

Dear members, friends and supporters of TUM: Junge Akademie,

Last year, TUM: Junge Akademie was again very active and successful despite the challenges coming from the pandemic that have impacted our daily life. We have come to - some unpleasant - routine and managed to work together efficiently and successfully. Incredible how TUM: Junge Akademie managed to adapt.

The related skills and competencies for efficient communication with an optimized carbon footprint will certainly help in the future. Nevertheless, the optimistic anticipation of the hopefully soon returning "normal" and numerous inspiring encounters and retreats that we miss so much prevail.

Learn more about the [class 2020 symposium](#) as well as one of the core elements of your work, the Research Reports, and their important constituents reflecting our overarching goals for the acquisition of further competencies during your scholarship at TUM: Junge Akademie. Read about the special formats [Science Hack](#) and [Cross Challenge](#), which have been developed during the last few years. They are good proof of our creativity and the well-established work of our Task Forces. Thank you for all your efforts.

We now are curious about how our new members will grasp the challenging topic "Learning from Nature". The groups are established and already focus on transferring their topics into tangible results.

Let us see how things develop and please cross your fingers for both - for our new teams and for a way back to normality with more intensive and inspiring exchange.

Dear students, tutors, and supervisors. Thank you for a great 2021. Best wishes for health, success, and happiness in 2022 to you and your friends and families. Stay healthy!

Sincerely yours,
Gerhard Müller

TUMJA News



Learning from Nature

#class22

New Scholarship Holders started in five Teams

After the Kick-off weekend in November 2021, 40 scholarship holders started as [#class22](#). They formed five research teams under the call "Learning from Nature".

[Learn more about the five teams](#)



Future Lab

Future Labs

First Weekend-Seminars in 2022

This year's first seminars for our current scholarship holders take place on the last two weekends of January. While [#class21](#) trained their writing skills on January 22-23, [#class22](#) will focus on their project management skills on January 29-30.

[Read more](#)



Research Reports 2020

Farewell [#class20](#)

Research Reports and Symposium 2021

On October 30, 2021, we said farewell to [#class20](#) at their inspiring and entertaining [symposium "celebrate creativity"](#). In their [Research Reports 2020](#), the teams published the results of their project work. You can download the book from our website on ja.tum.de/ja/projekte/

[View the video of the Symposium 2021](#)



cross challenge 2021

Cross Challenge

Pigeons, Deafs, and Slime Blops

The first year of the Cross Challenge as cooperation between TUM and the three art colleges in Munich (HFF, HMTM, and ADBK) is entering its fourth and final month. The sixteen participants split up into three projects that investigate *Caring Co-Existence* with three very different approaches. The project are: *Coexistence – Pigeons in the City*, *I Hear You*, and *How to Make a Blop Happy!*

[Read more](#)



New Representative
Andrea Schittenhelm

TUMJA Advisory Board

Advisory Board: New Representative elected

At its first meeting in 2022, the Board of Members (BoM) elected Andrea Schittenhelm as a new scholarship holder representative for the [TUMJA Advisory Board](#). She succeeds Beate U., who was BoM representative for two years. Together with her five colleagues, she will represent the interests and opinions of the scholarship holders and alumni during the next two years.

[Read more](#)



Former head of BoM
Elena Tangocci

TUMJA Board of Members

Board of Members with new Head and Deputy

In January 2022, the [Board of Members](#) (BoM) elected Philipp Patzelt as new head and Sophia Schmid as deputy head. A big thank you go to Elena Tangocci, former head of BoM.

[Read more](#)

Alumni presented



TUMJA-Alumnus
Matthias Geuß

Annabel Matz and Tobias Tiemeier interviewing

Matthias Geuss, Professor for Embedded Systems at Coburg University

TUMJA Alumnus Matthias Geuß has studied Mechanical Engineering at TUM and Economics at the FernUniversität Hagen. After his Ph.D. at the TUM Chair of Automatic Control, he has worked for the automotive industry. In 2018, Matthias Geuß became a professor at Hof University. In the summer term of 2021, he joined the Coburg University of applied sciences and arts as a professor for embedded systems.

[Read the interview](#)

Project News from Class 2022



Team Aesthetics

Aesthetics

Nature inspired Prosthetics

Our goal is to enhance the quality of life for people that have suffered the loss of an extremity. We will research alternatives to motion mechanisms, bonding and feedback-relay of prosthetics, aiming to give new approaches and create a prototype.

[Read more](#)



Picture of a salp -
Lovell and Libby
Langstroth ©
California Academy
of Sciences

Membrains

Membranes or Membrains?

Large parts of our ecosystem function through membranes and concentration gradients. In our developments, we are yet to take advantage of this. Under the title Membrains, we want to find new possible applications. In particular, we are looking at the so-called "salps". 'At first glance, they seem like jellyfish, but they are not. Salps take in food by filtering it through a membrane. Special is, that they can control the pore size of their membrane, even though this may seem counterintuitive at first.

[Read more](#)

Role Model

Role Model

Since the kick-off weekend, we have experienced quite a few changes: two new members joined, others switched teams and we are no longer considering splitting up into two subgroups. Currently, we are deciding if we want to research how people's understanding of sustainability affects their decision-making.

[Read more](#)



The daily fake
news?!

Swarmified

Fake News Test

The problem of the effects of fake news has been apparent for some time, especially in politics such as in the US presidential election in 2016.

Therefore, we want to develop a Fake News Test that detects if someone might be in a Fake News Bubble.

[Read more on nature.com](#)



VINFO Teammeeting

VINFO

Virulent Information

Our team VINFO (virulent information) focuses on the structure, spread and substance of SARS-CoV-2-related content on social media. Our point of interest is the German-speaking "Querdenker" movement, their information networks and effect on society.

[Read more](#)

Project News from Class 2021



Team Culture

Culture

Project „On the second sight“ ready to be distributed and evaluated!

Team Culture has its campaign posters set up and its survey ready to be distributed. The survey includes the poster prints, which aim at fostering the viewer's reflection on his/her own judgments. Additionally, it includes questions that allow for an evaluation of the posters' effectiveness. The survey is going to be sent out this month.

[Read more](#)



Team elecTUM

elecTUM

Calculator for Energy Consumption of TUM Lectures

Over the last few months, our team has been able to collect all the necessary data on the energy

consumption of lecture halls, video streaming and student accommodation. We also successfully launched our survey and were able to recruit more than 200 participants. Now we are developing our calculator and incorporating the energy consumption and survey data.

[Read more](#)



Visit our website!

CreaThesis

Improve your Science Communication Skills!

Together with the launch of our Project, we started a marketing campaign with posters and postcards. Follow us on Instagram [@creathesis](#) to stay tuned! Do you want to improve your science communication skills? Take part and support us at:

[Support us](#)

News from the Taskforces

CAP

This month marks not only the start of a new year but also the start of a new TUM: Science Hackathon. We are currently working on setting the next date and motto as part of our first planning phase and will publish the invitation in February. We are looking forward to working with our new team members and hosting the best Science Hack we have ever organized!

Event

2021 was having a lot of highlights: visiting art exhibitions and going ice skating were just a few. For Christmas, we prepared a Secret Santa gift exchange and were having a nice Christmas Party! We are looking forward to more awesome events in 2022!

Marketing

In the last weeks, we were collaborating with Taskforce Mentoring on

an alumni Interview. The interview with Prof. Geuß can be found in the current newsletter.

Recruiting

The former “Taskforce Members” has a new name: Taskforce Recruiting!

Mentoring

Our interim event in November turned out smaller than planned due to Covid but was still a nice evening with good food and great conversations. In December we had the pleasure of working with TF Marketing to interview Prof. Geuß for this newsletter.

Symposia

At the weekend seminar on January 23, the Taskforce worked with #class21 on planning their symposium in June 2022.

XP Transfer

Our Taskforce XP Transfer finished working on a calendar module for the wiki and recently published a how-to article on Marketing.

[More about the taskforces](#)

Save the Date @ TUMJA

Jan 29-30, 2022: Future Lab 1 for #class22

Save the Date @ partners

acatech am Dienstag – Weekly discussions on engaging technology related topics (in German). Upcoming events:

Feb 1, 6 PM [Maschinelles Lernen in der Produktion – Ersetzt KI die Experten?](#)

acatech events – Discussions on engaging technology related topics (in English). Upcoming events:

Feb 1, 9 AM [Circular Business Models: Overcoming Barriers – Unleashing Potentials](#)

Feb 2, 9 AM [Roadmaps towards Circularity – Experiences from the Netherlands, the Nordics and Germany](#)

Akademie für Politische Bildung Tutzing

Join the online conference at the Academy. Upcoming events:

Feb 2 – 4 [Everything is connected: Energie, Klima, Sicherheit in der globalisierten Welt](#)

TUM choir

The TUM choir is the choir of the students, staff, faculty, alumni, and friends of TUM. It performs every year in the Munich Philharmonie at the university's Advent concerts and at many other festive occasions.

[Upcoming dates for singers, new singers also welcome!](#)

Site notice

Editor: Prof. Dr.-Ing. Gerhard Müller, TUM Senior Vice President Academic and Student Affairs

Publisher: Peter Finger, TUM: Junge Akademie

80333 Muenchen

[jungeakademie\(at\)zv.tum.de](mailto:jungeakademie(at)zv.tum.de)

Follow us on:

[Facebook](#), [LinkedIn](#), [Instagram](#), [YouTube](#)

You can cancel this mailing at any time. To do so please **unsubscribe**.