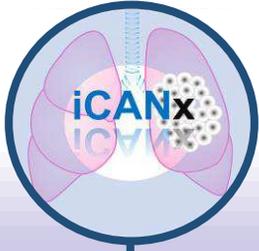


iCANx Minisymposium

(iCANx: Cancer – Lung (Disease) Crosstalk: Tumor and Organ Microenvironment)

8th December 2021; 15:00 – 18:00

virtual event via Cisco Webex™



15:00



Georgios Stathopoulos

(Helmholtz Center Munich)

„Non-oncogene addiction of KRAS-mutant tumors to interleukin-1 β .“

15:45



Christian Reinhardt

(University Hospital Essen)

„Targeting defects in the DNA damage response for genotype-stratified cancer therapy.“

16:30

Coffee break

16:45



Julián Aragonés López

(Autonomous University of Madrid)

„HIF1 α and HIF2 α -dependent metabolism rewiring in Vhl-deficient renal cell carcinoma.“

17:30

Networking session in Wonder

Organizers: Till Acker | Thorsten Stiewe | Rajkumar Savai | Soni S. Pullamsetti | Friedrich Grimminger



Speakers at the 3rd iCANx Minisymposium - Biosketches

Dr. Georgios Stathopoulos (Helmholtz Center Munich)

„Non-oncogene addiction of KRAS-mutant tumors to interleukin-1 β .“



Dr. Georgios Stathopoulos is head of the Research Group “Molecular Lung Carcinogenesis” at the Institute of Lung Biology and Disease (ILBD) and the Comprehensive Pneumology Center (CPC) at the Helmholtz Center Munich. He is the recipient of the 2009 Maurizio Vignola and 2013 Romain Pauwels Awards by the European Respiratory Society and of a 2010 Starting Grant by the European Research Council.

Georgios’ research is focused on the pathobiology of lung and pleural malignancies, including early carcinogenesis and late dissemination. For this, his lab uses animal models of environmental carcinogen- and oncogene-induced lung cancer and malignant pleural mesothelioma, as well as human cohorts of these diseases. The focus of the group is targeting inflammatory tumor-host signaling against metastasis and defining molecular signatures of causative exposures and cells of origin in thoracic malignancies.

Selected most recent literature:

Giotopoulou GA, ..., **Stathopoulos GT**. Immune-evasion of KRAS-mutant lung adenocarcinoma mediated by cAMP response element-binding protein. *bioRxiv*. 2021.

Spella M, ..., **Stathopoulos GT**. Tumor-secreted versican co-opts myeloid IKK β during metastasis. *bioRxiv*. 2021.

Marazioti A, ..., **Stathopoulos GT**. KRAS signalling in malignant pleural mesothelioma. *bioRxiv*. 2021. In press, *EMBO Mol Med*.



Prof. Dr. Christian Reinhardt (University Hospital Essen)

„Targeting defects in the DNA damage response for genotype-stratified cancer therapy.“



Prof. Christian Reinhardt is Director of the Department of Hematology and Stem Cell Transplantation at the University Hospital Essen. Among several other awards, like the Emmy-Noether fellowship of the DFG in 2009 or the Theodor Frerichs Award of the German Society for Internal Medicine in 2016, he was just awarded the Astra-Zeneca Scholar Award in Hematology Research this year.

Since his change to the University Hospital Essen in 2020, Prof. Reinhardt shifted his research focus from lung to lymphoma research. Nonetheless, he is still involved in lung research. In particular, he is interested in uncovering vulnerabilities in small cell lung cancer (SCLC). To address fundamental questions in SCLC biology and treatment response, he uses a versatile *in vivo* platform based on existing autochthonous mouse models of SCLC. Prof. Reinhardt's current research mainly focuses on translational research, for example on how to target defects in the DNA damage response for genotype-stratified cancer therapy.

Selected recent literature:

Dietlein F, ..., **Reinhardt HC**. A synergistic interaction between Chk1- and MK2 inhibitors in KRAS-mutant cancer. **Cell**. 2015.

Jachimowicz RD, ..., **Reinhardt HC**^{**}, Wiczorek D*, Shiloh Y*: UBQLN4 represses homologous recombination and is overexpressed in aggressive tumors. **Cell**. 2019.
* Shared last authors, # lead author contact

Dietlein F, ..., **Reinhardt HC**. A functional cancer genomics screen identifies a druggable synthetic lethal interaction between *MSH3* and *PRKDC*. **Cancer Discovery**. 2014.

Knittel G, ..., **Reinhardt HC**. Two mouse models reveal an actionable PARP1 dependence in aggressive chronic lymphocytic leukemia. **Nature Communications**. 2017.



Prof. Dr. Julián Aragonés López (Autonomous University of Madrid)

„HIF1 α and HIF2 α -dependent metabolism rewiring in Vhl-deficient renal cell carcinoma.“



Prof. Julián Aragonés López is professor at the Autonomous University of Madrid. Moreover, he is research group leader at the Research Unit of the Hospital of Santa Cristina, Research Institute Princesa (IP).

Prof. Aragonés López' group aims to understand the metabolism reprogramming triggered in response to oxygen fluctuations (hypoxia), which is relevant to understand the role of hypoxia-inducible factors (HIF1 and HIF2) in pathophysiology.

Current work in his group addresses the role of HIF1 and HIF2 in amino acid metabolism in different pathological scenarios specially focused on Vhl-deficient renal cell carcinoma. Recent studies from his laboratory reported about the role HIF1 on aspartate metabolism which is relevant to understand the ability of HIF1 to act as a tumor suppressor in Vhl-deficient renal cell carcinoma.

Selected recent literature:

Bouthelier A, ..., **Aragonés J.** Differential Contribution of N- and C-Terminal Regions of HIF1 α and HIF2 α to Their Target Gene Selectivity. *Int J Mol Sci.* 2020.

Moreno-Domínguez A, ..., **Aragonés J,** ..., Weissmann N, ..., López-Barneo J. Acute Oxygen Sensing Through HIF2 α -Dependent Expression of Atypical Cytochrome Oxidase Subunits in Arterial Chemoreceptors. *Science Signal.* 2020

Meléndez-Rodríguez F, ..., Böğürçü-Seidel N, ..., Acker T, ..., **Aragonés J.** HIF1 α Suppresses Tumor Cell Proliferation through Inhibition of Aspartate Biosynthesis. *Cell Reports.* 2019.

Soro-Arnaiz I, ..., **Aragonés J.** Role of mitochondrial complex IV in age-dependent obesity. *Cell Reports.* 2016.