students, member of Commissions of foreign doctorates,

#### Dr. Peter Kesa

Dr. Peter Kesa received his PhD degree in Biochemistry from the P. J. Safarik University in Kosice (Slovakia). He is currently employed at Fujifilm Visualsonics, Inc. as a Pre-Clinical Application Specialist. He did postdoc at Adam Mickiewicz University in Poznan (Poland) at the Institute of Acoustic. Then, he moved to Prague and has started as a scientist at the Center for Advanced Preclinical Imaging (Charles University). His research interest includes preclinical imaging of rodents by high-frequency ultrasound and photoacoustic imaging focusing on in vitro and in vivo testing of different contrast agents, biodistribution studies and tumor imaging as well.



# Eng. Valeria Grasso and Eng. Hanna Cwieka

Hanna and Valeria are early-stage researchers of the MgSAFE European Training Network (MSCA).

Hanna investigates the correlation between material properties, degradation, and bone-to-implant contact in biodegradable magnesium-based alloys.

Valeria develops machine learning algorithms for Ultrasound and Photoacoustic imaging to monitor the tissues surrounding a biodegradable implant.

