



PRESS RELEASE

Precision Anti-Cancer Medicine: Opportunities Knock for Young Investigators in Friuli Venezia Giulia and Tyrol with PreCanMed

First date today for young investigators in anti-cancer research with the training initiatives of PreCanMed, the cross-border project on precision anti-cancer medicine funded by the European Union, within the Interreg Italia-Austria Programme 2014-2020. The secrets of one of the most advanced research technology and a fast-track to personalized approaches in medicine will be in the hands of the participants to the first Summer School on Tumor Organoids organized by PreCanMed in Innsbruck.

Innsbruck, July 10, 2018 – Knowledge transfer and exchange go on stage today for young researchers thanks to the Italian-Austrian cross-border initiative PreCanMed. The first PreCanMed Summer School on new cancer enabling technologies is at its start in Innsbruck, Austria, at the laboratories of the Austrian Drug Screening Institute.

PreCanMed offers young biomedical research professionals in Friuli Venezia Giulia and Tyrol **a three-day hands-on experience** and a valuable taste of possible future strategies and tools to empower their anti-cancer research. Opened by a keynote lecture by professor Zlatko Trajanoski from the Medizinische Universität Innsbruck, the course is set as **a unique interregional opportunity** of experimenting innovative and more patient tailored systems to dig deeper into the molecular traits of tumors and their Achille's heels.

«Handling and eventually mastering one of the most powerful technology in cancer research, and training the set-up of suitable drug treatments: this is just a snapshot of this summer school. Of value to young scientists and junior researchers, our course will provide them with powerful tools for shaping their research and career in biomedicine, helping them to improve their skills, achieve or set their research goals, and improve their curricula» **the coordinator of PreCanMed, Stefan Schoeftner**, said.

Schoeftner works with the Italian Consorzio Interuniversitario per le Biotecnologie – Laboratorio Nazionale in Trieste, the Lead Partner of PreCanMed, a strategic project funded by the European Union, the European Regional Development Fund and the Interreg V-A Italia-Austria Programme 2014-2020. Explaining PreCanMed, he says: «We are a



synergy of five partners from leading scientific institutions and health facilities in Friuli Venezia Giulia and Tyrol. Our mission is to **enhance the research and innovation capacity** of these Italian and Austrian border regions in the field of precision anti-cancer medicine. So, we work together with **two priorities**: the interregional implementation of a novel tool for precision anti-cancer medicine – the patient derived tumor organoids – and the training of next generation research professionals to the use of this powerful technology. **PhD students and postdocs working in the laboratories of our regions are key** to bring **innovation** and tackle the **challenges of tomorrow** deriving from this **new approach to health care and anti-cancer medicine** aimed at **more evidence-based and personalised interventions**. This is why the **training** programme of PreCanMed is a **cornerstone of our strategy**, with the hiring of many young postdocs, now directly involved in the different phases of our work, with our open seminars and workshops, and our summer schools, like the one starting today here in Innsbruck».

The patient derived tumor organoid technology consists of **functional, 3D systems of tumor cells derived from patients**. They can be cultivated in a laboratory and are like **avatars of the tumors of origin**. These systems have emerged as **one of the latest frontiers in disease modelling**.

Fifteen early-career scientists from the two border regions are now receiving their training on this technology, but the programme is expected to expand to include more participants in the future.

And what are **some advantages** of attending this PreCanMed initiative?

«Having a grounding in **one of the most promising technologies** to model and thoroughly investigate the disease at the individual level is a great advantage » according to Stephanie Waich, from the Children Hospital of the University of Innsbruck.

«Mastering these systems is not easy. Organoids can be developed from biopsies or surgical resections of both normal and cancerous tissues, but each tissue has specific requirements. **Exchanging knowledge and experience** with other researchers working with the organoid technology, **understanding critical steps** in their development and investigation is really useful» said Ilenia Segatto, working with the Department of Translational Research at the Italian Centro di Riferimento Oncologico in Aviano.

PreCanMed integrates organoid and omics technologies, high-throughput screenings of compounds and bioinformatics to generate new knowledge and develop more effective anti-cancer treatments, and to establish the first Italian-Austrian cross-border tumor organoid biobank.

To find out more on the project and its targeted activities visit www.precanmed.eu, watch the **project movie** at <https://www.youtube.com/watch?v=QdjcDRQ4krE>;



<https://www.youtube.com/watch?v=3fOxJQxRi98>
secretariat@precanmed.eu.

and contact PreCanMed at

PRECANMED IN NUMBERS

- a 3 year project started in 2017
- 1.301.277,95 EUR of funding (total project cost)
- 5 partners (Università degli studi di Trieste, Università degli Studi di Udine, Consorzio Interuniversitario per le Biotecnologie – Laboratorio Nazionale, Medizinische Universität Innsbruck, the Austrian Drug Screening Institute)
- Young researchers recruited for the project:
 - Mariangela Santorsola (LNCIB), Bioinformatician
 - Odessa Schillaci (LNCIB), Cancer cell biologist
 - Alessandro Zannini (UNI Trieste), Cancer Cell Biologist
 - Marta Codrich (UNI Udine), Cell Biologist
 - Iris Krainer (ADSI), Cell Biologist
 - Arno Amman (MUI); Medical doctor, cancer researcher
- 2 regions at the Italian-Austrian border (Friuli Venezia Giulia and Tyrol)
- 3 cities (Trieste, Udine and Innsbruck)



PRECANMED

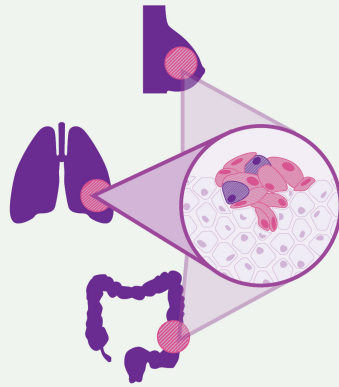
WHAT IT DOES



It makes synergies between leading Italian and Austrian Institutions

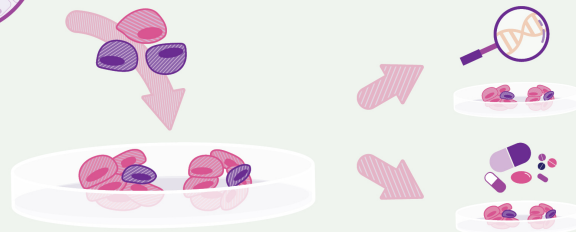
- Consorzio Interuniversitario per le Biotecnologie - Laboratorio Nazionale, Trieste
- Università degli studi di Trieste
- Università degli studi di Udine
- Medizinische Universität Innsbruck
- Austrian Drug Screening Institute

Together, without borders, these five partners will tackle the cancer challenge



It develops a new enabling technology, tumor organoids, novel model systems that faithfully resemble patients' developing tumors

1. **Lung, breast, and colon cancers**, as well as **mesothelioma**, are under the lens of Precanmed
2. A chip of diseased tissue will be taken from these tumors. The cells from these samples will proliferate in culture under peculiar conditions and they will develop 3D structures, the **tumor organoids**
3. These products will be investigated using cutting-edge omics technologies and they will be treated with different molecules to **test their drug sensitivity**



WHY IT MATTERS

It trains new field experts

and creates opportunities of knowledge exchange and collaboration at national and international level



It accelerates the development and experimentation of new personalized therapies tailored to the patient's needs and features

Every different tumor organoid represents a personal disease model and will enable the understanding of which drugs are more efficient and how a patient responds to treatments

It realises the first cross-border tumor organoid BioBank

a resource that will serve the needs of academic and translational research providing access to biological material and to a gamut of molecular data





Lead Partner and Project Coordinator

Consorzio Universitario per le Biotecnologie – Laboratorio Nazionale

Prof. Stefan Schoeftner

AREA Science Park

Trieste, Italy

Contacts

Secretariat PreCanMed

Palazzina F3

AREA Science Park

Trieste, Italy

+39 040 3758030

secretariat@precanmed.eu

Local Organizer

Dr. Barbara Frick

Barbara.frick@cemit.at

+43 676 82312923

precanmed partners



Consorzio Interuniversitario per
le Biotecnologie - Laboratorio
Nazionale, Trieste



Università degli
studi di Trieste



Università degli
studi di Udine



Medizinische
Universität Innsbruck



adsi
Austrian Drug
Screening Institute