Innovative Approaches for Cancer Targeting
A Tribute to Professor Kristian Berg
30th October 2024, Institute for Cancer Research

Speakers Bio

Santi Nonell is a ICREA Professor of Physical Chemistry at the IQS School of Engineering, (University Ramon Llull, Barcelona, Spain). He earned his Ph.D. for work carried out at the Max-Planck-Institut für Strahlenchemie (Silvia Braslavsky) and conducted postdoctoral research at the Arizona State University (Tom Moore) and the University of California Los Angeles (Chris Foote).

His core research interests lie in the area of physical and chemical photobiology, with a focus on singlet oxygen and the chemical and photochemical aspects of photodynamic therapy, a field to which he has contributed more than 200 papers and 29 PhD theses.

He served as President of the European Society of Photobiology, Editor-in-Chief of the journal Photochemical & Photobiological Sciences, and as Chair of the Spanish Network of Biological Photochemistry. He is currently the Director of the Photobiology School of the European Society for Photobiology.

His honours include the Otto Hahn Medal of the Max Planck Society, the election as a Fellow by the Royal Society of Chemistry and the Lifetime Achievement Award of the American Society for Photobiology.

Tayyaba Hasan, Professor of Dermatology at Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School and Professor at Harvard-MIT Health Sciences and Technology, is a leader in photochemical approaches (PDT) for targeted treating and diagnosis of disease. She leads an NCI multinational project on Image-guided Cancer Treatment as well as one on Low-cost Cancer Technologies using image-guided PDT in rural settings.

Famous as a co-inventor of a sought-after PDT eye treatment (**Visudyne®**, an anti-neovascularisation agent used for the treatment of AMD), she has over 300 publications, 30+ inventions, and is a Fellow of the National Academy of Inventors and Optica (founded as the Optical Society of America, OSA). Attaining 13 Significant or Lifetime Achievement awards from our foremost bodies, such as ICPP, ASP, SPIE, including 2 Gold Medals from the ESP and the IPA, recognizing her significant career, she is also known for her mentoring, teaching, and promoting equitable representation in science. Prof. Hasan has chaired or co-chaired 32 sessions or conferences. Hasan has served on the executive boards of several learned societies, including acting as President of the International Photodynamic Association, Vice President of Science for the Pan American PDT Association and President of the American Society for Photobiology

Kristine Young-Halvorsen has been with Photocure since 2016, now serving as the Clinical Development and Medical Science Director. Before joining Photocure, she worked as a researcher at the University of Oslo's Institute for Experimental Medical Research. Kristine's role supports Photocure's commitment to the advancement of medical science as part of the medical affairs and clinical development team. Kristine holds a PhD in medical technology from the Norwegian University of Science and Technology.

Pål K. Selbo is a photobiologist and obtained his PhD from the University of Oslo (2001) in the lab of Kristian Berg at The Norwegian Radium Hospital. From 2002-2003 he had a post doc stay in the lab of Tayyaba Hasan, Mass. General Hospital/Harvard Medical School, Boston. Currently, he is the acting group leader of the Photochemical Internalization (PCI) group at the Department of Radiation Biology, Oslo University Hospital. He serves as President of the Norwegian Society for Photobiology and Photomedicine (NOFFOF) and the President-elect of the European Society for Photobiology (ESP). His main research focus is using the intracellular drug delivery technology PCI to enhance the efficacy of cancer immunotherapies. In addition, combining PCI with clinical relevant drugs in hard-to-treat cancers and photochemical based targeting of cancer stem cells.

Ole Jakob Norum (MD/PhD) is head of Department for Orthopaedic surgery at the Norwegian Radium Hospital. He earned his PhD at the University of Oslo in 2009 based on his work in the PCI group where he conducted preclinical evaluation of the PCI method for treatment of soft tissue sarcomas. At the "23rd Annual Meeting of the European Musculo-Skeletal Oncology Society" the prize for "Best Basic Science paper/ poster" was awarded Ole Jacob. The award was based on research carried out in the PCI group. Ole Jacob has a high focus on testing and implementing novel technologies to improve patient treatment and care.

Anders Høgset is Chief Scientific Officer (CSO) in PCI Biotech AS in Oslo since April 2001, and he was also CEO in the company from 2004 to 2008. He holds a PhD in biochemistry from the University of Oslo. Earlier employments include: senior scientist in the PCI group at The Norwegian Radium Hospital in Oslo, senior scientist and project manager at Nycomed (now GE Healthcare) and scientist at the University of Oslo. Høgset has over 100 publications and more than 20 international patents and patent applications.

John Lambert

Dr. Lambert earned his Ph.D. in Biochemistry from the University of Cambridge in 1976, working on the structure of glycolytic enzymes under the supervision of Professor Richard N. Perham. His postdoctoral training was at the University of California, Davis (1976 – 1980), working on ribosome structure in the laboratory of Dr Robert R. Traut, and at the University of Glasgow, Scotland, UK (1980 – 1982), working on the *arom* multienzyme complex in the laboratory of Dr John R. Coggins.

In 1982, Dr. Lambert joined the Dana-Farber Cancer Institute, Harvard Medical School, Boston, as the second scientist recruited to work on the ImmunoGen-funded programs to develop antibody-drug conjugates (ADCs) and immunotoxins as anti-cancer therapeutics.

He joined ImmunoGen in 1987 and worked in a variety of roles at the Company, including Chief Scientific Officer from 2008 until 2015. He also served on the Executive Committee of the company as Executive Vice President, Research, from 2008 until 2016.

During Dr Lambert's tenure in leadership roles at ImmunoGen, scientists at Immunogen invented the ADC technology that ultimately resulted in the Genentech/ Roche drug, **KADCYLA®** (approved in 2013 for treating HER2+ breast cancer), discovered the anti-CD38 antibody that became the Sanofi drug **SARCLISA®**, and created several other ADC molecules that were taken into clinical development. One of these ADCs is ImmunoGen's drug **ELAHERE®** that received accelerated approval from FDA in November 14, 2022, for the treatment of folate receptor alpha-positive, platinum-resistant ovarian cancer, which was converted to full approval on March 22, 2024 (ImmunoGen was acquired by Abbvie in February 2024).

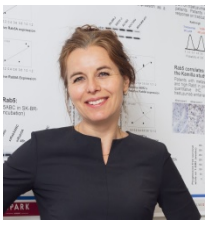
Since January, 2018, Dr Lambert consults with and/or advises a number of start-up and early-stage Biopharma companies, and some VC firms, on ADC research, ADC technologies and ADC development.

Dr Lambert is the author/co-author of over 125 peer-reviewed scientific publications. In 2016, Dr Lambert was elected as a Fellow of the American Institute for Medical and Biological Engineering (AIMBE). In 2018, he was appointed to an Honorary Professorship at The Queen's University Belfast, Northern Ireland, UK.

Anne Simonsen

Professor Anne Simonsen leads the Autophagy research group at the Institute for Cancer Research, Oslo University Hospital, and is the co-director of the Centre of Excellence CanCell (Centre for Cancer Cell Reprogramming) at the University of Oslo, Norway. She received her PhD in 1996 and during her postdoc, she identified the FYVE domain as a specific PtdIns(3)P binding domain and EEA1 as a PtdIns(3)P and RAB5 effector protein important for endosome fusion. She started her laboratory at the University of Oslo in 2009 where she became a full professor in 2011. The main objective of the Simonsen laboratory is to unravel the molecular mechanisms involved in selective types of autophagy and their role in normal health and disease. Specific focus areas include characterization of the role of hypoxia-induced mitophagy in cancer development and protein aggregate clearance in neurodegenerative disease. Her lab also has a continued interest in ALFY and other BEACH-domain containing proteins. They have used both mammalian cell lines, various in vitro approaches, and zebrafish for their discoveries. She has authored more than 120 papers and has an H-index of 64. She is a member of the Norwegian Academy of Sciences and an elected member of EMBO.

Jònas Einarsson is the CEO of Radforsk, a position he has held since 2002. Jónas has over 30 years of experience from the medical industry and has held and still holds several directorships in Norwegian biotech companies. He was educated as a medical doctor (MD) at Reykjavik University, Iceland and the University of Oslo, Norway. He was a general practitioner and health director of Lardal municipality from 1991 until 2000, and was general manager of Oslo Private Hospital from 1984 until 1991. Jónas took the initiative for and was previously chair of the board of Oslo Cancer Cluster and Oslo Cancer Cluster Innovation Park.



Anette Weyergang is a pharmacist and obtained her PhD from the University of Oslo (2009) in the lab of Kristian Berg at The Norwegian Radium Hospital where she also did her post doc in collaboration with Dr Michael Rosenblum at MD Anderson Cancer Center, Houston. She obtained a career scholarship from the Norwegian cancer Society in 2015 in which she established a laboratory for recombinant production of targeted toxins based on technology transfer from MD Anderson. Currently, she is a project group leader at the Department of Radiation Biology (Radiumhospitalet, OUS) and her research interest has been in photomedicine and intracellular delivery of macromolecular drugs, including antibody drug conjugates (ADCs). Weyergang has high focus on innovation and is co-founder and CEO of Rab Diganostics, a startup company spun out of her research at the Norwegian Radium Hospital, OUS. She has been awarded the “Vaccibody Innovation Award” (2023) from the SPARK Norway program and the “Basic PDT Research Excellence Award” from the International Photodynamic Association.

Kristian Berg has been at The Norwegian Radium Hospital for around 40 years. He has been head of the Department of Radiation Biology for 13 years, professor II at Dept. of Pharmacy, University of Oslo since 2009 and leader of the PCI-group for more than 25 years. After his MSc in biochemistry he has more than 3-4 decades of experience in experimental and preclinical research within the field of photodynamic therapy (PDT). A major focus of his research has been to reveal the mechanisms involved in the therapeutic effects of PDT and implementing such knowledge towards clinical utilization. These studies influenced the development of 5-aminolevulinic acid esters into clinical use by Photocure. Since 1995 the focus has been to utilize PDT as a platform, named photochemical internalization (PCI), for inducing intracellular delivery and activation of drugs that accumulate in endocytic vesicles. Several clinical trials have been carried out on the PCI technology. This research has resulted in approx. 120 publication with Berg as co-author and more than 400 peer-reviewed publications worldwide focusing on the PCI technology. In total, he has published more than 250 scientific publications on photobiological topics as well as 11 patents.
Kristian has been the President of the European Society for Photobiology (ESP), Board Member of IPA, Founder and Director of the ESP Photobiology School, and contributed to establishment of the companies Photocure and PCI Biotech. Kristian has received several awards including most recently the Niels Finsen medal from the International Union for Photobiology (2024), the Lifetime Achievement Award of the International Photodynamic Association (2023), European Commissions Innovation Radar Prize for Innovative Science (2019), European Society for Photobiology Award for Excellence in Photobiological Research (2013), Rimington’s Memorial Price (2000) and 1st Price at the University of Oslo and Oslo Science Parks Innovation Competition (1995). He is also elected Member of the Norwegian Academy of Science and Letters and the Royal Norwegian Society of Sciences and Letters.