Welcome to the tenth issue of Science in School





Intelligence is of secondary importance in research." So says our featured scientist, cosmologist Tamara Davis. For

her, interest and inspiration are far more important for success in science. Tamara herself certainly lacks neither interest nor inspiration (nor, I suspect, intelligence). She tells Henri Boffin about her work on dark energy, supernovae, the speed of light, and life elsewhere in the Universe – and how she combines this with playing world-class sport.

Shamim Hartevelt-Velani, Carl Walker and Benny Elmann-Larsen also have their eyes to the heavens, if not quite so distantly. In their second article about the International Space Station, they describe the daily life of an astronaut on board and the physiological effects of space.

Still closer to home is Mico Tatalovic's research: his group has spent 15 years following the daily life not of humans but of meerkats. Why do some of these small African carnivores spend so much time watching for predators? Are these sentinels risking their safety for the sake of the group, or do they have something to gain as individuals? And why are scientists so interested?

Recently, the interest not only of scientists but also of the general public has been drawn to the topic of particle physics. When the Large Hadron Collider (LHC) at CERN was switched on – and almost immediately switched off again – it made headline news across Europe and beyond. Rolf Landua and Marlene Rau investigate why this colossal experiment is necessary, how it works and what it will be able to tell us about the origins of the Universe.

If that all sounds a bit remote from the classroom, you might prefer the latest in our series of articles about climate change: Dudley Shallcross and Tim Harrison's practical chemistry demonstrations. For younger students concerned about our climate, Sue Johnson offers experiments and a role play about carbon dioxide, oxygen and plant conservation.

While climate change is certainly a hot topic, nanotechnology is also frequently in the news. But what is it? With the help of Matthias Mallmann's practical activities, you can introduce

Editorial



nanotechnology into your classroom – what is the science behind pregnancy tests, and how can you visualise a magnetic field in a liquid?

Climate change, the LHC, nanotechnology – if we hear about a scientific topic in the media, we assume it must be important. But is it? And who decides what we hear about? TV journalist Nadia Salem takes Marlene Rau behind the scenes, discussing her daily work, her love of science and what it takes to become a science journalist.

If you find these articles useful and inspiring, why not help us to share them with teachers across Europe by translating them into your native language? Or if that doesn't appeal, perhaps you could join our reviewer panel, and help us decide which articles to publish. And of course, we welcome articles written by our readers. For more information, please visit our website.

On the *Science in School* website, you can also join our discussion forum

(www.scienceinschool.org/forum) to contact teachers across Europe, pose scientific questions and offer your own tips and advice. We look forward to your contributions.

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