# First international workshop on Sexual dimorphism in cancer

# March 22-26 2021 ONLINE VIA ZOOM

# Monday March 22

16.00-19.30 Swiss Time (11 am -2 pm East Coast US; 8-11 am West Coast US)

- 16:00-16:10 Introductory remarks and overview Gian Paolo Dotto
- SESSION 1 Gender medicine, sex determination and cancer susceptibility
- Chair : Dr. G. Paolo Dotto; co-chairs : Eirini Chrysanthou, Emily Strachan

16:10-16:35.	Ongoing efforts in gender medicine Sabine Oertelt-Prigione Professor of Gender in Primary and Transmural Care, Radboud University, Nijmegen, The Netherlands Sabine.Oertelt- Prigione@radboudumc.nl
16:35-17:00	Sex differences in epidemiology of non-sex related cancers Melinda Schuurman
	Netherlands Cancer Registry, M.Schuurman@iknl.nl and j.praagman@IKNL.NL
17:00-17:25	Sex differences in response to anticancer drugs and immune therapy Anna Dorothea Wagner and Berna Özdemir
	Consultant Department of Oncology Lausanne University Hospital CHUV/ Bern University Hospital (Inselspital) dorothea.wagner@chuv.ch Berna.oezdemir@insel.ch
17:25-17:40	Break

17:40-18:00 Beyond dimorphism – Disentangling the science in cancer care for transgender and non-binary people

## **Dr Alison May Berner**

Speciality Trainee and Clinical Research Fellow in Medical Oncology Barts Cancer Institute & Specialist Registrar in Gender Identity Gender Identity Clinic, Tavistock and Portman NHS Foundation Trust alison.berner@nhs.net

 18:00-18:25 Genetic basis of sex determination Robin.Lovell-Badge Head of the Laboratory of Stem Cell Biology and Developmental Genetics at the Francis Crick Institute Robin.Lovell-Badge@crick.ac.uk
 18.25 -18:50 The sex of the intestine and why it matters Irene Miguel-Aliaga Genes and Metabolism Section Chair, MRC London Institute of Medical Sciences, and Professor of Genetics and Physiology, Imperial College i.miguel-aliaga@Ims.mrc.ac.uk

19:00-20:00 Meet the speakers roundtable.

# **Tuesday March 23**

16:00-19:00 pm Swiss Time (11 am -1:30 pm East Coast US; 8-10:30 am West Coast US)

#### **SESSION 2 – Genetic predisposition and cancer cells genetics**

#### Chair : Dr. Susanna Chiocca; co-chairs : Luigi Mazzeo, Hannes Bode

16:00-16:25	Twins, hormones and cancer risk factors Jaakko Kaprio Professor of Genetic Epidemiology, Department of Public Health, Faculty of Medicine & Institute for Molecular Medicine FIMM, HiLIFE University of Helsinki jaakko.kaprio@helsinki.fi
16:25-16:50 future	Genetic determinants of cancer susceptibility : a look to the
	Allan Balmain Professor of Cancer Genetics, UCSF allan.Balmain@ucsf.edu
16:50-17:15	X chromosome silencing and biological impact Jeannie Lee Professor of Genetics (Pathology), Harvard Medical School, Molecular
17:15-17:30	Biologist, Massachusetts General Hospital lee@molbio.mgh.harvard.edu Break

17:30-17:55	"Gender specificity in DNA damage response pathways" Laura Zannini Group leader, Institute of Molecular Genetics, National Research Council (IGM-CNR), Pavia, IT laura.zannini@igm.cnr.it
17:55–18:20	"The molecular epidemiology of somatic mutations: how does patient sex influence cancer evolution?" Paul C. Boutros Group leader, UCLA PBoutros@mednet.ucla.edu

19:00-20:00 Meet the speakers roundtable

# Wednesday March 24

16:00-19:00 pm Swiss Time (11 am -2 pm East Coast US; 8-11 am West Coast US )

- **SESSION 3** gene mutations and cancer
- Chair : Berna Özdemir; co-chairs : Claudia Cifuentes Caballero, Achyut Bora

16:00-16:25	<b>Tumor-suppressor genes that escape from X-inactivation</b> <b>Andrew Lane</b> Broad Institute of Harvard and MIT, and Department of Medical Oncology, Dana-Farber Cancer Institute, Harvard Medical School, Cambridge, Massachusetts, USA, andrew Iane@dfci.harvard.edu
16:25-16:50	Sex disparity and the p53 signaling network Sue Haupt and Yigal Haupt Peter MacCallum Cancer Centre, 305 Grattan St, Melbourne, Victoria 3000, Australia <u>sue.haupt@petermac.org</u> ; <u>Ygal.Haupt@petermac.org</u>
16:50-17:15	<b>Sex differences in glioblastoma Joshua B. Rubin</b> Professor of Pediatrics, Hematology and Oncology, Washington University School of Medicine in St. Louis, <u>rubin_j@wustl.edu</u>
17:15-17:30	Break
17:30-17:55	Pancreatic Cancer Alexandros Tzatsos Group leader, School of Medicine and Health Science, George Washington University, atzatsos@email.gwu.edu
17:55-18:20	Novel sex-specific molecular etiology of human hepatocellular Kenneth Buetow Professor and Director Center for Evolution and Medicine, Arizona State University Kenneth.Buetow@asu.edu
18:30-19:30	Meet the speakers roundtable

# **Thursday March 25**

16:00-19:00 pm Swiss Time (11 am -2 pm East Coast US; 8-11 am West Coast US)

#### **SESSION 4 – Hormones and cancer**

#### Chair : Dr. Giovanna Chiorino; co-chairs: Georgios SFLOMOS, Valentina Biasin

- 16:00- 16:25Role of local sex steroid synthesis and metabolism in hormonal<br/>carcinogenesis<br/>Matti Poutanen<br/>Professor of Physiology, Institute of Biomedicine, University of Turku,<br/>Finland matpou@utu.fi
- 16:25-16:50 Finding Dory: hormone exposure, mutational signatures and estrogen receptor defines the early oncogenesis processes at play in the cell of origin of breast cancer Luca Magnani Group leader, Imperial College London, I.magnani@imperial.ac.uk
- 16:50-17:15 Hormonal contraceptives: consider the breast! Cathrin Brisken Professor and group leader, EPFL, Lausanne and Institute of Cancer Research, London; cathrin.brisken@epfl.ch
- 17:15-17:30 Break
- 17:30-17:55 Sex hormones signaling in male breast cancer Wilbert Zwart Group leader, Netherlands Cancer Institute (NKI), w.zwart@nki.nl
- 17:55-18:20 ER signaling and Melanoma Todd Ridky Group leader Department of Dermatology, U. Penn, <u>ridky@pennmedicine.upenn.edu</u>
- 18:20-18:45 AR signaling in skin cancer Soumitra Ghosh / Min Ma UNIL, Department of Biochemistry, <u>soumitra.ghosh@unil.ch</u> <u>min.ma@unil.ch</u>
- 18:45-19:00 Break
- 19:00-20:00 Meet the speakers roundtable

# Friday March 26

16:00-17:00 pm Swiss Time (11 am -12 pm East Coast US; 8-9 am West Coast US)

## **SESSION 5 - FRONTIERS AND OPPORTUNITIES**

Chair : G. Paolo Dotto; co-chairs : Lavinia Ghiani, Caterina Peraldo Neia,

- 16:00-16:25 Gender differences in metabolism Adriana Maggi Professor of Pharmacological Biotechnologies, University of Milan, <u>adriana.maggi@unimi.it</u>
- 16:25-16:50 "Gene-by-sex interactions regulating mitochondrial functions and cardio-metabolic traits" Aldons Jake Lusis <u>JLusis@mednet.ucla.edu</u>
- 16:50-17:15 "Sex differences in brain development and function: Implications for comorbidity of psychiatric and cardiovascular outcomes" Jill Goldstein Professor of Psychiatry and Medicine, Harvard Medical School; Executive Director, Innovation Center on Sex Differences in Medicine, Massachusetts General Hospital, jill goldstein@hms.harvard.edu
- 17:15-17:30 Break
- 17:30-18:10 *ICPI life time achievement award lecture* Introduced by **Cathrin Brisken**, ICPI co-founder, CancerPrev coordinator, EPFL and Institute for Cancer Research, London, cathrin.brisken@epfl.ch

#### **Tony Howell**

Professor of Medical Oncology, Manchester Breast Center and Breast Cancer Now Research Unit, Manchester University, UK Anthony.Howell@manchester.ac.uk

- 18:00-18:50 Poster awards (with awardees' speed talks)
- 18:50-19:00 Break
- 19:00-19:15
   Sexual dimorphism in cancer : meeting overview

   Sarah Seton.Rogers
   Chief Editor, Nature Reviews Cancer

   S.Seton-Rogers@nature.com
   Seton-Rogers@nature.com
- 19:15 19:20 Concluding remarks G. Paolo Dotto