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## Dear Readers,

The scientific journal *Nature* has published the *Career Guide Germany* for the first time and TU Dresden is included!

The three new Clusters of Excellence CeTi, ct.qmat and PoL, which began their work in January 2019 as part of the Excellence Strategy of the Federal and State Governments, grant a fascinating glimpse into their unique and interdisciplinary research approaches.

The *Career Guide Germany* was published on 28 March 2019 both in print – as supplement to the *Nature* journal – and online.



## New Trefftz Visiting Women Professors at TUD

Since 2013, the Eleonore Trefftz Programme for Visiting Women Professors **has enabled excellent female scientists** to spend up to one year **teaching and researching** at TU Dresden.

**Dr. Verena Behringer** (MPI-EVA, Leipzig) joined the Institute of Zoology at the beginning of the year, and since then, three more visiting women professors have already accepted appointments at TUD:

**Christina Köchling** (Architectural Office Felgendreher Olf Köchling, Berlin) will be a guest at the Institute of Public Buildings and Design until 31 August 2019.

**Dr. Lana Ivanjek** (University of Vienna) will be visiting the [Chair of Didactics of Physics](#) until 31 July 2019.

**Dr. Nayla Fawzi** (LMU Munich) will be working at the [Institute of Media and Communication](#) until 30 September 2019.

Last but not least, **Prof. Angela Slavova** from the Bulgarian Academy of Sciences will be the fifth scientist in the programme. Starting in mid-July, she will be a guest at the [Chair of Fundamentals of Electrical Engineering](#) for three months.

This means that during the last seven years, **28 outstanding women scientists** have come to TU Dresden under the [Eleonore Trefftz Programme for Visiting Women Professors](#). The programme is financed by the [Institutional Strategy](#) as part of the Excellence Initiative of the Federal and State Governments.

### Research Workshop of “Bionics” FLiK Module



Over the course of millions of years of evolution, nature has developed a wealth of life forms, each adapted to its specific niche. During the research workshop of the “Bionics” FLiK module in the summer semester, interested students can find out how this might inspire architecture, natural sciences and engineering.

In **interdisciplinary working groups**, students’ research projects are developed, discussed and implemented **under expert supervision**. Prof. Maik Gude ([Institute of](#)

[Lightweight Engineering and Polymer Technology](#)) is responsible for the module.

The research workshop takes place in four block sessions, and their exact dates can be found online. Registration is still possible.

“FLiK” is a German acronym for **“research and learning in an interdisciplinary context”**, and the module is co-ordinated by the [Centre for Interdisciplinary Learning and Teaching \(ZiLL\)](#).

### GA Future Career Program: Business

The modular **certificate programme** “Future Career Program: Business” organised by the [Graduate Academy \(GA\)](#) provides important knowledge in the fields of **project management, leadership skills, business administration and career planning**.

It is aimed at doctoral candidates in the final phase of their doctorates and at postdocs who wish to pursue a professional future **outside of science or the university**.

The [application](#) deadline is **6 May 2019**, and the programme will start on **28 June 2019**.

### Fourth GA Writing Retreat

From 1 to 6 September 2019, **20 doctoral candidates and postdocs** will once again have the opportunity to work undisturbed on their dissertations and scientific texts during the [Graduate Academy \(GA\) Writing Retreat](#) in the monastery of St. Marienthal. The [deadline for applications](#) is **15 May 2019**.

### „Meine grüne Stadt und ich“ in the DDc Tram

Allotments, parks or fallow land with wild vegetation – it is the green spaces that make cities like Dresden worth living in. The tasks that green spaces perform in the city are as diverse as their appearance. But what exactly are these tasks and what can each one of

us do to preserve and enhance urban green spaces?

Scientists from the Leibniz Institute of Ecological Urban and Regional Development, the Senckenberg Natural History Collections, the Deutsches Hygiene Museum and TU Dresden, who are all partners in the DRESDEN-concept (DDc) research alliance, will act as guides during a **special tour of the city in the "DDc Science Tram" on 16 May 2019**, explaining what science in Dresden can contribute to making the city even greener.



The special tour **starts at 5.30pm** at Straßburger Platz, which is also where it will end. It is possible to board the tram from 5.15pm.

**The tickets are free, but there is only a limited number.** You can [register online](#).

### Two Nobel Laureates at TUD in April

Over the past four years, the [public lecture series "Nobel Laureates at TU Dresden"](#) has established itself as a summer highlight of Dresden's scientific landscape.

This year, the School of Science will once again host a total of **four Stockholm Laureates from the fields of medicine, physics and chemistry** at the main auditorium of TU Dresden.

The Israeli structural biologist **Prof. Ada Yonath** will get the ball rolling at 7 p.m. on **24 April 2019**, with a public lecture on "Ribo-

somes: A Connection Between The Far Past & Near Future".



Very shortly afterwards, at 6 p.m. on Friday, **26 April**, Nobel Laureate **Prof. Thomas Südhof** (photo) will explain the structure of synapses, the information transfer points of the nervous system.

Registration and further information on all four lectures at:

<https://tu-dresden.de/mn/nobel>

### New Mechanism Discovered In Insect Development

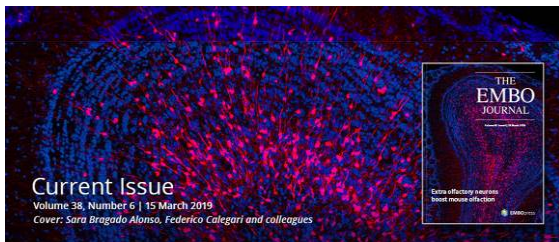
What forces shape the complex body of insects during their development? Research from an interdisciplinary team of scientists from Dresden provides new insights and identifies a previously undiscovered attachment between the developing tissue and its surrounding protective shell. This connection generates an additional force that is necessary for **proper tissue folding during insect development**.

Researchers from the [Max Planck Institute of Molecular Cell Biology and Genetics](#), the [Biotechnology Center](#) and the [Cluster of Excellence "Physics of Life" \(PoL\)](#) were significantly involved in the study.

## CRTD Makes New Progress in the Fight Against Brain Diseases

A study by **Prof. Federico Calegari's research group** at the Center for Regenerative Therapies Dresden (CRTD) shows that the **proliferation of stem cells** gives the brain additional neurons and turns normal mice into "super-sniffers". A similar approach, which **improves the function of a healthy brain**, could be beneficial for the treatment of neurodegenerative diseases.

The study **attracted attention in several media**: The EMBO journal from 15 March 2019 featured the study on its cover and included an online report in its "News & Views". Nature magazine has highlighted the study in its "Research Highlights" section.



## CRTD on the Trail of FOP Therapy

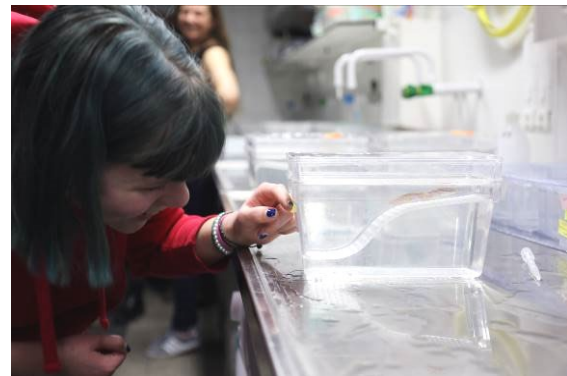
Only a few know the rare **bone disease FOP**: muscles and connective tissue of the diseased are transformed into bone – and those affected are literally trapped alive.

Scientists from **Prof. Lorenz Hofbauer's research group** at the Center for Regenerative Therapies Dresden (CRTD) have now discovered a protein that inhibits excessive bone formation in FOP. In the future, this could be a therapeutic approach. The results of the study were published in the journal "Nature Metabolism".

## Successful "Girls' Day" at CRTD

Fascination Zebrafish – about **20 participants** dealt with this master of regeneration during the annual "Girls' Day" on 28 March 2019 at the Center for Regenerative Therapies Dresden (CRTD).

For example, the girls examined the developmental stages of the zebrafish from egg to adult animal and made diligent use of the microscope. **Together with CRTD scientists**, they led the experiments, examined various samples and took home fascinating microscope images on their smartphones.



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