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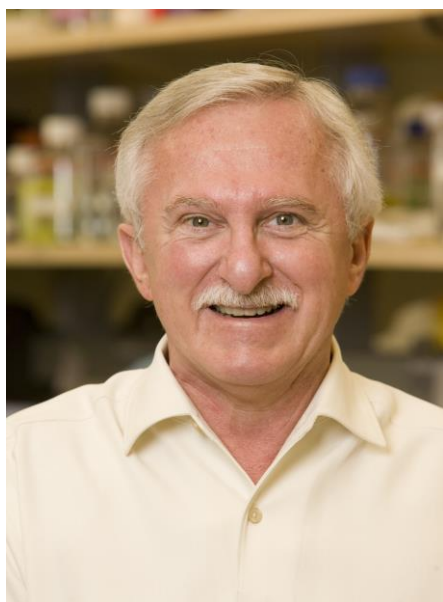
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Nobel laureate Paul Modrich was born on 13 June 1946 in Raton, USA. Today he works as James B. Duke Professor of Biochemistry at the Duke University School of Medicine. © Duke Photography

EVENTS

Nobel laureate Paul Modrich speaks about cell repair mechanisms in DNA

His colleagues call him the advocate of basic research: Paul Modrich. In his public talk “Mechanisms in DNA mismatch repair” on **16 May at 7pm**, the 70-year-old US-American biochemist will teach us about his decades of research in the field of endogenous repair systems in the cell. In 1989, he decoded the mismatch repair system (MMR) – a mechanism of the cell, which can detect and repair mismatches in the base pairs that occurred during DNA replication. Furthermore, Modrich was able to prove that malfunctions in the MMR are the most common cause for hereditary colon cancer and play a significant role in the formation of neurodegenerative diseases and in 30% of sporadic tumours. With his fundamental work on a molecular level, he made a significant contribution to the development of cancer treatment and was awarded the Nobel Prize in Chemistry in 2015.

The public lecture “Mechanisms in DNA mismatch repair” will take place on 16 May 2017, at 7 pm in the central lecture hall AUDIMAX. For further information and registration, please follow the link <https://tu-dresden.de/mn/nobel>.

RESEARCH

ERC Advanced Grant for chemistry professor Stefan Kaskel

Stefan Kaskel, Professor for Inorganic Chemistry, is awarded the ERC Advanced Grant worth approximately EUR 2.4 million for his project “Understanding negative gas adsorption in highly porous networks for the design of pressure amplifying materials.” In 2016, the team headed by Kaskel discovered a new counter-intuitive phenomenon: A porous material named DUT-49 (DUT = Dresden University of Technology) that reacts upon an externally applied gas pressure by expelling molecules from inner voids, giving rise to an overall gas pressure amplification. In order to enable a knowledge-based exploitation of pressure amplifying materials in the future, the ERC grant focuses on the fundamental understanding of the underlying thermodynamics and rational tuning of pressure amplifying porous materials. Prof. Kaskel feels honoured and motivated by this extraordinary recognition of his work: “The ERC Advanced Grant is an enormous motivation for me and my team, acknowledging in depth the fundamental understanding of new phenomena as a crucial rational basis for sustainable technological exploitation.”

Wilhelm-Ostwald-Medal awarded to Prof. Karl Leo

During the public spring meeting of the Saxon Academy of Sciences in Leipzig, Karl Leo was awarded the Wilhelm-Ostwald-Medal in recognition of his outstanding scientific achievements. Following Manfred von Ardenne, Leo is therefore the second scientist from Dresden to receive such an honour. Since 1979, the medal has been awarded 15 times.

Professor Leo was delighted to receive the award for which he said: “The Wilhelm-Ostwald-Medal is a tribute to my entire work group, as scientific achievements in experimental physics are the result of teamwork.” Of course Professor Leo and his team will not rest on their laurels – they will continue their research. Their current project focuses on organic transistors and lasers. The aim is to create components for novel, flexible electronics, such as intelligent plasters, which can monitor a certain function, similar to a 24-hour ECG monitoring device.

INTERNATIONAL AFFAIRS

Tuesday After Work Mixer @ School of Science

On 23 May, the School of Science will host the Tuesday After Work Mixer for the second time.

In the focus of this time's intercultural event will be India. Elenore Trefftz Guest Professor Madhuri Wuppuluri from India will start the evening with a short presentation on "Asian Women in Engineering and Physics."

Later on, there will be the option to participate in mini workshops to learn more about Indian culture. Culinary highlight of the event will be a live preparation of Indian street food.

Furthermore, there will be an exhibition of the Iranian night and intercultural childcare for our small guests.

When: 23 May 2017, starting at 5 pm

Where: Willers-Bau, room C 207

Who: Everybody interested in (inter)culture and/or India
How? Free entrance.

Please register at
nicole.gierig@tu-dresden.de

CURRENT ANNOUNCEMENTS

In 2017, the university offers again an award for Best Practices in the Action Field 'Internationalisation of Teaching and Learning' as part of the implementation of TU Dresden's internationalisation strategy. Employees and students of TU Dresden can apply for the award for exemplary activities and actions in the 'Internationalisation of Teaching and Learning' not later than **15th of June 2017**. The total prize money is **€ 6,000**.

More information and all application documents at tu-dresden.de/best-practice-2017

DFG funding for prevention project at the Institute of Clinical Psychology and Psychotherapy

Dr. Eva Asselmann and Professor Katja Beesdo-Baum (Chair of Behavioural Epidemiology, Institute of Clinical Psychology and Psychotherapy, TU Dresden) as well as Dr. Christiane Pané-Farré (Chair of Clinical and Physiological Psychology/ Psychotherapy, University of Greifswald) have received funding by the German Research Foundation. Their project "Indizierte Prävention psychischer Störungen bei Personen mit initialen Paniksymptomen: Untersuchung der Wirksamkeit und zugrundeliegenden Wirkmechanismen" is funded by a total of € 717,356 for a duration of three years.

TEACHING METHOD OF THE MONTH

Increasing interactivity in your courses thanks to AMCS

In the March issue of our newsletter, we had reported about the implementation of AMCS in the Department of Physics. Now we would like to take a look behind the scenes: the audience response system *Auditorium Mobile Classroom Service* (AMCS) is a joint development of the Chair of Learning and Instruction (Dr. Felix Kapp) and the Chair of Computer Networks at the Faculty of Computer Science (Dr. Iris Braun and Dr. Tenshi Hara). The primary objective of this tool is to increase interactivity in courses and teaching. The developers thus implemented numerous differing items and question formats. Students receive Apps (Android, iOS) and a browser version to aid their learning. Lecturers have the option to link the items to their presentation in such a way, that they are distributed automatically during the course. The development team is investigating how students can be supported in their learning process through push-notifications during lectures and which information should be presented on the lecturer's smartwatches to support their teaching. Are you interested? Then read more at <https://amcs.website/>

GUEST RESEARCHER PROGRAMMES

DRESDEN Junior Fellow: Dr. Hafez Mahfoud

From March to August, the Syrian scientist Dr. Hafez Mahfoud works as [Dresden Junior Fellow](#) at the Department of Biology. Dr. Hafez Mahfoud is Head of the Institute of Biotechnology at the Research Center Latakia and is working there for the General Commission for Scientific Agricultural Research in Syria. From 2005 to 2010, he was a PhD candidate at the Institute of Botany at TU Dresden (Prof. Christoph Neinhuis) and wrote his doctoral thesis on botany in the eastern Mediterranean region. Prior to this, he studied horticulture at the University of Tishreen in Latakia, where he was also a lecturer.

Elenore Trefftz Guest Professor Dr. Monica Dunford

Dr. Monica Dunford works as [Elenore Trefftz guest professor](#) at the Institute of Nuclear and Particle Physics from April till September. Dr. Monica Dunford (USA) is a lecturer in physics and *Akademische Rätin* at the University of Heidelberg. Since 2010, she has been involved in the research of the [ATLAS experiment](#): from 2010 to 2012 as a CERN Fellow in Geneva and subsequently, as a junior research group leader at the University of Heidelberg, where she successfully completed her habilitation thesis in 2015. At the [Institute of Nuclear and Particle Physics at TU Dresden](#), she is collaborating closely with the three ATLAS research groups working there. In addition, she is planning courses for female students and the general public, as well as a new type of lecture in which students will be able to experience the broad spectrum of research methods of particle physics in tutorials, using real data from ATLAS.

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