p53Dundee 2025
Speaker Profiles

The international p53/p63/p73 isoforms workshop in cancer and ageing:
5th International p53 Isoforms Meeting and 10th International p63/p73 Workshop

10 June - 13 June 2025

Dundee, Scotland, UK

Contents

Alessandra Bisio

Alessandra obtained her PhD in 2010 from University of Genova, working in the Molecular Mutagenesis Unit at the National Cancer Research Institute, under the supervision of Prof. Alberto Inga on a project focused on the functional characterization of non-coding germline variants in the 5'UTR of CDKN2A identified in melanoma patients. During her PhD, Alessandra joined the laboratory of Experimental Medicine led by Prof. Borlak at Fraunhofer Institute (ITEM) in Hannover, Germany to study the mechanism of doxorubicin induced cardiomyopathy in breast cancer patients. She then returned to Italy as a post-doctoral fellow in the Laboratory of Transcriptional Network at CIBIO, University of Trento, where her main research interest has been the understanding of the underlying mechanisms for the post-transcriptional/translational regulation of $p16^{INK4a}$, such as the demonstration that the $p16^{INK4a}$ 5'UTR can act as a cellular IRES, particularly in response to hypoxia, and that it is a target of the YBX1 RNA binding protein (2011-2015). During the same period, she was also interested in studying the transcriptional crosstalk between p53 and Estrogen Receptor (2013), and between p53 and NFκB driven by chemotherapy-induced responses in luminal breast cancer (2014). Moreover, she demonstrated the p53-dependent post-transcriptional (via microRNAs (2013) and translational control (via RNA binding proteins, 2014) of target genes, finding new layers of complexity in the p53-driven cellular responses. In 2016 Alessandra established her independent Laboratory at CIBIO, University of Trento, focusing on innovative cancer treatments based on particle therapies (Proton and heavy ions therapies). Since 2024, she is an Associate Professor of Genetics at the University of Trento. More recently, her group demonstrated the relevance of altered p53 isoforms' expression in Uveal Melanoma aggressiveness and response to therapy (2025).

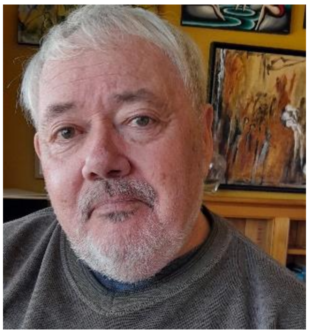
Jean-Christophe Bourdon

Dr. Jean-Christophe Bourdon earned his PhD in Cellular and Molecular Biology from Paris XI University in 1997 and is currently a Senior Lecturer at the University of Dundee's School of Medicine, leading the Molecular Oncology lab since 2010. Dr. Bourdon was also the co-director of the Inserm-European Associated Laboratory at Toulouse University, France from 2006 to 2010 and the CNRS-European Associated Laboratory at the University de Lorraine, Nancy, France from 2012 to 2018. In 2012, Dr. Bourdon was honoured with a prestigious fellowship from Breast Cancer Now.

He is internationally renowned for discovering p53 isoforms in 2005. His work has revealed that TP53, the most frequently mutated gene in cancer, produces at least twelve isoforms, each with unique biochemical activities. His lab has developed scientific tools (protocols, methods, and antibodies specific to the different p53 isoforms) that he makes available to clinicians and scientific communities. Dr Bourdon aims to integrate the p53 pathway into cancer diagnostics and therapies, including CAR-T cells and immunotherapy. His research also extends to ageing and degenerative diseases, focusing on liquid biopsy technologies and new therapeutic compounds.

Looking forward, he aims to further the clinical application of p53 pathway in diagnostics and therapeutics, while pursuing commercial ventures in this field. Dr Bourdon is Chief Scientific Officer of TayBiosciences, a start-up that manufactures and commercialises antibodies specific to the p53 pathway.

Antony Braithwaite



Antony Braithwaite's PhD and first postdoc were as an adenovirologist with Alan Bellett (discovered terminal protein - the DNA primase) in Canberra (Australia) in the early 1980s. I was looking for the viral gene that induced cell DNA replication. It turned out to be one of the E1a proteins (1983); part of the cell transformation region of adenovirus. As E1a was thought to function similarly to SV40 Large T protein and the then newly discovered protein p53, I went to work with John Jenkins (first cloned mouse p53 cDNA) in Oxted (UK). I showed that p53 surprisingly inhibited SV40 DNA replication (1987). Then returning to Canberra I investigated whether the other transforming protein of Adeno (E1b55k) which binds to p53, affected viral or cell DNA replication (1997). It did not. Then I moved to Dunedin, NZ. At that time the oncolytic adenovirus ONYX-15 (E1b deleted) was reported to target and kill cells with mutant p53 (ie cancer cells). We found that the mechanism proposed for cell death, being dependent on mutant p53, was incorrect (1998). In the early 2000s, not being able get funding to work on adenoviruses any more (not relevant the referees said) we made a couple of transgenic mutant p53 mice – one had a large deletion in the N-terminus and looked like the recently described D133p53 human p53 isoform. So we called it D122p53 in deference to the isoform terminology (2010). This mouse had interesting immunopathologies. We have been using this mouse as a model of the human D133p53 isoforms ever since.

Marco Candeias

Marco obtained his PhD in 2007 from Paris Diderot University under the direction of Robin Fahraeus who co-discovered the first human short isoform of p53 (p47 or D40p53). During his PhD, Marco discovered D40p53's IRES (Internal Ribosome Entry Site or Internal Regulator of Expression Site) in the coding region of p53 mRNA (2006) and was one of the first to show that an mRNA (p53 mRNA) can possess non-coding trans-acting regulatory capacities (2008). During his post-doc between Paris-INSERM and Kyoto University, Marco first observed that an RNA can have the capacity to sequester and inactivate proteins in the nucleolus (2012). Marco became a group leader in Kyoto University in 2010 and showed that many of what were considered to be "mutant p53 functions" are naturally present in the wild type p53 products D160p53 and D133p53. In fact, Marco showed that p53 is not only a tumour suppressor but also a proto-oncogene, as some mutations in cancer activate the translation of D160p53 and D133p53 turning p53 into an activated oncogene with roles in survival, proliferation and invasion (2016). In 2016 Marco started two associated laboratories (A.K.A. the Molecular and RNA Cancer Unit) at the Medical School of Kyoto University (Japan) and at the National Health Institute (Portugal). During that period Marco's group elucidated the mechanism of p53 proto-oncogene activation in normal physiology in response to stress via eIF2alpha phosphorylation and activation of a newly identified IRES in p53 mRNA that leads to the synthesis of D160p53. D160p53 has much stronger affinity for full-length (FL) p53 compared to other isoforms and induces a switch in p53 target genes maintaining cell viability under stress (2023). More recently Marco joined the Multidisciplinary Institute of Ageing (MIA-Portugal) and identified a new p53 isoform, D246p53, with a role in senescence and organismal ageing (2025).

Eleonora Candi

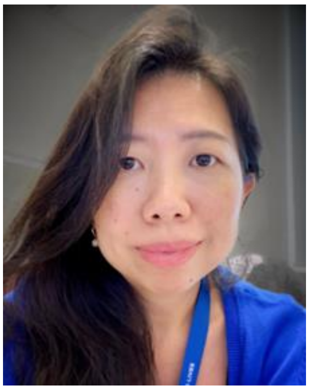
Eleonora Candi, received the Ph.D. degree at the Department of Experimental Medicine and Biochemical Sciences of University of Rome “Tor Vergata”, in 1995. She completed her pre- and post-doctoral training from 1993 to 1998 at the Skin Biology Branch, NIAMS, National Institutes of Health, Bethesda, MD, USA, under the supervision of Dr. P.M. Steinert, focusing on transglutaminases and their substrates. From 1999 to 2001, she received a Telethon Research Fellowship to study the role of transglutaminases in the genetic disease lamellar ichthyosis. Currently, she is a full professor of Biochemistry at the University of Rome “Tor Vergata”, Department of Experimental Medicine. Her research interests include the role of p63, a homolog of p53, and non-coding RNAs in epithelial development and tumor formation, using both in vitro and in vivo models. Recently, she has been investigating the role of metabolism in normal epithelia and diseases.

Xinbin Chen

Dr Chen’s laboratory has been working on the p53 family of tumor suppressors, including various isoforms of p53, p63 and p73. Dr Chen’s group found that the p53 family transcriptionally regulates ferredoxin reductase (FDXR), an enzyme necessary for iron-sulfur cluster biogenesis and mitochondrial iron homeostasis.

For this meeting, Dr Chen will discuss recent findings that through FDXR and its substrates ferredoxin 1 (FDX1) and FDX2, the p53 family is critical for cellular iron homeostasis.

Chit Fang Cheok



Chit Fang Cheok’s research focuses on identifying tumor vulnerabilities in cancer cells for personalized therapeutic strategies. Her interests have broadened to encompass synthetic lethal pathways in DNA damage response and cancer metabolic networks. Chit Fang received her B.Sc (Hons) from Imperial College London and her DPhil degree from the University of Oxford. After her postdoctoral training in A*STAR, she took on an independent position as a Group Leader at the FIRC Institute of Molecular Oncology Foundation, IFOM (Milan, Italy). Currently, she leads the group Molecular Therapeutics in Cancer and Aging at IMCB, A*STAR, and also as an Assistant Professor in the Yong Loo Lin School of Medicine, NUS, and Research Director at the Department of Pathology, expanding her interest in translational research to build on and convert molecular knowledge about cancer pathways into actionable targeted therapies and molecular diagnostics. Her diverse interests in replication stress pathways and cancer metabolic pathways formed the basis of her work in identifying druggable pathways as therapeutic modalities.

Claudia Christowitz

Coming Dr Claudia Christowitz is a postdoctoral research fellow in the Department of Physiological Sciences at Stellenbosch University, South Africa. She obtained several qualifications from Stellenbosch University, including a BSc Human Life Sciences with Psychology (2015), a BSc Honours in Physiological Sciences (2016), an MPhil in Cancer Science (2018), and a PhD in Physiological Sciences (2025). Her professional experience includes a DST-NRF Internship Programme under the National Research Foundation (2019-2020), a flow cytometry assistant at the Central Analytical Facility (2024), biostatistics teaching assistant at the African Cancer Institute (2018-2022), and a demi and practical convenor at the Department of Physiological Sciences, Stellenbosch University (2023-2024). She has co-supervised various BSc Honours and MPhil students and was involved in academic leadership roles, including serving on the Physiology Postgraduate Student Society Committee (2023) and as the MPhil Class Representative (2017 – 2018).

Her research focuses on cancer biology, immunology, and vascular pathology. She published several peer-reviewed articles and presented her work at numerous national and international conferences. In 2023, she was invited to attend the Lindau Nobel Laureate Meeting (Physiology and Medicine) and Baden-Württemberg Post Conference Programme for Young Scientists (Digital Health: Artificial Intelligence and the Transition to Applied Sciences) in Germany. She contributed to the development of a functional genomics pipeline for a personalized medicine platform (known as the pathology-supported genetic testing framework) established in South Africa, to improve the classification of variants of uncertain significance and thereby enhance the clinical utility of whole exome and genome sequencing. This framework was presented at a webinar held by the EU-Africa PerMed consortium. In addition, she conducted functional studies to investigate the impact of a rare germline *TP53* variant identified in breast cancer patients with the Li-Fraumeni-Like syndrome using a translational *ex vivo* model.

Yari Ciribilli

Prof Yari Ciribilli is an Associate Professor of Genetics and Group Leader of the Laboratory of Molecular Cancer Genetics (LMCG) at the Department of Cellular, Computational and Integrative Biology (CIBIO), University of Trento, Italy.

His group is interested in understanding the role of transcriptional regulators in the aggressiveness of cancer cells, with the aim to potentially target them therapeutically.

For several years, he has dedicated his effort in studying the biology of p53 as a transcription factor, both in its wild-type or mutant form; in the last 10 years he decided to focus more specifically on the analysis of the impact of p53 isoforms' altered expression in cancer aggressiveness and resistance to standard-of-care therapies. Noteworthy, his group has developed different tools to study the p53 isoforms: a) vectors to over-express each single p53 isoform; b) cancer cell lines (both in the context of *TP53* null or *TP53* wild-type background) stably over-expressing single p53 isoforms; c) optimized two separate 2-step nested PCR approaches to a) study the *TP53* status (an adaptation of the standard FASAY assay in yeast) and b) quantify the p53 isoforms' expression at mRNA level (it discriminates 9 out of the 12 p53 isoforms).

Volker Dötsch

Volker Dötsch obtained his PhD from the ETH in Zürich. As a postdoctoral fellow he used NMR to determine the structure of protein-DNA complexes at the Harvard Medical School. In 1998 he moved as assistant professor to the University of California San Francisco (UCSF). In 2003 he was appointed professor at the Institute of Biophysical Chemistry of Goethe University in Frankfurt. His research interests focus on the structural and functional characterization of members of the p53 protein family, in particular p63 and its involvement in genetic quality control in germ cells. His lab is characterizing the mechanisms that keep TAp63a in an inactive conformation in resting oocytes and how it gets activated following the detection of DNA damage. Recently, his lab developed Designed Ankyrin Repeat Proteins (DARPins) as tools to study the p53 protein family that can also be used as inhibitors or stabilizers.

Hakim Echchannaoui

Hold a MSc. degree in Biochemistry (1998) from the University of Bourgogne (Dijon, France) and a PhD (2004) in innate immunity from the University Hospital Basel (Switzerland). Three years post-doctoral fellow in Lausanne CHUV (Switzerland) and a second post-doctoral fellow in cellular cancer immunotherapy in the Department of Hematology at the University Medical Center Utrecht (The Netherlands). He moved to Mainz in 2010 to lead a research group at the Department of Hematology and Oncology at the University Medical Center Mainz (Germany).

His research focuses in cellular treatment optimization for cancer immunotherapy. He has a longstanding expertise in the generation and improvement of chimeric antigen receptor (CAR) and T-cell receptor (TCR) targeting tumor antigens and preclinical mouse models of adoptive T cell therapy. His group is particularly interested in deciphering mechanisms that lead to premature exhaustion and dysfunction of gene modified (CAR/TCR) T cells, a hallmark often associated with poor therapeutic outcome in cancer patients. The group is also integrating novel strategies using genomic and transcriptomic approaches and synthetic biology to target newly identified patterns of T cell dysfunction to improve metabolic and cellular fitness of T cells for effective and durable TCR cellular therapy. In this context, the group recently uncovered for the first time a new role of Δ133p53α as a transcriptional enhancer of metabolic and cellular fitness in tumor antigen-specific TCR-T cells, which could be exploited to improve resilience and robustness of T cells for adoptive cellular cancer immunotherapy. These pioneered findings were recently confirmed in CAR-T cells by Curtis Harris and Carl June.

Martin Fischer

Martin Fischer is a biochemist specializing on genome regulation and molecular oncology. He is currently a Staff Scientist and Principal Investigator at the Leibniz Institute on Aging in Germany, where he leads innovative research to understand the molecular mechanisms of gene regulation and cancer. His work focuses on how transcription factors such as p53, the DREAM complex, and RFX7 control gene expression programs. He also holds an adjunct faculty position at the Medical School of Friedrich Schiller University Jena, where he completed his habilitation in Molecular Medicine in 2020.

Martin earned two doctoral degrees from the University of Leipzig, in Biology (2014) and Molecular Oncology (2015), followed by a postdoctoral fellowship at the Dana-Farber Cancer Institute, Harvard Medical School. His recent studies have helped define principles of genome regulation by integrating transcription factor binding with local chromatin dynamics and transcription control.

Martin's contributions to cancer research have been recognized with multiple honors, including the BBA Rising Stars in Biochemistry and Biophysics Prize 2024 for his work on the p53 gene regulatory network. He is also a dedicated mentor and peer reviewer for over 40 scientific journals and major funding organizations, sharing his expertise to support advancements in cancer biology and genomics.

Bjørn Tore Gjertsen

Bjørn Tore Gjertsen, M.D., Ph.D., is Professor of Haematology, University of Bergen, and Senior Consultant Haematologist at Haukeland University Hospital. From 2016–2022 he served as co-Director for Centre for Cancer Biomarkers (CCBIO) Norwegian Centre of Excellence, University of Bergen. In 2010-2018, he developed the phase I clinical trials unit at Haukeland University Hospital. His clinical practice is focused on clinical trials in CML and AML, and several early phase clinical trials in AML has been established with single cell biomarker programs for disease profiling and response evaluation. His laboratory is working on intracellular signal transduction, p53 regulation, single cell analysis and immune cell profiling for early response evaluation in myeloid blood cancer. In 2024 Gjertsen was awarded a five-year KG Jebsen Centre for Myeloid Blood Cancer, focused on signalling targeted therapy guided by single cell signalling profiles tumor and immune cells. Funding support: Norwegian Cancer Society, the Helse Vest Health Trust, the Research Council of Norway, EU TRANSCAN-3 and ERA PerMed. Dr. Gjertsen is founding member and chair of the Norwegian AML Group and the Nordic AML Group and is member of the Nordic CML Study Group.

Kerstin Kampa-Schittenhelm

Head of Translational Laboratory Research Dept. of Medical Oncology, HOCH health Ostschweiz, Kantonsspital St. Gallen Research group leader Laboratory for Translational Experimental Hematology and Oncology, Medical Research Center (MFZ), St. Gallen

Daniela Kandioler

Daniela Kandioler was born in Austria in 1967. She is a professor of general surgery at the Medical University of Vienna (MUV) specialising in visceral, thoracic and vascular surgery, as well as intensive care medicine. She also holds an MBA. In 1993, she set up a molecular genetics laboratory at the MUV's surgical research laboratories and obtained government approval to conduct genetic analyses on humans, focusing particularly on patients with Li-Fraumeni syndrome.

The following year, she founded the Medical University of Vienna's p53 Research Group. In 2011, she was granted two patents for a special method of p53 gene-specific sequencing and TP53 interaction with cancer therapies. In 2013, she founded MARK53 Ltd, a research start-up funded by the Austrian Federal Ministry of Economics.

She is the principal investigator of several prospective phase II and phase III randomised clinical trials, which aim to demonstrate the interaction between TP53 status and response to various cancer therapies. These trials have focused on lung, colon, rectal, breast and oesophageal cancers.

Since 2000, she has also run a private outpatient practice. One of her main goals is to increase the efficiency of cancer therapy for her patients and to reduce side unnecessary side effects by enabling them to receive TP53-adapted cancer therapy.

Pavitra Kannan

Dr. Pavitra Kannan is a Researcher in the Department of Microbiology, Tumor and Cell Biology at the Karolinska Institute. After training in chemistry, she received her Ph.D. from the Karolinska Institute, where she developed imaging probes to investigate blood-brain barrier function in brain diseases. During her postdoctoral training at Oxford University, she developed novel imaging methods to study tumor vessel responses during antivascular and radiation therapies. Upon returning to KI, she joined the p53 lab of Professor Sir David Lane with a Marie Skłodowska-Curie Fellowship.

Dr. Kannan's current research uses pharmacology, imaging, and computational approaches to understand how blood vessels mediate resistance to cancer treatments. In recent work, her team has used MDM2 inhibitors and zebrafish embryo models to study the role of p53 in blood vessel function. She is currently funded by a Radiotherapy Fellowship from the Swedish Cancer Society.

Konstantinos Karakostis

My research expertise spans Molecular Biology, Biochemistry, Cancer Research, Molecular Diagnostics, and Genomics. I hold a BSc and MSc in Chemistry and Protein Biochemistry from the University of Crete and FORTH IMBB (Greece) and my PhD in Molecular Developmental Biology (Marie Skłodowska-Curie Actions program at the University of Stuttgart; CNR; CNRS).

Postdoctoral Research - Paris, France: Four years of cancer signaling research at INSERM & St. Louis Hospital, focusing on the TP53 tumor suppressor pathway, which yielded significant insights into mechanisms regulating cell cycle control, apoptosis, and oncogenesis. - Athens, Greece: Four years as Scientific R&D Director at a biotech firm, where I developed innovative molecular clinical diagnostics services, including CE-IVD certified pharmacogenomic PGx panels advancing personalized medicine. - Barcelona, Spain: Three years on functional genomics and structural variants with long-read Nanopore sequencing as a Maria Zambrano fellow at the Autonomous University of Barcelona & the Hospital del Mar Research Center (IMIM) at PRBB.

Since May 2025, I am a PI at the Department of Biochemistry & Molecular Biology, Faculty of Medicine and Dentistry, University of Valencia. My primary research focuses on the cellular and structural interactions involved in DNA damage sensing and DNA damage response signaling pathways in cancer. I focus on the p53 tumor suppressor employed as a model to investigate gain-of-function mutations in human cancer. Additionally, the group explores the evolutionary conservation of p53 from invertebrates to mammals to better understand its roles in development and tumor suppression. Currently I collaborate with laboratories across Europe, including Spain (PRBB), France (INSERM), the UK (Oxford University), the Czech Republic (Masaryk Memorial Cancer Institute), Sweden (University of Umeå), and Greece (NHRF).

Dagmar Kulms

Dr. Kulms studied Biology and Educational Science at the Justus-Liebig-University of Gießen, Germany. She did her PhD at the Institute of Biochemistry at the Medical University of Lübeck, Germany, studying thermostable protein structures of archaebacterial. Subsequently, Dr. Kulms decided to switch gears and startet her career on cell death and signal transduction as a post at the Laboratory of Cell Biology, Department of Dermatology of the University of Münster, Germany, and finished her Habilitation in: „Molecular and Cellular Biology“ in 2003.

She continued her work on apoptotic networks including p53 and NFκB as an Assistant Professor at the Institute of Cell Biology and Immunology at the University of Stuttgart, Germany, and after 8 years became full Professor of Experimental Dermatology. Her group Is integrated into the National Center for Tumor Diseases at the Medical Faculty of the Technical University of Dresden, where it aims to identify sensitive nodes in the signal transduction network of cancer cells, in particular of malignant melanoma, that may serve as alternative therapeutic targets.

David Lane

Prof Sir David Lane is professor of tumour suppressor biology at the Department of Microbiology, Tumor and Cell Biology at the Karolinska Institute and the head of the A*STAR laboratory in Singapore. Sir David is credited with the landmark discovery of p53 and its role in cancer development. As the Chief Scientist of A*STAR, Lane advises and engages in scientific development across the Biomedical Research Council (BMRC) and the Scientific Engineering Research Council (SERC) at the strategic level. Lane is concurrently the Director of the p53 Laboratory, which primarily focuses on research on protein interactions and how to develop drugs to inhibit such interactions, using p53 as a model system.

Denis Maihöfer

Denis Maihöfer is a PhD student in the laboratory of Prof. M.L. Schmitz at the Institute of Biochemistry at the Justus Liebig University in Giessen, where he investigates the regulation of the tumor suppressor p53 through phosphorylation since November 2023. He obtained a Master's degree in Biology from Ruhr University Bochum (2023) and a Bachelor´s degree in Biology from the Justus Liebig University Giessen (2021).

María C Marín

Dr. Maria C. Marin is a Full Professor of Cell Biology and a researcher of the Instituto de Biomedicina (IBIOMED) at the Universidad de León. She earned her PhD at MD Anderson Cancer Center and later joined Dr. William G. Kaelin Jr.'s lab at Dana-Farber Cancer Institute, focusing her work on *TP73*, a p53 homologue. Her research explores p53-family genes in stem cell biology and morphogenesis. Currently, the group is focused on elucidating how alterations in the pathways regulated by these genes impact beyond development, particularly in brain tumors like glioblastoma, where the reactivation of neurodevelopmental signaling pathways can create a tumor-permissive microenvironment. Her team pioneered *TP73* role in neurogenic and vascular niches and patented a p73 inhibitor against glioma stem cells. They have developed a tool box of brain organoid models for disease study, with a current focus on glioblastoma.

Sunali Mehta

I began my scientific journey with a Bachelor of Engineering in India, where my interest in cancer research first took shape. This passion led me to Aotearoa New Zealand, where I completed an MSc at the Auckland Cancer Society Research Centre (ACSRC). I then joined Professor Cristin Print's laboratory at the University of Auckland for my PhD, focusing on the identification of prognostic biomarkers for stage II colorectal cancer patients.

Following my PhD, I undertook postdoctoral training with Professor Antony Braithwaite at the University of Otago, investigating how tumour biology is regulated by the cold shock protein YB-1 and the p53 isoform Δ133p53.

I am now a Sir Charles Hercus Fellow and Senior Research Fellow based in Dunedin, where I lead a cancer research laboratory dedicated to understanding the molecular mechanisms that drive tumour evolution. My group integrates genomic, cellular, and functional approaches to dissect how mutations in *TP53* influence the p53 isoform network, with a particular interest in how these alterations contribute to tumour adaptation, immune modulation, and therapeutic resistance. A core goal of our research is to translate these discoveries into clinically meaningful strategies for cancer prognosis and treatment.

Caterina Missero

Caterina Missero is Full Professor of Molecular Biology at the University of Naples Federico II and Principal Investigator at CEINGE – Advanced Biotechnology in Naples, Italy. She trained as a postdoctoral fellow at Yale University and later as a Research Scientist at Massachusetts General Hospital – Harvard Medical School. She established her independent research group in 2000 at the Telethon Institute of Genetics and Medicine (TIGEM), before moving to CEINGE in 2006. Her research focuses on the molecular mechanisms governing epidermal development and disease, with particular emphasis on p63, a master regulator of epithelial biology. Her work has elucidated key transcriptional, chromatin, and signaling networks involving p63, revealing its central role in skin morphogenesis, squamous cell carcinoma, and syndromic ectodermal dysplasias such as AEC and EEC syndromes. She has pioneered studies demonstrating that AEC is a protein aggregation disorder and has contributed to the development of therapeutic strategies based on small molecules and genome editing to restore p63 function. Prof. Missero has served on numerous international grant review panels and editorial boards, including the Journal of Investigative Dermatology. She was a board member of the European Society for Dermatological Research (ESDR), chaired its 2019 annual meeting, and held leadership roles within the Italian Society of Biophysics and Molecular Biology (SIBBM). She currently leads research programs funded by AIRC and Telethon focused on cutaneous squamous cell carcinoma and gene therapy for p63-related disorders.

Manuel Müller

Manuel Müller studied biochemistry at ETH Zürich and stayed on to pursue a PhD with Prof. Don Hilvert on primordial enzymes. His work was supported by a fellowship from the Scholarship Fund of the Swiss Chemical Industry and awarded with the ETH Medal. He then joined Prof. Tom Muir's lab at Rockefeller and Princeton University as a postdoctoral fellow (Swiss National Science Foundation) where he developed and applied chemical biology tools to study chromatin modifying enzymes, and how these enzymes contribute to epigenetic phenomena and diseases. In 2016, he joined the recently re-established chemistry department at King's College London as a Wellcome Trust/Royal Society Sir Henry Dale Fellow. His lab develops and applies chemical biology tools to study the function of post-translational modifications, including on p53. He received the 2021 Norman Heatley Award from the Royal Society of Chemistry for contributions to the field of posttranslational modifications, especially the use of protein chemistry to gain insight into molecular mechanisms of epigenetics processes and cancer.

Philipp Münick

Philipp Münick is a PhD candidate and research scientist at the Institute for Biophysical Chemistry at Goethe University in Frankfurt, Germany. His research focuses on the development and application of Designed Ankyrin Repeat Proteins (DARPins) as versatile tools for probing and modulating the p53 protein family.

In his doctoral work, he characterized DARPins targeting the hetero-tetramer formed by p63 and p73, leading to the first direct evidence of their existence in tissue and offering new avenues for understanding their role in epithelial biology and tumor development. He also pioneered a DARPin-based strategy to reactivate p53 in HPV-positive cells by blocking viral-mediated degradation, demonstrating a novel therapeutic approach to restoring tumor suppressor function in virus-associated cancers. This work has been recently published in Nature Structural & Molecular Biology titled *"DARPins as a tool to reactivate p53 in HPV positive cells."*

At the conference he will present work on DARPin-based bioPROTACS targeting the p53 family, highlighting the therapeutic potential of targeted degradation and the broader applications of engineered binding proteins in cancer biology.

Jinrong Peng

Jinrong Peng got his BSc in Sichuan University in 1984 and MSc in Shanghai Institute of Biochemistry in 1987. He then was appointed as an assistant lecturer at Fudan University. He received his PhD from John Innes Centre, a prestigious institute famous on plant molecular genetics, in 1993, and did his post-doc research in John Innes Centre from 1993-1999. He was appointed as a senior scientist by Institute of Molecular Agrobiology in 1999 and by IMCB in 2002. From later of 2008, he was appointed as a full professor by Zhejiang University. His lab mainly focuses on studying liver development and regeneration in zebrafish, and was one of the earliest lab in discovering p53 isoform delta113p53. He has published a series of high impact papers in top notch journals including Nature and Science.

Pierre Roux

Pierre Roux did his PhD in molecular biology in P. Jeanteur's laboratory in Montpellier before going to Munich for a post-doctoral internship with Prof. Axel Ulrich on tyrosine kinase receptors. On his return to France, he obtained a position as a research fellow at INSERM. He leads the "Dynamics of cancer cell invasion" group at the Molecular Biochemistry Centre of Montpellier (CRBM) since 1998. The team has an acknowledged expertise in the field of p53, Rho GTPases, migration and invasion. since their discovery of the link between p53 and cell invasion. They unraveled the link between p53 and cell migration and recently, the crucial roles of alternative spliced p53 isoforms in cell invasion and EMT. PR has led the group since 2002 and has coordinated and managed several multi-partner research programs. He has also experience in setting up CNRS spin-off companies. In 2008, he was behind the creation of Splicos SAS, now ABIVAX, and was involved in the discovery of a molecule called Splicos 464, now Obefazimod, an anti-inflammatory agent effective in chronic inflammatory bowel disease (IBD), whose clinical development is at the end of phase III in ulcerative colitis.

Morgan Sammons

Morgan Sammons, PhD is an associate professor in the Department of Biological Sciences and a member of the RNA Institute at the University at Albany, State University of New York. Professor Sammons earned his undergraduate degrees in Biology and Chemistry from the University of Toledo, his doctorate in Biology from Vanderbilt University, and completed his postdoctoral training at the University of Pennsylvania in gene regulation and epigenetics. The goals of the Sammons lab are to understand how information is encoded in DNA sequence, shape, and structure and how that information is decoded by transcription factors. Our primary "model system" is the p53 family of transcription factors which regulate a broad range of roles in human health and disease. We aim to explore how these interesting transcription factor paralogs perform shared and unique biochemical activities to generate novel physiological outcomes.

Mithun V. Shah

Mithun Shah, M.D., Ph.D., is an assistant professor of medicine and oncology, and consultant in the Division of Hematology. He has received several honors and awards for his research and clinical work, including the 2014 Merit Award from the Conquer Cancer Foundation of ASCO, the Paul Calabresi Program in Clinical-Translational Research at Mayo Clinic Cancer Center K12 Career Development Award, and the New Investigator Award from the Leukemia Research Foundation.

He has published more than 80 peer-reviewed articles in prestigious journals, such as Blood, JCO, and Haematologica, and has served as a reviewer for several journals and funding agencies. His research interests include therapy-related myeloid neoplasms, histiocytic disorders, and molecular and genomic predictors of outcomes in acute myeloid leukemia and stem cell transplantation.

Neda Slade

Dr Neda Slade is senior researcher at Ruđer Bošković Institute, Croatia, where she is the head of the Laboratory for protein dynamics and associate professor at Doctoral study of Molecular Biosciences University of Osijek. Since her postdoctoral training at Stony Brook University, USA, she has been involved in the p53 research exploring the p53 family members, particularly p73 and its role in tumors. After Dr Jean-Christophe Bourdon discovered p53 isoforms in 2005, she deepened her focus in the field of p53 family isoforms. She is particularly interested in interactions among the p53 family members that could modulate normal functions of the canonical p53 in tumors. The precise gene and protein expression as well as potential interactions offer a broad area for investigation of the molecular basis for their diverse biological functions. Recently, she has been dedicated to researching their role in acquired resistance to targeted therapy of melanoma. Notably, in 2019 together with colleagues Jean-Christophe Bourdon and Yari Ciribilli, she organized previous International p53 Isoforms Meeting in Dubrovnik, Croatia.

Tania Slatter

Associate Professor Tania Slatter, Head of Department for Medical Laboratory Science, School of Pharmacy, University of Otago, Dunedin, New Zealand. With expertise in laboratory medicine and molecular biology, my research is related to understanding how p53 and p53 isoforms affect the disease microenvironment, and how this can be manipulated for treatment. My molecular biology based research interests are in brain cancers, chronic kidney disease and more recently macular degeneration. My laboratory medicine based interests are in implementation of new diagnostic testing for molecular diagnostics, histopathology, and clinical biochemistry.

Artem Smirnov

Dr Artem Smirnov is an Assistant Professor at University of Rome Tor Vergata. He received his PhD from the same University in 2017, after which he worked as a postdoctoral fellow in Prof Xin Lu lab at University of Oxford (UK). During that period, he studied interplay between p63 and iASPP in skin carcinogenesis as well as p53-dependent regulation of human oncogenic viruses such as EBV and HCV. Since 2022 he is an Assistant Professor in Prof Eleonora Candi’s lab (Rome), where he studies the role of p63 throughout bladder cancer progression. His group is interested in understanding the dynamics of changes in p63 targetome during cancer evolution from low grade to muscle-invasive bladder tumours.

Diana Spiegelberg

Dr. Diana Spiegelberg is an associate professor specializing in biomedical radiation sciences at Uppsala University's Department of Surgical Sciences, where she leads a research group focused on innovative cancer diagnostics and therapies. She is a dedicated cancer researcher developing cutting-edge technologies in radioimaging and radiosensitizing treatments. Her work bridges molecular biology and clinical applications to advance personalized cancer therapies.

A central theme of Diana's research is the tumor suppressor protein p53 and its role in cancer treatment. She investigates how p53 influences cancer cell response to radiation and chemotherapy and explores the complex interplay between cancer treatment and the immune system, aiming to enhance immune responses and improve therapeutic outcomes.

Combining expertise in molecular mechanisms with translational research, Diana and her team strive to develop improved cancer diagnostics and treatment strategies that bring practical benefits to patients.

Luiza Steffens

Dr. Luiza Steffens Reinhardt is an early-career researcher specialising in cancer signalling, DNA damage response, and genomics. Her PhD research focused on targeting p53 isoforms in breast cancer, revealing their role in disrupting DNA damage response pathways. Currently, Luiza is a Clinical and Health Service Research Fellow at NSW Health Pathology and an Honorary Associate Lecturer at the University of Newcastle, Australia. Her ongoing work explores the clinical implementation of long-read sequencing and the identification of novel therapeutic targets for HER2+ breast cancers.

Chandra Verma

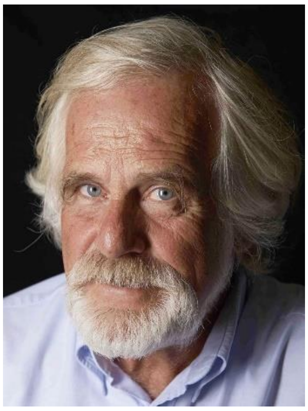
Chandra Verma leads a team in the Bioinformatics Institute (A*STAR, Singapore) focused on applying atomistic computational models to understand mechanisms in biology.

Working with colleagues in experimental labs in academia, hospitals, biotech, pharma, they use the understanding towards designing molecules, peptides, proteins, enzymes.

He has a deep interest in p53 and has been working with Sir David Lane since 2004, resulting in several insights into mechanisms of p53 and the design of stapled peptides as activators of p53. Prior to Singapore he was at the University of York, UK.

He has two spinoffs and a startup developing therapeutics in oncology and opthalmology.

Fritz Vollrath



Prof Vollrath is an evolutionary biologist studying the behaviour, ecology, life history and evolution of spiders and elephants. Currently, his main research focus is shifting from the folding of silk molecules to the function of p53 molecules. Key to an understanding of both proteins is the appreciation of their evolution and selection in the carrier organisms. Silk provides us with a unique bio-polymer material where properties are determined by molecular phase-transitions that are open to experimental probing. Elephant p53 presents us with a unique natural experiment and rare window into possible functions (and selection pressures) related to guarding the genome on many levels. This includes the link between p53 and temperature i.e. metabolism, which leads to interesting and testable hypotheses. Vollrath studied Biology and Physics at Freiburg and Göttingen followed by MSc research at the Max Planck Institute in Seewiesen and culminated in a Dr.rer.nat. at the University of Freiburg (D) with fieldwork at the Smithsonian Tropical Research Institute in Panama. A Royal Society Post-Doc at the Animal Behaviour Research Group in Oxford was followed by professorial positions in Basel (CH), Aarhus (DK) and Oxford (UK). View profile (hyperlink)

Annika Wylie

Dr. Annika Wylie obtained her PhD in Genes, Development and Disease from UT Southwestern Medical Center and continued as a post-doctoral researcher in Dr. John Abrams' lab. With Dr. Abrams, she made the important discovery that p53 restricts transposons in flies and fish, and accordingly, also showed how p53 loss leads to an eruption of these mobile elements in mouse and human cancers. Their observations suggest that p53 may mitigate oncogenic disease, in part, by restricting transposon activity and oKer a novel hypothesis for p53-mediated cancer prevention. To understand how p53 represses transposons, Dr. Wylie showed that p53 isoforms act as constitutive repressors, operating continuously in unstressed cells through the same canonical DNA binding sites that specified p53 gene induction in earlier stages. This is surprising because conventional 'text-book' models argue that p53 is solely a transcriptional activator. Together, these discoveries expand our understanding of p53 function and raise the possibility that certain p53 isoforms could suppress tumor formation by constitutively repressing target genes and retroelements. Dr. Wylie is continuing this line of work as an Assistant Professor and Cancer Prevention and Research Institute of Texas (CPRIT) scholar at Southern Methodist University.

Jin Zhang

Dr. Zhang is a cancer biologist whose research focuses on the molecular and functional characterization of the p53 family of tumor suppressor proteins — including p53, p63, and p73 — and their roles in human cancers. With a strong interest in the mechanisms that regulate cell fate decisions, genomic integrity, and tumor suppression, Dr. Zhang investigates how disruptions in the p53 signaling network contribute to cancer initiation, progression, and therapeutic resistance, and how these pathways might be leveraged for the development of novel targeted therapies. By integrating biochemical, molecular, and translational approaches, Dr. Zhang aims to develop mechanism-based strategies for cancer treatment by targeting the p53 family pathway.

Liuqun Zhao

Dr. Liuqun Zhao is a Postdoctoral Researcher in the Department of Cell and Molecular Biology at Uppsala University, with a research focus on the p53 tumor suppressor protein and its isoforms, particularly Δ133p53α and Δ160p53α. Their work investigates how these truncated isoforms exert a dominant-negative effect on full-length p53. Dr. Zhao has demonstrated that Δ133p53α and Δ160p53α impair p53 function primarily through co-aggregation. These findings, published in eLife, improve the understanding of the Δ133p53α and Δ160p53α isoforms and suggest a promising therapeutic strategy: targeting and disrupting the aggregation process to restore normal p53 activity. Looking ahead, Dr. Zhao aims to develop novel approaches to inhibit this pathological aggregation, with the ultimate goal of developing novel cancer therapies that help to prevent or slow cancer progression.

Xiang Zhou

Dr. Xiang Zhou is a Professor and Principal Investigator at Shanghai Cancer Center and Institutes of Biomedical Sciences at Fudan University in China. He earned his Bachelor's and Ph.D. degrees from Wuhan University in China and completed postdoctoral training at Indiana University and Tulane University in the United States. His research interests focus on both basic and translational studies on cancer, with a particular emphasis on the role of p53 in cancer metabolism and regulated cell death. Dr. Zhou is committed to investigating the mechanisms through which p53 regulates cellular stress plasticity to determine tumor fate. His major scientific contributions include: (1) Elucidating the mechanisms by which cellular stress modulates p53 activity. (2) Deciphering the mechanisms underlying p53-mediated drug resistance and cell survival in cancer, primarily through its "guardian" functions in maintaining genomic stability and metabolic homeostasis. (3) Developing tumor-targeting strategies using engineered exosomes to specifically activate the nucleolar stress-p53 signaling pathway for cancer inhibition. Dr. Zhou was honored with the 2016 USCACA-AFCR Scholar Award (U.S. Chinese Anti-Cancer Association - Asia Fund for Cancer Research). His research is supported by the National Natural Science Foundation of China and the Innovative Research Team of the High-level Local University in Shanghai. He serves on the editorial boards of several journals, including BMC Biology and Journal of Molecular Cell Biology. As a corresponding author, Dr. Zhou has published over 30 papers in prestigious scientific journals such as Cancer Cell, Molecular Cell, Cell Reports, PNAS, Cell Death Differ, and Advanced Science.