

Three new groups strengthen research/medicine links

The beginning of 2006 saw the official addition of three new groups to the Molecular Medicine Partnership Unit (MMPU). They are:

- Carsten Schultz and Marcus Mall studying cystic fibrosis;
- Peer Bork and Magnus von Knebel-Doerberitz looking at the identification of cancer markers;
- Matthias Hentze and Martina Muckenthaler studying mammalian degenerative diseases due to defects in iron metabolism.

The “pilot” phase of the project tested the feasibility of such a novel partnership, in which groups are jointly led by two principal investigators – a basic researcher from EMBL and a medical researcher from the Medical Faculty of the University of Heidelberg – with the aim to pursue basic research projects that are related to medicine. The first group was that of MMPU founders Andreas Kulozik from the Medical Faculty and EMBL Heidelberg’s Matthias Hentze, who established the Partnership in 2002 and work together on diseases of RNA metabolism.

Their success, producing valuable new insights into the mechanisms underlying some of the most common human genetic diseases, has opened the way to the second phase of the project. This will serve as a springboard for several new research areas with the appointment of the three additional groups, all of

which fit the model of joint leadership from both institutions.

“The new groups have been chosen as a result of their interest in the ongoing convergence of biology and medicine – the types of research carried out at EMBL and in the clinical setting at the Medical Faculty,” says Matthias. “They also fit the criteria established when the MMPU was created: they have joint leadership from EMBL and the university, with the two leaders having a collaborative history, complementary expertise and a project that is sustainable.”

Carsten Schultz’s background in medicinal chemistry and his interest in cystic fibrosis had already led to an involvement with the University of Heidelberg’s Cystic Fibrosis Centre. The arrival there of Marcus Mall, a physician scientist with a longstanding interest in cystic fibrosis pathogenesis, offered an obvious opportunity for collaboration.

“Until then, the Cystic Fibrosis Centre focused predominantly on clinical issues, but then Marcus arrived with the first well-functioning mouse model for the disease,” Carsten says. “This provided a new opportunity: my group had already synthesised several compounds that looked promising in cell experiments, and now they could be examined *in vivo*. As well as this, we aim to define and validate future cystic fibrosis drug targets. If successful, we will be able to significantly

strengthen research on the disease in Heidelberg.”

Carsten and Marcus have just hired the first dedicated MMPU PhD student to work on the project. “Joining the MMPU offers a great opportunity to follow a line of research that we might not otherwise be able to,” Carsten says. “It’s an excellent initiative enabling a fusion of chemical biology, cell biology and physiology, a rare opportunity. In the future, it would also be beneficial to add a focus on microbiology.”

As well as working on their individual projects, the new groups will be involved in the MMPU as a whole, getting together to organise seminars, mini-symposia and teaching activities. In the longer term, it is hoped that the groups will move in together on the Neuenheimer Feld campus in Heidelberg, rather than remaining split between different locations. As well as the expansion, the second phase also aims to increase postgraduate training.

As for the future of the MMPU, Matthias is positive that the partnership will continue to expand and provide some sterling insights into both basic research and the clinical field. “Membership of the MMPU has many benefits, both for the basic and medical researchers involved and for the project as a whole. I see no reason why it could not expand to the size of one of EMBL’s other Units if the MMPU success story continues.”

EU Commissioner for Research visits EMBL

Admittedly, Janez Potočnik’s visit to EMBL didn’t exactly get off to the smoothest start. After his driver almost missed the EU Commissioner for Research at Frankfurt Airport, he made it to the main Lab only just in time for the beginning of the day’s schedule of events. Luckily, what he heard and saw at EMBL during his stay on January 16 made up for the bumpy start.

To set the scene, Iain Mattaj introduced EMBL and its latest research and developments. Two projects in which the EU Commissioner showed particular interest were the EMBL International Centre for Advanced Training (EICAT) and the bioinformatics services and databases of the EBI. Following a presentation by Janet Thornton, the Director of the EBI, he called the extensive databases in Hinxton a highlight of molecular biology in Europe and a piece of crucial scientific infrastructure that should be promoted in the future.

Later, the EU Commissioner got a first-hand impression of research in molecular biology during a tour of some of EMBL’s core facilities. After Rainer Pepperkok explained the cutting-edge technology and the services offered by the



Rainer Pepperkok explains the ALMF to Janez Potočnik (left) while Christian Boulin looks on

Advanced Light Microscopy Facility, Vladimir Benes introduced the subtleties of DNA sequencing and analysis in the Genomics core facility.

EMBL left a very favourable impression. It is

“a model institution for science in Europe,” Commissioner Potočnik summarised, adding that he hoped EMBL’s exceptionally high participation in EU research projects would continue in the future.