

1st Cancer Research Workshop

KICK-OFF MEETING

Program

OCTOBER 3-5, 2018 | CYPRUS UNIVERSITY OF TECHNOLOGY, LIMASSOL

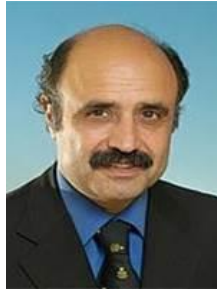


Cyprus
University of
Technology

Cancer Research Centre



MESSAGE FROM THE MEETING CO-CHAIRS



Welcome to the 1st Cancer Research Workshop on behalf of the Cancer Research Centre, an initiative between the Cyprus University of Technology (CUT) and the German Oncology Center (GOC). The Centre focuses on tackling questions relating to cancer diagnosis, treatment, care and prevention, supported by world-class core scientific facilities. The aim of the collaboration is the practical application of high-quality basic research, forming a bridge between the cutting-edge science of the CUT, the state of the art GOC, cooperating international institutes, biotechnology companies and patient associations. A [first-of-its kind hub in Cyprus](#) for cancer research, which will expedite the discovery of new diagnostic tools and treatments through a collaborative “bench-to-bedside” approach.

The workshop offers an opportunity for knowledge transfer between science, clinic and enterprises that can spur innovation within the consortium and fellow stakeholders. The participants will get a chance to meet, and network with key international players in the field of research oncology. The aim of the meeting is to enable and drive dialogue and cooperation for research in order to identify common areas of interest for the future collaboration of the consortium with key European Institutes.

We would like to take this opportunity to thank you all for joining us in this effort.

Enjoy the meeting!

Enjoy Limassol!

Andreas Anayiotos

Prof. Dr.,

Rector,

Cyprus University of Technology

Nikolaos Zamboglou

Prof. Dr. Dr. Dr.,

Medical Director,

German Oncology Center

Wednesday, 3rd October 2018

20:30-22:30 Dinner

Thursday, 4th October 2018

Senate Amphitheatre

08:30-09:00 Registration

09:00-09:10 Welcome Address

Andreas Anayiotos (CUT)

09:10-09:20 Welcome Address

Nikolaos Zamboglou (GOC)

Session 1 Bioengineering "Imaging"**Chairs:**
N. Zamboglou & A. Anayiotos

09:30-10:00 Recent developments in X-ray Imaging for Cancer research

Franz Pfeiffer
(TUM)

10:00-10:20 Image-based catheter navigation in interstitial brachytherapy

George Sakas
(TU Darmstadt)

10:20-10:40 PSMA PET/CT for personalization of radiation therapy for prostate cancer

Constantinos Zamboglou
(University of Freiburg)

10:40-11:00 In vivo imaging for monitoring of tumor burden and assessment of treatment response

Costas Pitsillides
(TheramiR Ltd)

11:00-11:10 Discussion

Coffee break

Session 2 Current trends in personalized Oncology**Chairs:**
M. Molls & G. Fountzilas

11:10-11:30 Combined therapy consisting of radiochemotherapy, NK cells and immune checkpoint inhibitor blockade in NSCLC: a case report

Gabriele Multhoff
(TUM)

11:30-11:50 Ultrasound mediated nano-based therapies in cancer

Joseph Kost
(Ben-Gurion University)

11:50-12:10 Nanoparticles and microRNAs in the fight against cancer

Marianna Prokopi
(CUT)

12:10-12:20 Discussion

12:30-14:00

Lunch Break**Session 3 Molecular Diagnostics & Clinical Perspectives****Chairs:**
A. Vrachimis & A. du Bois

14:00-14:20 Clinical Utility of tissue and plasma DNA profiling of solid tumor cancer patients

Philippos Patsalis
(NIPD Genetics Ltd)

14:20-14:40 Hellenic Cooperative Oncology Group (HeCOG): 26 years of clinical and translational research in Greece

George Fountzilas
(HeCOG)

14:40-15:00 In Silico Oncology: Translating Oncosimulators to the Clinic

Georgios Stamatakos
(NTUA)

15:00-15:20 Research activities of the Interdisciplinary Breast Unit Kliniken Essen-Mitte

Sherko Kuemmel
(KEM)

15:20-15:30 Discussion

Coffee break

Session 4 Public Health**Chairs:**
K. Ferentinos & P. Karaiskos

15:30-15:50 Young adult cohort set up in Cyprus: Cancer risk determinants and evidence-based public health

Konstantinos Makris
(CUT)

15:50-16:00 Discussion

16:00-16:30 Summary & Discussion**Contribution in the discussion:****Medical Oncology:** G. Fountzilas; **Radiation Oncology:** M. Molls, N. Zamboglou, K. Ferentinos; **Nuclear Medicine:** A. Vrachimis, C. Zamboglou, D. Baltas; **Gynecological Oncology:** A. du Bois, P. Kneschaurek; **Computational Oncology:** G. Sakas, S. Chatzis

16:30 – 19:30

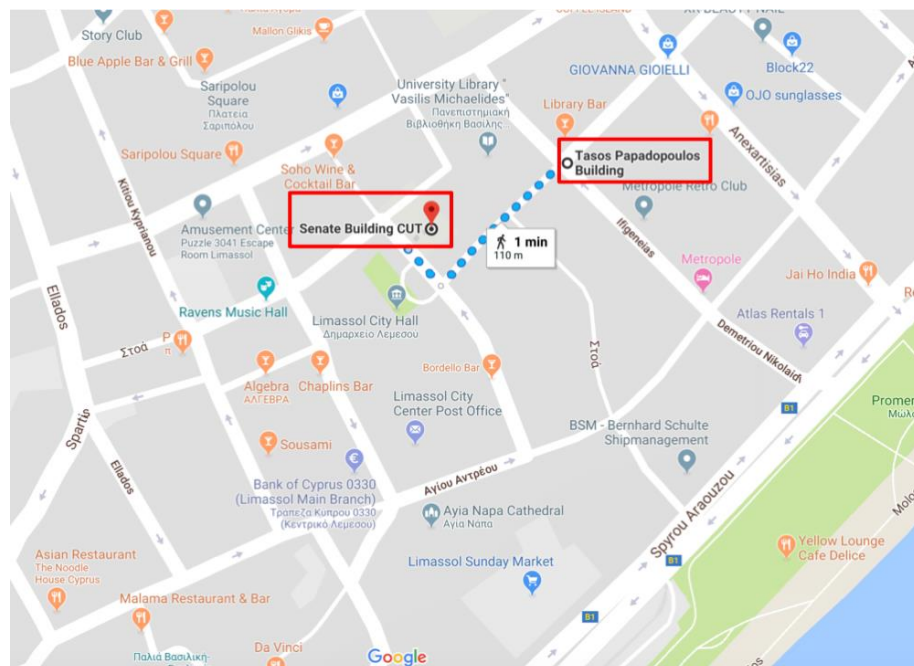
Break

Thursday, 4th October 2018**Tassos Papadopoulos Building**

19:30-20:30	Establishment of the Cancer Research Center	Amphitheatre 1
19:30-19:35	Welcome Address	Prof. Andreas Anayiotos, CUT Rector
19:35-19:40	Welcome Address	Prof. Nikolaos Zamboglou, GOC Medical Director
19:40-19:45	Welcome Address	Mr Konstantinos Ioannou, Minister of Health, Cyprus
19:45-20:15	Keynote Lecture "Translational Research and Clinical Innovations in Oncology"	Prof. Michael Molls Technical University of Munich
20:15-20:20	Signing of Bilateral Agreement between the Cyprus University of Technology and the German Oncology Center	
20:20-20:30	Music program by Aris Choir of Limassol	
20:30-21:00	Cocktail	
21:00-23:00	Dinner	

Friday, 5th October 2018**Senate Amphitheatre**

Session 5	Round Table Discussion	Chairs: A. Anayiotos, N. Zamboglou & V. Tsakalos
10:00-11:00	Highlights of the Meeting	
11:00-12:00	Future Prospects for common research programs and potential for European cooperation	
12:00-18:00	Excursion and networking	



Prof. Andreas Anayiotos, Cyprus University of Technology



Prof. Andreas Anayiotos is the Rector of Cyprus University of Technology and Professor at the Department of Mechanical Engineering and Materials Science and Engineering. He studied Aerospace Engineering at Boston University and got his MS and PhD from Georgia Institute of Technology (USA) also in Aerospace Engineering. He has been a faculty member at the University of Alabama at Birmingham (UAB) from 1991-2007 and has been the director of the Biofluids and Echocardiography lab at UAB. The graduates of his laboratory are currently employed at Emory University, NASA Glenn Research Center, Boston Scientific Corporation, Baxter Medical Corporation, Cordis Inc (Johnson and Johnson) and other organizations in the US. Dr. Anayiotos has established and is the director of the Biomechanics and Living Systems Analysis Laboratory at CUT since 2007. His field of research includes: Experimental and computational methods in cardiovascular modeling, image-based arterial modeling and computational hemodynamic, novel cardiovascular implants, devices and biomaterials, nanotechnology and drug delivery for cardiovascular diseases and cancer. He has received funding and coordinated projects in excess of \$4M from the Whitaker Foundation, National Institutes of Health and the Biomedical Device Industry in the US. The BioLISYS lab has been funded by the Research Promotion Foundation (Cyprus), the FP7 program Marie-Curie and the Eureka EUROSTARS program. Dr. Anayiotos has published more than 120 peer reviewed journal and conference papers. He has also been an organizer and chairman of numerous technical sessions and panel discussions in International Conferences. He is an Associate Editor of the "Annals of Biomedical Engineering" and on the Editorial Advisory Board of "Ultrasound in Medicine and Biology" and a reviewer in numerous international journals. Dr. Anayiotos has also been an expert evaluator in multiple panels and study sections in Bioengineering for the European Union, the National Institutes of Health and the National Science Foundation (US) and has provided consulting services to numerous cardiovascular implant and device manufacturers.

Prof. Dr. Dr. Nikolaos Zamboglou, German Oncology Centre



Prof. Nikolaos Zamboglou was born and raised in Limassol, Cyprus, and in 1967 he moved to Germany for his studies. He was awarded a degree in Physics from RWTH Aachen in 1974, and in 1977 he obtained his PhD in Physics at the University of Düsseldorf. He completed his degree in Medicine in 1984, and his PhD in Medicine in 1989, both at the University of Essen. From 1986 to 1992, Prof. Zamboglou held the post of Consultant of Radiation Oncology at the University of Düsseldorf. He subsequently assumed his appointment as Director and Professor of the Department of Radiation Oncology at Klinikum Offenbach, at the Academic Hospital of Wolfgang Goethe University, Frankfurt, where he remained until 2016. Prof. Zamboglou also is appointed as Adjunct Research Professor at the Technical University of Athens since 1993. He is elected as corresponding member of the Academy of Athens in 2010. Most notably, he was President of the German Society of Radiation Oncology between 2005 and 2007, and in 2012 was declared an Honorary Member of the Austrian Radiation Oncology Society. Finally, in 2015 he was honoured with the Alfred-Breit Award of the German Society of Radiation Oncology (the highest society award). Since 2016, Prof. Zamboglou has been acting as Medical Director of the German Oncology Centre, currently being designed and constructed in Limassol, Cyprus, which is expected to commence operations in the Autumn of 2017. Clinical applications: Over the past years, extension of the spectrum of treatment indications for interventional radiotherapy. The advantages of image guidance and individualised dose shaping, enabled the effective application of interstitial brachytherapy for the treatment of prostate and breast cancer, sarcomas as well as brain tumour and solid tumours recurrences. Especially in the curative treatment of prostate cancer, brachytherapy yields the same treatment

results compared to radical surgery. However, the percentage of treatment related urinary incontinence is insignificant and the proportion of patients with preserved erectile function exceeds 80%. Advanced interventional radiotherapeutic treatment to more than 15.000 patients, through progresses in the optimisation of dose distribution and advanced methods of virtual treatment simulation. Education of physicians from more than 120 institutions, including 10 centres from Greece, in brachytherapy methods.

Prof. em. Michael Molls, Technical University of Munich



Michael Molls was a Professor as well as the Director of the Clinic for Radiotherapy and Radiation Oncology at Technical University Munich (TUM) from 1992 to 2014. His further activities included serving as a member of the Board of management and the Board of directors at the "Rechts der Isar" University Hospital and was the Head of the Tumorzentrum (Tumour Centre) München of both Ludwig Maximilian University and TUM. He was particularly committed to quality in the processes, results and structures of interdisciplinary oncology. Clinically the Molls' group was engaged in investigations on tumour hypoxia and blood flow, imaging techniques (CT, MRT, PET) for therapy planning, high-precision radiotherapy and the initiation of multicentric studies funded by the German research foundation and the German Federal Ministry for Education and Research. The group produced internationally renowned work on stereotactic radiation therapy for brain tumours and the early stages of lung carcinomas as well as the post-therapeutic quality of life with breast and prostate cancer. As president of the "German Society of Radiation Oncology" and Head of its academy, Michael Molls introduced guidelines for the treatment of cancer patients and a curriculum for specialisation in radiation treatment according to European standards. He helped stimulate the integration of radiobiological and physical medicine research in radiation oncology. Michael Molls is the author of approximately 400 publications and editor of textbooks, monographs and series of books in English on radiation oncology. He supervised 14 professorial teaching qualification processes, and seven of his colleagues achieved professorial and directorship appointments in Germany and internationally.

Prof. Gabriele Multhof, Technical University of Munich



One of the focus areas of the research work of Professor Multhoff (b. 1961) is the development of innovative immunological prognosis and treatment methods based on heat shock proteins (SFB 824: in vivo imaging). The aim is to use these new therapeutic approaches in combination with conventional radiation therapy in clinical therapies. Her current research work is leading to a randomized clinical phase II study entitled "Targeted NK cell based adjuvant immunotherapy for the treatment of patients with NSCLC after radiochemotherapy" funded by the German Federal Ministry of Education and Research (BMBF). Professor Multhoff's research interests also include the analysis of cellular, molecular biological and immunological mechanisms in normally oxygenated and hypoxic tumor tissue and normal tissue following exposure to radiation. After studying biology at LMU Munich, Professor Multhoff completed her PhD in 1990 having conducted research work in the field of immunology. While she was working towards her postdoctoral teaching qualification (habilitation), which she acquired in 1998, she was supported by a Möllemann Habilitation grant. In 2002 she became professor of "Experimental Haematology" at the University Clinic in Regensburg before being appointed professor for "Experimental Radiooncology and Radiation Biology" at Klinikum rechts der Isar at TUM in 2007. Professor Multhoff is founder and managing director of multimmune GmbH. She is a commissioner of the German Academic Exchange Service (DAAD) and the EU as well as a member of numerous professional and scientific associations.

Prof. Franz Pfeiffer, Technical University of Munich



Prof. Pfeiffer (b. 1972) conducts research on biomedical X-ray physics. The focus of this research is new imaging methods for improved early diagnosis and detailed studies of illnesses such as cancer, lung diseases and osteoporosis. His scientific work extends from fundamentally oriented research with high-energy X-rays in large international research centers to applied research on new concepts in radiology. Professor Pfeiffer studied physics at Munich's Ludwig Maximilian University (1999) and was awarded doctorates by the Institut Laue-Langevin (Grenoble) and the University of Saarbrücken (2003). Following subsequent positions as a post-doc in Urbana-Champaign (USA) and as a member of scientific staff at the Paul Scherrer Institute (Switzerland, 2008), he initially assumed the position of assistant professor at École Polytechnique Fédérale in Lausanne (2008). He was appointed to the Chair of Biomedical Physics at TUM in 2009. Since 2013, Professor Pfeiffer has also been a member of the TUM School of Medicine, and furthermore became the director of the Munich School of BioEngineering in 2017.

Prof. em. Peter Kneschaurek, Technical University of Munich



Prof. Kneschaurek is originally a physicist and finished his doctorate with a topic from the semiconductor physics at the Physics Department of the TUM. He first worked at the research reactor in Garching (FRM) before he changed in the late 70s to the Klinikum rechts der Isar; where he became acquainted intensively with radiation biology and radiotherapy. Finally, he qualified as a university lecturer with a topic of Medical Physics, the brachytherapy, which uses sealed sources within the body, directly adjacent to the tumor, for treatment. From 1988 until his retirement in 2012, he was an Academic Director head of Medical Physics in the Department of Radiotherapy and Radiological Oncology of the TUM clinics. As a medical physicist Kneschaurek has always been an important link between the two disciplines; he equipped – especially under Prof. Alfred Breit and Prof. Michael Molls – the Department of Radiotherapy and radiological oncology with the most modern radiation equipment and helped this way, that the "Institute for Radiological Radiotherapy and Oncology" became the "Department of Radiation Oncology and Radiation". In addition to teaching in medicine at the TUM he campaigned particularly for the education and training of medical physicists. Kneschaurek is author or coauthor of more than one hundred scientific publications and co-editor of the journal "Radiotherapy and Oncology". By retirement, he focused on his consultant activities, since his great and long experience make him further a sought-after expert.

Prof. Dimos Baltas, University of Freiburg



Prof. Baltas focus of research is on Inverse optimization and inverse planning in interventional radiation oncology, on Biological models (TCP, NTCP) for the optimization and individualization of radiation therapy and on Application of Monte Carlo simulation methods for dosimetry of low, medium and high energy photon radiation. Prof. Baltas studied Physics at the University of Athens, and had his postgraduate studies at the Radiology Center of the University of Heidelberg, funded by the German Academic Exchange Service. In 1996 he was awarded the academic title of "Adjunct Research Associated University Professor" in Medical Physics & Engineering, National Technical University of Athens (NTUA), Institute of Communications and Computer Systems (ICCS). He then became an Associate Professor (W2) of Medical Radiation Physics, University of Erlangen-Nürnberg and more recently a Full Professor (W3) and Head of Medical Physics Division, Department of Radiation Oncology, Medical Center – University of Freiburg.

Dr. Constantinos Zamboglou, University of Freiburg



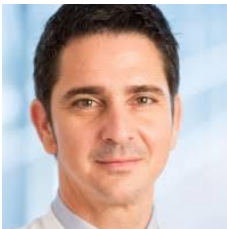
Dr Zamboglou studied medicine in Budapest and in Freiburg. He received his medical degree from the University of Freiburg, Germany. 2013, he started as a resident at the Department of Radiation Oncology at the University Medical center of Freiburg. His main research interest is advanced imaging techniques for radiation therapy in patients with prostate cancer with focus on PSMA PET/CT. On this topic he published over 10 publications in peer-reviewed journals in the last three years.

Prof. Dr. Dr. h.c. Andreas du Bois, Kliniken Essen Mitte



Prof. Andreas Du Bois is a gynecologist and Head of the Department of Gynecology and gynecological Oncology at the Kliniken-Essen-Mitte, Germany. Du Bois' clinical focuses are operative gynecology and above all diagnosis as well as operative and systemic therapy of tumor diseases of the female genital. The internationally renowned scientist is founder of the studygroup AGO and member of a variety of national and international scientific societies in some of which he is engaged in an executive position. Furthermore, du Bois' scientific work was honoured by numerous prizes including, Young Investigator Award (MASCC) (1995-1996), Pride and Joy – PricePublication Phase II Studies (Ann Oncol) (2001), Arthur Walpole Clinical Trials Award (German Cancer Society) (2006), Ernst Wertheim Prize (Austrian Society of Gynecology Oncology) (2006), Adjunct Professorship of the University of Vienna (2016-2019).

Prof. Dr. Sherko Kümmel, Kliniken Essen Mitte



Prof. Kümmel is the clinical director/chairman of the Multidisciplinary Breast Unit Kliniken Essen-Mitte, Germany, and he is affiliated at Lead Breast Cancer Research Program in Kliniken Essen-Mitte and he is an Executive Board Member of the AGO. He is an Extraordinary Professor of Medical School, Humboldt University Berlin, Germany, University Hospital Charité – 2018. He acquired his PhD on "Adjuvant dose dense Chemotherapy at patients with high risk lymph node positive breast cancer" at the Gynecological Oncology – Dept. of Gynecology and Obstetrics, University Hospital Essen, 2008. His MD specialisation was on "MRI of focal liver lesions with new liver specific contrast media Gd-EOB-DTPA Clinical Dept. of Radiology, Charité – University Medicine Berlin, Germany 2000 – predicate Magna cum laude. He joined the Board of Gynecology and Obstetrics in Germany at 2004. His specialisation is in Gynecological Oncology (Germany 2007) and in medical tumorthrapy (Germany 2007), he is also a specialized Breast Surgeon (Germany 2016). He has publications in well-known scientific journals and has received a plethora of scientific awards.

Prof. Dr. Pantelis Karaiskos, National and Kapodistrian University of Athens



Prof. Karaiskos is interested in quality assurance in modern radiation therapy techniques, such as Intensity Modulated Radiation Therapy (IMRT/VMAT) and stereotactic radiotherapy- radiosurgery stereotactic radiotherapy. Another clinical interest of his is the comparison and evaluation of modern radiotherapy techniques using physical and biological parameters. His research interests are (i) Conventional (TLD, diode, film) and contemporary (3D polymer gel-MRI) experimental dosimetry in modern radiation therapy techniques, such us Intensity Modulated Radiation Therapy (IMRT/VMAT), high dose rate brachytherapy and stereotactic radiotherapy- radiosurgery, (ii) Monte Carlo and experimental dosimetry in small photon beams, (iii) Monte Carlo modelling of brachytherapy sources for the generation of dosimetry data for use in treatment planning systems and development of analytical dosimetry models and (iv) Monte Carlo simulations of high energy x-rays and charge particles for radiotherapy purposes.

Prof. Georgios S. Stamatakos, National Technical University of Athens



Georgios S. Stamatakos is Research Professor of Analysis and Simulation of Biological Systems and their Interaction with Electromagnetic Radiation at the Institute of Communication and Computer Systems (ICCS), School of Electrical and Computer Engineering (SECE), National Technical University of Athens (NTUA). He is also a Visiting Professor at the School of Electrical and Computer Engineering, NTUA. He is the Founder and Director of the In Silico Oncology and In Silico Medicine Group of ICCS-SECE-NTUA (www.in-silico-oncology.iccs.ntua.gr). He has published more than 160 articles in international peer reviewed journals, conference proceedings and scientific books (book chapters). His research interests include in silico oncology, in silico medicine, multiscale cancer modeling, computational medicine, systems medicine, precision medicine, the Virtual Physiological Human (VPH) initiative, systems biology, bioinformatics, biomedical engineering, bioengineering, bioelectro-magnetics, biooptics, computational electromagnetics, software engineering and applied mathematics. He serves as a referee for numerous scientific peer reviewed journals including Nature Reviews Clinical Oncology and Nature Scientific Reports. G. Stamatakos is a Member of the Editorial Board of Cancer Informatics and a member of IEEE, the Virtual Physiological Human (VPH) Institute and the Technical Chamber of Greece.

Prof. George Fountzilias, Aristotle University of Thessaloniki / Hellenic Foundation for Cancer Research



Prof. Fountzilias, Professor Emeritus of the Aristotle University of Thessaloniki, Greece was Director of the Department of Medical Oncology at "Papageorgiou" Hospital, Aristotle University of Thessaloniki School of Medicine, Thessaloniki, Greece. He is the co-founder of the Hellenic Cooperative Oncology Group (HeCOG, since 1999), Athens, Greece and Director of the Hellenic Foundation for Cancer Research (HeFCR, since 2008), Athens, Greece. He also serves as Director of the Laboratory of Molecular Oncology (since 2009), Thessaloniki, Greece. Professor Fountzilias' main interest is clinical and translational research in breast and head and neck cancer in the frame of personalized medicine. He has publications in well-known scientific journals, such as Annals of Oncology, Lancet, Journal of Clinical Oncology, Nature Genetics and Lancet Oncology. He was initiator and took part in many clinical trials and received a plethora of scientific awards.

Prof. Joseph Kost, Ben-Gurion University of the Negev



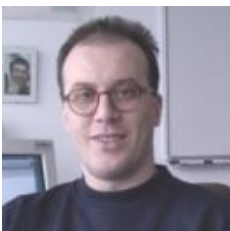
Prof. Joseph Kost D.Sc. is University Distinguished Professor and Senior Advisor to the President on International Research Strategies, holder of The Abraham and Bessie Zacks Chair in Biomedical Engineering and the past Dean of the Faculty of Engineering Sciences at the Ben-Gurion University of The Negev. He completed his undergraduate and graduate degrees in Chemical Engineering at the Technion Israel Institute of Technology before earning a doctorate in Biomedical Engineering at the same institution and Post-Doctoral training at University of Washington, MIT and Harvard Medical School. Kost went on to earn an M.B.A. at the Ben-Gurion University School of Management. Kost was the founder and first President of the Israeli Society of Controlled Delivery of Bioactive Materials. Between 2007 and 2011 he was the President of the Israel Institute of Chemical Engineers. He is a Fellow of the American Institute for Medical and Biological Engineering, Foreign Member of the United States National Academy of Engineering (NAE), Honorary Fellow of the Israel Institute of Chemical Engineers. Member of the Controlled Release Society College of Fellows and Member of the Israel Academy of Sciences and Humanities.

Prof. Philippos Patsalis, NIPD Genetics Ltd



Prof. Philippos Patsalis obtained his BSc in Biology from the Aristotelian University of Salonica, Greece and his MA, MPh and PhD in Genetics from the City University of New York, USA. He underwent specialization and post-doctoral training at Cornell Medical Center, New York University, Memorial-Sloan Kettering Cancer Center and Columbia University, in New York. He also received professional certification and licensing to practice as a Laboratory Director from New York Department of Health and the College of American Pathologists; and he is American Board Certified from the American Board of Bioanalysis. Prof. Patsalis Founded and Directed the Department of Cytogenetics and Genomics and the Translational Genetics Team at the Cyprus Institute of Neurology and Genetics; He Founded and Directed the biotechnology companies AKESO and NIPD Genetics; He Founded and became the first Professor and Provost of the Cyprus School of Molecular Medicine; He also served as Chief Executive Medical Director of the Cyprus Institute of Neurology and Genetics and as Minister of Health of the Republic of Cyprus. He is currently Distinguished Professor at the Cyprus Institute of Neurology and Genetics and visiting Professor in other Universities; and Chief Executive Director of NIPD Genetics. Prof. Patsalis is a scientist with international recognition in the field of Human Genetics. He has been invited as lecturer to more than 200 Universities and international conferences. He has competitively obtained more than 40 research grants and funding of over 20 million euro from international organizations including the most prestigious grant in the European Union known as the ERC Advanced Grants, which is based purely on excellence. He was appointed to several Editorial Boards of scientific journals and has filed more than 10 patents. He contributed chapters in 10 books and published more than 130 peer-reviewed scientific publications in international journals, such as Nature Medicine, Lancet, Human Molecular Genetics, American Journal Human Genetics, etc. He is the President of the National Council of Research, Innovation and Entrepreneurship and has served on several other Councils Committees and Boards. He is an elected Board Member of the European Society of Human Genetics. He has been appointed as external member of the National Academy of Lithuania and has been honored with many national and international awards, including the Cyprus National Research Award, the Cyprus National Innovation Award, the Most Notable Scientific and Social Contribution Award University of Nicosia, the US State Alumni Award-State Department USA, the Silver Medal of the Cyprus Parliament which is the highest honorary distinction of the Parliament of the Republic of Cyprus and the National Award from the President of the Republic of Cyprus.

Prof. George Sakas, TU Darmstadt



Prof. Dr.-Ing. Georgios Sakas is founder, majority shareholder and managing director of MedCom GmbH. In 1982 Diploma (MSc) in Computer Engineering, in 1992 Ph.D. in Computer graphics, both at the TU Darmstadt. Between 1994 and 2011 he was heading the "Cognitive Computing & Medical Imaging" department by Fraunhofer IGD. Since 1998 he associated adjunct professor at NTU Athens and since 2007 honorary professor at the TU Darmstadt. Since 1997 until today CEO of MedCom GmbH and co-founder of 4 more companies. His research includes medical imaging, surgical navigation and treatment planning systems. He supervised 23 PhD and dozens of graduation students' theses, published/co-edited 10 books & proceedings, co-authored ca. 200 scientific papers, and received over a dozen scientific awards. He participated in several EU-funded projects, served by the European Commission as research proposal reviewer and as member of the CIP Strategic Advisory Board. He chaired several conferences/workshops and serves as committee member to several international conferences and scientific magazines, further as business plan and innovation evaluator for funding organisations and ministries.

Dr. Costas Pitsillides, Theramir Ltd



Dr. Costas Pitsillides is a co-founder and director at Theramir Limited. He has significant expertise in preclinical imaging and drug development as his PhD work was on the design of biomedical imaging systems for disease monitoring at the Massachusetts General Hospital and Harvard Medical School, Boston, USA. He also holds graduate degrees from the Massachusetts Institute of Technology and studied Physics for his undergraduate degree at Northeastern University in Boston, US while on a Fulbright Scholarship. He joined CUT as a Marie Curie Fellow, where he has been developing the University's preclinical research labs; he has designed and built several optical based systems for in vivo applications and has in parallel served as a scientific and business development adviser with several Cyprus-based companies such as Trojantec and Curis Life Sciences. His areas of interest include advanced imaging systems (in vivo imaging), therapeutic applications of lasers and nanotechnology in medicine as well as the biomolecular mechanisms and pathways that regulate cancer disease development.

Dr. Marianna Prokopi, Cyprus University of Technology



Dr. Marianna Prokopi is a research fellow at Cyprus University of Technology and co-founder and director of Theramir Ltd. She is an experienced researcher with a demonstrated history of working in the academia, biotech and pharmaceutical industry. She received her PhD from the School of Medicine at King's College London, UK for her work on evaluation of endothelial progenitor cells as therapeutic agents implicating the development of microparticles. She also holds MSc degrees from the London School of Hygiene and Tropical Medicine (MSc in Microbiology) and University of Kent (MSc by Research in Biochemistry). Her areas of interest include Cancer and Cardio personalized nanotherapeutics, molecular diagnostics and drug pre-clinical development. Dr. Prokopi received numerous European and National grants and she is the author of several scientific publications and patents. Her vision focuses in the development and rise of a new category of researcher, the "entrepreneurial academic". Dr. Prokopi has been awarded several scholarships, bursaries and awards among them the JRC King's College London/NHS Trust King's College Hospital PhD Scholarship, the Peter Baker Award for adapting in new technologies (King's College London), the King's College Award Graduate of the Year 2009. As a postdoctoral research fellow at Trojantec Ltd and the Bank of Cyprus Oncology Center, she received an RPF grant for her research project "Development of anti-cancer therapeutics using mesenchymal stem cell microparticles loaded with miRNAs" (2012-2014). The success of the project led to the filing of a patent application on "the delivery of microRNAs using mesenchymal stem cell microparticles". Dr. Prokopi is a co-founder and Chief Scientific Consultant of Theramir Ltd, created to protect the ownership, development and commercial rights of the mesenchymal stem cell derived microparticle platform, as well as other miRNA-based diagnostic technologies. As a research fellow at CUT (2015-present), she has been trained in the development of animal models, on cutting edge in vivo imaging techniques, and on methods to assess the mechanical properties of cells. She was actively involved in projects and was successful in producing significant research results in both the cardiovascular and cancer therapy fields. Furthermore, in collaboration with the BioLISYS team, she was instrumental in establishing the cancer molecular biology and tissue culture facilities of the Laboratory.

Dr. Konstantinos Makris, Cyprus University of Technology



Dr. Makris supervises the Water and Health laboratory in the Cyprus International Institute for Environmental and Public Health. He is currently serving as the Dean of the School of Health Sciences at the Cyprus University of Technology. He has held an appointment as adjunct assistant professor of environmental health at the Dept. of Environmental Health, Harvard University, USA (2009-2015). Dr. Makris leads the exposome-based water and health lab which aims to minimize the human health risk associated with chronic exposures to environmental stressors. Towards this goal, his team applies improved exposure assessment protocols that refine the degree of association with metabolic health outcomes, participating in human studies in Cyprus, Greece, France, Kuwait, the Netherlands, and Norway. His laboratory is equipped with state-of-the-art instrumentation valued at >0.5M euros to generate its own biomarker and metabolomics data. Since 2009, Prof. Makris has received > 1.5 million euros in external funding from the EU, the Cyprus RPF, the BBMRI-LPC biobanking network in the EU, and the National Institutes of Environmental Health Sciences Center at Harvard University. He has produced over 85 peer-reviewed journal articles and >40 conference proceedings. He was one of the two investigators that conducted the cancer cluster investigation for the Astrasol brain cancer case in Cyprus. Prof. Makris was invited by the Cyprus Parliament Senate Committee on Environment and Health to provide expert testimony about the environmental health consequences for the surrounding populations after the Mari tragedy/explosion and has also served as a member of the scientific advisory committee to the Ministry of Health concerning arsenic exposures in Cyprus. Prof. Makris has been invited by >10 universities and organizations in the USA/EU to deliver research talks, such as in Harvard University, Emory University, University of Alberta, University of Delaware, etc. and he has presided 6 symposia in international conferences.

Dr. Konstantinos Ferentinos, German Oncology Centre



Dr. Konstantinos Ferentinos was born in Ioannina Greece, where he studied Medicine. He was awarded the degree in Medicine in 2007. He was resident in the Department of Radiation Oncology at the Klinikum Offenbach in Germany under the supervision of the renowned oncologist Prof. Zamboglou. His main areas of interest were the Interventional Radiotherapy and the novel radiation techniques. He was responsible for the Stereotactic Radiotherapy in his department. In 2012 he obtained the PhD in Medicine at the Goethe University Frankfurt. From 2013 to 2015 he worked as consultant at the Klinikum Offenbach and since 2016 as a senior consultant in the Department of Interventional Radiotherapy at the Iatriko Kentro Hospital in Athens. He is the head of the Department of Radiation Oncology at the German Oncology Center in Limassol.

Prof. Alexis Vrachimis, German Oncology Centre



Dr. A. Vrachimis is the Director of Nuclear Medicine of the German Oncology Center and Associate Professor in nuclear medicine of the Medical School of the Wilhelm Westfalen University of Muenster in Germany. Furthermore, he served for several years as a Lecturer at the Medical Technologist/Radiology Department of the University Hospital of Muenster. He studied Medicine at the University of Ioannina in Greece and specialized in nuclear medicine at the Nuclear Medicine Department of the University Hospital of Muenster in Germany. His Doctorate thesis (2008-2011) examines surveillance with Positron Emission Tomography (PET) of Ewing sarcomas of the trunk. Since 2016 he bears the title of "Private Dozent" given in German universities after having completed a minimum number of publications and academic work such as lectures, and national and international presentations. His "Habilitation" is entitled "Differentiated Thyroid Cancer: From Diagnosis to Prognosis". In the past, he worked as a clinical Researcher at the Collaborative Research Centre 656 (SFB656) in the fields of Molecular Cardiovascular Imaging, with grants received from the Deutsche Forschungsgemeinschaft (DFG). Additionally, he worked as a postdoc-researcher at the European Institute for

Molecular Imaging (EIMI, Muenster), focusing on preclinical Single Photon Emission Computed Tomography (SPECT)/CT studies. Dr. Vrachimis specializes in thyroid cancer management, and he currently serves as a board member of the thyroid committee of the German Society of Nuclear Medicine (Deutsche Gesellschaft fuer Nuklearmedizin). Furthermore, he was in charge of one of the first PET/MRI systems in Germany and has extended experience in PET/CT. In addition to thyroid cancer therapies, he is also trained in novel radiopeptide therapies such as Lu-177-DOTATATE for neuroendocrine tumors and Lu-177-PSMA for prostate cancer and selective internal radiotherapy (SIRT) of liver metastatic disease. He has authored 24 peer-reviewed papers and more than 70 in international conference proceedings. He has supervised two dissertations and is currently supervising a third one. He is the leader of three projects currently running in Muenster (Germany), which are concerned with thyroid cancer. In 2013 he was awarded the Karl-Oberdisser prize of the Nordrhein Westfälische Gesellschaft fuer Endokrinologie und Diabetologie for his study on the prognosis of patients with differentiated thyroid cancer.

Dr. George Anagnostopoulos, German Oncology Centre



Dr. Georgios Anagnostopoulos was born in Athens in 1974 and raised in Crete and Athens, Greece, where he was awarded a degree in Physics from the University of Athens in 1997. He then moved to Germany for his Postgraduate studies in the University of Heidelberg and his practical training as a Medical Physicist in the Department of Radiation Oncology at Klinikum Offenbach, and in 2001 he obtained his MSc Degree as well as his working license as a Medical Physicist in Germany. He was appointed as full time Medical Physicist in the Klinikum Offenbach and at the same time he started his PhD studies in the University of Heidelberg in 2002, which he completed in 2006 by receiving the PhD Degree in Physics. From 2001 to 2007, Dr. Anagnostopoulos held the post of Medical Physicist at Klinikum Offenbach and subsequently assumed his appointment as Medical Physicist at the Metropolitan Hospital in the Radiation Oncology Department, in Athens, Greece, where he remained until 2012. He then started working for NZ Medical Ltd. in Greece and in association with the Central Clinic of Athens and the Athens Medical Center in the field of Interventional Radiation Oncology (Brachytherapy) both as clinical Medical Physicist as well as research and development fellow with Pi-Medical Ltd, Greece in the field of Monte Carlo dosimetric simulation algorithms and the development of radiobiological applications in Radiation Therapy. In June 2017, Dr. Anagnostopoulos was appointed as the Head of the Medical Physics Department of the German Oncology Center.

Dr. Vassilis Tsakalos, Research Promotion Foundation



Vassilis Tsakalos is the Director General of the Research Promotion Foundation (RPF), the National Funding Agency for Research and Innovation in Cyprus, since January 2011. Before this appointment, Vassilis was for 12 years the Head of PRAXI (HELP-FORWARD) Network, a Technology Transfer, Research, Innovation and Entrepreneurship Promotion Agency in Greece belonging to the Foundation for Research and Technology – HELLAS (FORTH) and operating under the auspices of the Hellenic Federation of Enterprises (SEV) and the General Secretariat of Research and Technology (GSRT). Vassilis has served as a national expert, advisor, contact point or representative in numerous Committees and Bodies related to EU Framework Programmes, National research and innovation programmes and high technology entrepreneurship initiatives. He has advised several hundreds of entrepreneurs and researchers and has been personally involved in numerous cases of spin off company creation and the negotiation of licensing agreements from academic and research institutions. He served as a trainer in the above mentioned topics in more than 15 countries. Vassilis is a graduate in Chemical Engineering from the National Technical University of

Athens. He holds a DEA and a PhD degree from École Nationale Supérieure des Mines de Paris in Materials Science.

