

*Media release*

**April 23, 2021**

**World Laboratory Day 2021**

## **Talent for top-level cancer research**

**In conjunction with World Laboratory Day 2021, Inselspital, Bern University Hospital and the University of Bern interview SNF Professor Dr. Georgia Konstantinidou about her work and recent findings to provide insight into a research laboratory.**

Cancer claims more than 42 000 lives in Switzerland every year. Despite major advances in cancer treatment and prevention, important questions about its development, progression and metastasis remain unanswered. Research on cancer cell signaling pathways and potential treatments is a priority in the fight against cancer. The University of Bern and Inselspital, Bern University Hospital invest considerable resources in cutting-edge cancer research.

### **Prof. Georgia Konstantinidou, researcher and group leader**

From among the many representatives of top-level research in Bern, we asked Prof. Georgia Konstantinidou for an interview. With a scientific career that has taken her from Greece to Italy, the USA and Switzerland, Prof. Konstantinidou now heads a research group at the Institute of Pharmacology at the University of Bern, which is based at Inselspital.

### **Findings in lung and pancreatic cancer research**

Prof. Konstantinidou's group has recently published their findings in lung and pancreatic research. For instance, the role of PLC $\gamma$ 1 suppression to promote the adaptation of KRAS-mutated lung cancer to hypoxia (oxygen deprivation) was presented in "Nature Cell Biology". Thanks to these results, it should be possible, by controlling PLC $\gamma$ 1 to also regulate the development of tumors.

Research on ACSL3, an enzyme controlling lipid metabolism, has contributed to elucidating the development and treatment of pancreatic cancer. In "Science Advances", the research team led by Prof. Konstantinidou published a paper demonstrating that ACSL3 plays an important role in the progression of pancreatic cancer. And with this, a target for a subsequent treatment could be found.

### **Harnessing talent**

Good basic research, translational and applied research are crucial for treating cancer. Financial resources and an excellent research infrastructure also play a major role in this. The key to successful research, however, is the researchers themselves. To give young researchers an idea of

what this means, Inselspital and the University have arranged a brief interview and a video clip with Professor Georgia Konstantinidou for World Laboratory Day.

#### Experts:

- Prof. Dr. Georgia Konstantinidou, SNF professorship, Head of Research, Institute of Pharmacology, University of Bern at Inselspital, Bern University Hospital

#### Links:

- [Video and interview with Prof. Georgia Konstantinidou](#)
- [M. Rossi Sebastiano, C. Pozzato, M. Saliakoura, Z. Yang, R.-W. Peng, M. Galiè, K. Oberson, H.-U. Simon, E. Karamitopoulou, G. Konstantinidou, ACSL3–PAI-1 signaling axis mediates tumor-stroma cross-talk promoting pancreatic cancer progression. Sci. Adv. 6, eabb9200 \(2020\). DOI: 10.1126/sciadv.abb9200](#)
- [Saliakoura, Maria et al. "PLCy1 suppression promotes the adaptation of KRAS-mutant lung adenocarcinomas to hypoxia." Nature cell biology vol. 22,11 \(2020\): 1382-1395. DOI: 10.1038/s41556-020-00592-8](#)

#### Contact:

- Insel Gruppe AG, Communication: +41 31 632 79 25, kommunikation@insel.ch

**Insel Gruppe** is Switzerland's leading group of hospitals for university and integrated medicine. It offers comprehensive health care based on groundbreaking quality, research, innovation and education: in all stages of life, around the clock and in the right place. The six hospitals comprising Insel Gruppe (Inselspital, Aarberg, Belp, Münsingen, Riggisberg and Tiefenau) carry out over 800 000 outpatient consultations and treat about 60 000 in-patients using the latest therapy methods. It provides training for a large number of professions and is an important institution for the further training of young physicians. Insel Gruppe employs a staff of over 11 000 (including students).

Follow us on:

