

# MOVERS

**Miodrag Stojkovic, deputy director of regenerative medicine, Prince Felipe Research Centre, Valencia, Spain**



**2004-05:** Deputy director, Centre for Stem Cell Biology and Developmental Genetics, University of Newcastle upon Tyne, UK

**2003-05:** Reader in embryology and stem-cell biology, University of Newcastle upon Tyne, UK

**1998-2002:** Head of an *in vitro* fertilization laboratory, Ludwig-Maximilians University, Munich, Germany

Born in Leskovac in former Yugoslavia, Miodrag Stojkovic has in the past 15 years moved to Germany, then to Britain and has recently arrived in Spain. "That's it for me — no more languages after this one," he jokes. Indeed, his ability to adapt to new countries has served him well as he takes up his post at Spain's newest biomedical research centre.

After receiving his degree in veterinary medicine at the University of Belgrade, Stojkovic left his native country for Germany in 1991, just before the Balkan conflict started. "I had a feeling the war was coming," he says. For two years he worked as a nurse at the University Hospital of Hamburg before moving to Munich to study veterinary medicine again. Stojkovic had to repeat four semesters of coursework, pass additional exams and attend a language school to get his degree recognized in Germany. He began a PhD programme at Ludwig-Maximilians University in Munich and worked as a nurse during weekends.

After receiving his doctorate, he stayed on and soon became the head of an animal *in vitro* fertilization lab. He considers his time in Munich to be the most important period of his career. "It was here that I learned all the basic techniques that I am now using for my work on human embryos and human embryonic stem cells," he says.

Wanting to shift his work from animal embryos to human ones, Stojkovic soon realized that Germany's law restricting work on human embryonic stem cells would force him to move. In 2002 he went to Britain, where he joined the Newcastle Fertility Centre and the Institute of Human Genetics at the Centre for Life. Six months later he derived Britain's first fully characterized human embryonic stem-cell line. He then became a reader at the University of Newcastle upon Tyne, and three years later he created Europe's first cloned human embryos. Stojkovic also became deputy director of the university's stem-cell biology centre.

Stojkovic first got to know the Prince Felipe Research Centre when he was invited to give a lecture there. He was immediately impressed by the atmosphere and the commitment of its researchers. Realizing that Spain would offer him better opportunities, he decided to move. His belief in the therapeutic potential of stem cells motivates him. "If you believe in something, it will give you power and energy, no matter what political or religious obstacles you might come across," he says. ■

**Siëlle Gramser**

## MENTORS & PROTÉGÉS

### Teaching in depth

My adviser John Krommes, a theoretical plasma physicist at Princeton University, is an active researcher and outstanding teacher. He takes as much time as needed with students and watches out for our career development. That is why he received a Graduate Mentoring Award last year from Princeton.

Good mentoring begins with good teaching. In plasma physics, it is easy for students and professors to neglect the fundamentals and work from established results. That does not happen with John. He teaches from first principles. Students in his class are guided by more than 300 pages of handouts that he updates every year.

John makes plenty of time for his students. When Jill Foley, one of my fellow students, was preparing for her general exams, she asked John for a brief meeting to go through some questions. They spent eight hours reviewing the most challenging topics from two years of plasma-physics courses. "He didn't just give me the answers but led me to them so that I knew how to take that path again," says Jill.

John nurtures young scientists by really listening to our ideas. For example, we recently worked on the creation of fake data to test a data-analysis technique our team is using. John wanted to focus on the fundamental

plasma physics required to simulate data that more closely resemble the experimental data. But my thoughts on this problem led me to new understandings of the analysis technique itself. Instead of pursuing the topic of greatest interest to him, John took about five hours to understand my questions and ideas and to discuss them with our experimental partners. After much thought, he sent me an 800-word e-mail guiding my next steps.

John also contributes to our future as researchers. For example, even though both John and I are primarily analytic theorists, he has suggested that I invest significant project time acquiring skills in numerical simulation. This will probably not be essential for my thesis but may be important for my employment prospects.

The demands of pursuing a thesis and the all-too-frequent struggles with demanding, abusive or absentee advisers seem to cause a lot of soul-searching among graduate students about their career paths. But I know that after graduation, I will be seeking a research job as a plasma physicist. John Krommes deserves a great deal of credit for that confidence. ■

**Timothy Stoltzfus-Dueck, a graduate student at Princeton University, drew on the experiences of several fellow students to compile this tribute.**

#### ALUMNUS JOURNAL

### Writing up

I was a Graduate Journal writer for *Naturejobs* in 2004 and have spent the past year finishing my PhD. The physical and mental toll of writing it up took me by surprise. I realized that not only my results, but my experimental designs, the criteria I used to review the literature, my interpretations and my understanding of first principles would all be under scrutiny. As I strove to explain my results, I gaped at the seemingly infinite magnitude of what I do not know.

As much as it was painful and humbling, I also found writing was a reflective and rewarding experience. It was a luxury to be able to focus on all aspects of my work at once, connecting the results from different experiments and finally bringing them together into an illustrative story.

I am in awe of the number of people who helped me produce this thesis. Listing the names of technicians, fellow students and a supervisor (who lived up to his job description) on an acknowledgements page seems to be paltry payback. I received much helpful advice, including one tip from a fellow student: "The most important thing to get out of graduate school is yourself."

Provided that my defences go well, I will be out by early this year. My time, tuition and stress are not adequately represented by those 201 pages. But I hope that what I do in the future will be a credit to the talented people who helped me gain the skills and knowledge that I take away with me. ■

**Sidney Omelon will soon graduate from the University of Toronto, Canada.**