

Targeted anti-cancer therapies

# TACT 2023: new year, new choices!



TRAINING SESSION IN HEIDELBERG

Productive and fun time in Germany!



« SCIENCE IS MY WAY TO GIVE SOMETHING BACK”

Yağmur Ersoy about anticlinins and science as a tribute.



WHO IS BEHIND THIS ANTIBODY?

Meet TACT Dissemination Team, in Strasbourg and all over Europe!

Let us take a look back at 2019. Just before TACT started, the world was still more or less comprehensible. We were planning a four-year research project without even thinking about the hazards: we would check costs for regular trips across Europe and availabilities for meetings, but that was about it. 2023, after waves and waves of pandemics, a war at the gates of Europe, not to mention the climate crisis, we are, let's say, more careful in planning. Or we choose more carefully what we focus on.

Let's use the fresh energies of January to find some ADC powers, and gather strength for the next Tact Training Seminar in Belfast on 20-24 of March! Until then, the Communication Team will give you some extra homework: for our TACT Graphic Novel, and the animation videos about your research!

## TIME FOR CHOICES...



# "I WANT TO PRODUCE PROTEINS UNTIL I DIE!"



Yağmur Ersoy, 29 years old, is TACT latest member. She comes from Turkey, studies and works in Freising in TUM (Technische Universität München). She studies anticalins. About her love for proteins, anticalins and science as a tribute.

## HOW DID YOU BECOME A TACT RESEARCHER?

To be honest, I did not know the project. My first application was for Professor Skerra and his lab. He is the one who made me aware of an open position in the TACT Consortium. I applied and got selected. I come from Turkey, I studied at Boğaziçi University, then at Koç University, and I did my Erasmus in Cologne, Germany. I kept saying that I would never work in two fields: cancer research and immunology. Well, never say never.

## BIOLOGY OR CHEMISTRY?

I'm absolutely a biologist. In high school, I developed an idea: I wanted to cut a mitochondrion in two pieces. I thought that if I could look through it, I would understand the complete energy production chain of a cell. When I could choose what to study, I told myself: I want to cut mitochondria in two pieces - that means biology. Within the first week at the "Molecular Biology and Genetics" Department, I learned that cutting a mitochondrion was impossible. But for me, pure science is not helping anything rapidly enough. You can describe a protein, count the precise number of its amino acids? Great. This is not enough. If I do something, I want to know that it is helping someone, or something. For that reason, I had to choose biotechnology. Not just biology.

## WHAT SKILL WOULD YOU LIKE TO MASTER?

Remembering. Here, I always have to carry my notebook around here. There are so many experienced people and I want to know everything they know!

## DID YOU ALWAYS KNOW THAT YOU WANTED TO WORK IN SCIENCE?

Yes. As a child, I was already crushing flowers to make some poisons. I am here, in the world, consuming things all the time - oxygen for example. Science is my way to give something back. To people, to earth, to everything. I am not an artist, I can't make people see something that they have never seen before but I know that I can make them healthy and comfortable and help them live longer. This is my way to "pay the bill".

## IN SCIENCE, WHAT IS THE CLOSEST THING TO REAL MAGIC?

Proteins are perfect. For me, they are the magic part of biology. You can assume your protein does a certain thing, but it is not quite sure. And maybe at 40° C, it does something totally different. They are still predictable, but with surprises. I love to produce proteins and make them ready to be used. I want to do it forever, after my retirement, until I die... I am really happy with this. Here, with TACT, people are working on the proteins that take part in cancer or immunology. So it is a perfect fit. We are helping people, but still producing profile proteins. I love that!

## WHAT ARE YOUR HOPES FOR THE NEXT TWO YEARS?

I can't dream small. In Heidelberg, I exchanged with other researchers, and some tested a drug which is working perfectly. They have the drug, we have the targeting anticalines: together, it is a solution!

# GREAT TIME IN HEIDELBERG!

After two years of dedicated research and intensive work, the Fourth Training Seminar held in Heidelberg was a great opportunity for personal exchange!

The ESR had an intensive week focused on "Drug Development", eventually in person. The fellows could familiarize with every aspect of drug development in detailed presentations held by Heidelberg Pharma AG specialists, highlighting different aspects of non-clinical and clinical development of an #ADC.

Evaluation of toxicity, bioanalytical measures, animal models, IP, details of the good manufacturing processes (GMP), and the evolution of a project through clinical phases were addressed, but there was also time to join in for a meal

During a workshop different specialisations of such processes starting from lead discovery and moving through all the steps and decision points to a final product were discussed.

The supervisors joined for a two-day intensive presentation of the ESRs projects and the Supervisory Board meeting, during which, among other matters, the next network meeting in Belfast as well as the follow-up project TACT2 were discussed. Stay tuned!



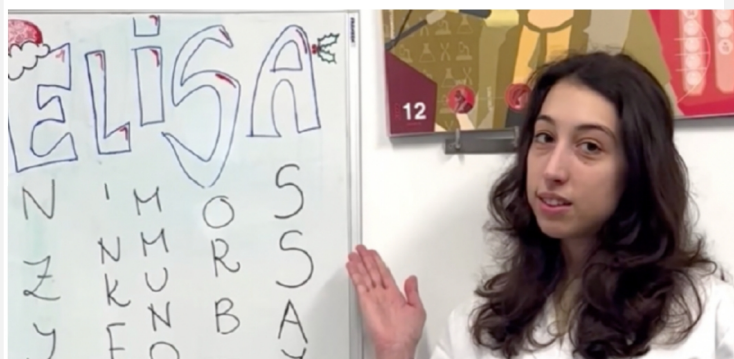
## "THE LIMITS OF MY LANGUAGE ARE THE LIMITS OF MY WORLD"

....says philosopher Ludwig Wittgenstein. The TACT Consortium offers you the costs of a European First Aid Certificate or TOEIC/IELTS language test if you are interested. Of course, it might require a bit of extra work, but those certificates are useful in an international context. Don't forget to register before the end of March!

## PUBLICATION IN "ORGANIC AND BIOMOLECULAR CHEMISTRY": CONGRATULATIONS TO LOIČ HERTER, ILIAS KOUTSOPETRAS AND LORENZO TURELLI

The collaboration took place during their secondment in Basel, Switzerland, and led to a publication in the prestigious "Organic and Biomolecular Chemistry". Their article, "Preparation of new bicyclo[2.1.1]hexane compact modules: an opening towards novel  $sp^3$ -rich chemical space" was the result of a fruitful collaboration.

## FIRST TUTORIAL AWARD GOES TO... ALESSANDRA TOTTI'S: "HOW TO ELISA"



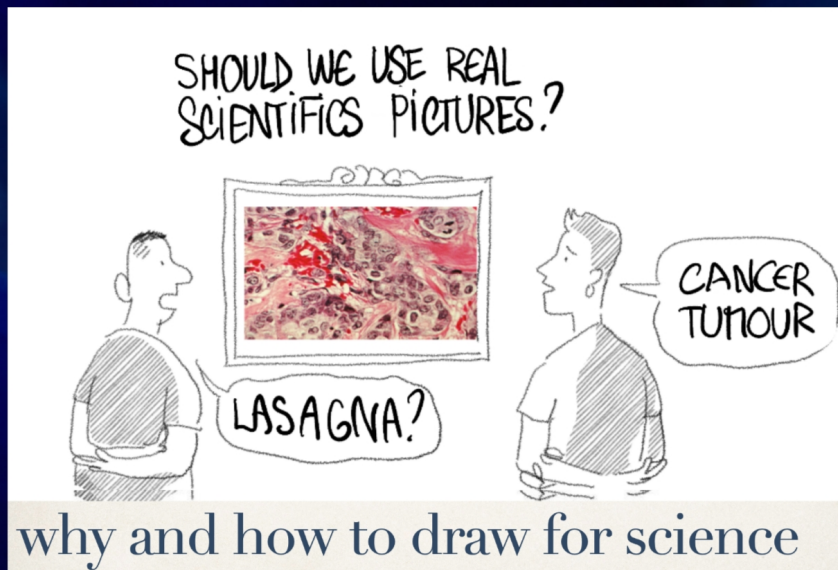
Clear explanations, self-speaking images, nice voice over, straight to the point, Alessandra totti knows her didactics! Well done for the first TACT tutorial, and good luck for the others!

# Meet TACT Dissemination Team!



## A NEW TACT PROJECT MANAGER:

You already know her from various zoom sessions, and a brief meeting in Strasbourg: after a long recruiting process, Dorothée Fraleux has been appointed as TACT new EPM. She is a journalist and communication expert, who has worked for different french media –Libération, Télérama, but also for some scientific magazines. Sciences et Vie, heidi.news, and the german speaking Higg.ch. Popularizing science has been her aim since she started to write for science. Together with Lison Bernet and Atelier Limo, they'll make sure that the work of TACT gets a boarder audience !



## LISON BERNET

... is drawing you and your research in the TACT Graphic Novel.

Lison Bernet, 45, is drawing you and your project. She uses drawings to support understanding. Her work is divided between "popularising science" and "drawing live" during events. In addition to the comic strip for TACT, she also creates comic strips for the Fondation pour la Recherche Médicale. You can read them here:

<https://www.frm.org/nos-publications/bande-dessinees>

Before that, she has been drawing for particle physics research for 10 years, for the CNRS and the CEA.

<https://www.lhc-france.fr/spip.php?rubrique65>

She accompanies seminars and conferences with her humorous drawings sketched on the spot and uses the drawings in the conception phase of a project, and in group meetings.



## ATELIER LIMO 4RESEARCH

...is producing three animation films about TACT.

Simon Brunel and Nicolas Pannetier are Atelier Limo 4Research studio's two founders. Both of them hold an MA and a DPLG in Architecture in France and are former DAAD research fellows at the European University Viadrina in Frankfurt (Oder) in the Department of Visual Anthropology. Limo means "borders" in Esperanto. As the directors of films and web documentaries (including The Return of Frontiers, ARTE 2018), as well as organisers of travelling international exhibitions, Simon and Nicolas have been producing a wide range of highly creative formats for different universities and research institutes since 2007.

Now it is your turn to put your work in an film !

<https://www.4research.eu/fr/>

# ABOUT TACT:

THIS IS WHY THE TACT PROJECT (TARGETED ANTI-CANCER THERAPIES), A EUROPEAN ANTI-CANCER NETWORK ON ANTIBODY-DRUG COMBINATIONS, WAS LAUNCHED IN 2020.



11 PhD students at the crossroads of two disciplines:

BIOLOGY  
CHEMISTRY

TACT!



Public/private collaborations



A European project

4 years to take giant steps forward in research on targeted therapies.

## TIME LINE



### Before the end of January 2023:

Don't forget to update your Personal Career Development Plan.

### Before the end of March 2023:

Preparing Belfast! The next TACT Training Seminar is on its way! (20-24 March)

Don't forget to register for a language certificate.

### Before the end of April 2023:

Preparing Boston!  
Poster presentation  
<https://www.pegsummit.com/>  
A great opportunity!

## A EUROPEAN TRAINING NETWORK

The EU-funded TACT project is an innovative, international, multidisciplinary training and research programme designed to train 11 early-stage researchers in the field of anti-cancer therapeutics, creating a new generation of experts.

The TACT research programme is focused on key principles for the development of a new and more potent generation of protein-drug conjugates employing site-specific bioconjugation methods, environment-specific cleavable linkers, more efficient protein-based targeting systems and new analytical tools for protein characterisation. The scientific consortium at the root of this research project is composed of 9 European universities, research institutes and companies:

[www.tact-etn.eu](http://www.tact-etn.eu)



MARIE SKŁODOWSKA-CURIE ACTIONS  
Research Fellowship Programme

