GRADUATE JOURNAL

A tough challenge

Despite physics being the subject I found most difficult at school, or maybe because it was, I decided to pursue it further. I spent four years at the University of Cambridge, UK, and then moved to London to start my PhD. For the past 18 months I have been based at Fermilab, a particle accelerator in the United States, near Chicago. Fermilab currently has the highest-energy accelerator in the world and is an exciting place to work.

At Fermilab, we ask the most fundamental questions of the Universe. Where do we come from? How was the Universe created? How will it end? These are some of the most challenging questions humanity can ask, and are for me the most inspiring ones.

But I also want a job that provides a tangible benefit to society and that makes a difference to people, if only in a small way. Although I feel enormously lucky to do what I do, I also recognize that my research is very esoteric. I would enjoy a career that allows me to share some of my passion for science with others, for example to walk into a classroom and excite and enthuse children about what Fermilab does. My biggest decision after finishing my PhD in the next year is whether to continue in my field of research, or to choose something that touches society a little more directly. Amber Jenkins is a graduate student in particle physics at Imperial College London.

SCIENTISTS SOCIETIES

Giving young European students a voice

urodoc is a European federation of national organizations that represent young researchers in their respective countries. It aims to give a voice to PhD candidates, postdoctoral fellows and other junior researchers in European policy-making processes and to improve their working conditions. To achieve these goals, Eurodoc set up several workgroups that operate open mailing lists and a discussion forum.

So far, postdoc and graduate-student associations from 13 countries are members of Eurodoc, with more expressing interest in joining. Eurodoc is also encouraging young scientists in other countries to establish their own national organizations.

Both board and working-group members regularly attend

conferences and deliver talks, poster presentations or position papers to policy-makers in their field of research in Europe. In addition, Eurodoc organizes an annual conference, gathering the national delegates with guest speakers from policy, academia and industry, for discussions at plenary sessions and thematic workshops.

The next annual conference will be held in Athens on 18-21 March. The major topics to be addressed are the profession of the researcher in the European Research Area, with a keynote speech by Achilleas Mitsos, director-general of the European Commission's research directorate, and the doctoral level as the third tier of higher education, with Eric Froment, president of the European University Association.

As well as this event, Eurodoc is currently coorganizing a conference on early-stage researcher's mobility, to take place in Lisbon on 25–27 February. The results are expected to significantly raise awareness of this issue and help to remove the national and European obstacles to mobility within and beyond the European Research Area. Eurodoc will also be a member of the steering committee of the research project called 'Doctoral programmes for the European knowledge society', which will collect information about the current situation of doctorates in Europe.

The need for an organized voice of European researchers in the initial stages of their professional career will become increasingly evident in the future, and Eurodoc's growth aims to help meet this challenge.

Alexandre Urani, Raoul Tan, Renzo Rubele and Daniel Mietchen are members of the Eurodoc board.

OVERS Otmar Wiestler, director, German Cancer Research Center (DKFZ), Heidelberg, Germany



f you want to do basic research in modern biomedicine and stay in touch with clinical diagnosis, you have only three fields to choose: human genetics, virology or neuropathology, says Otmar Wiestler. "In other fields the distance to clinical research has either become too great, or the clinical load will be

overwhelming, time-wise and mentally." Wiestler, who on 1 January took over as director of the German Cancer

1992–2003: Director of the Institute of Neuropathology, University of Bonn, Germany.

1987–1992: Junior physician, then senior physician and group leader, at the Institute of Pathology, Department of Neuropathology, University Hospital Zurich, Switzerland.

1984–1987: Postdoctoral fellow in the Department of Pathology, University of California, San Diego. **1982–1984:** Junior physician in the Department of Neuropathology, University of Freiburg, Germany.

Research Center (DKFZ), is one such biomedical researcher who has always been keen not to lose sight of the clinical aspects of his work.

Wiestler says that he was lucky as a young scientist to work in groups bristling with talent — one team member in Zürich, Adriano Aguzzi, has since become a leading prion researcher. Wiestler's decision to focus on cancer genes, on the eve of the discovery of the *p*53 gene as a key tumour suppressor, also proved to be a wise one. All of a sudden, he found himself in the forefront of a newly emerging field.

But he also learned to keep an eye on politics, which proved to be crucial for his future career. He was propelled into the headlines when, three years ago, he and a group leader in Bonn became the first scientists in Germany to apply for public grant money for research involving human embryonic stem cells. The intense public debate that followed has been a valuable exercise in public relations, he says. But it also had unpleasant side effects: Wiestler's wife and five children were put under police protection when a national newspaper published their home address.

But Wiestler feels no bitterness. He is thrilled by the challenge of transforming the 30-year-old DKFZ into a comprehensive cancer centre to network and coordinate cancer research, diagnosis, prevention and therapy countrywide — similar to the US National Cancer Institute, he says.

Experimental therapies, for example those involving human stem cells, will also play a role at the DKFZ, although not the main role. "It would be very wrong to raise any hopes before their true potential has been thoroughly investigated," he says. "The example of gene therapy has shown us that it can be fatal to test human applications too early."