## **EDITORIAL**



This issue of CHIMIA contains contributions on the history, research, and teaching activities at the Institute of Pharmaceutical Sciences of the Swiss Federal Institute of Technology Zurich (ETHZ).

The decision to devote a special topic issue to our institute is timely for several reasons. First, the institute's body of teaching and research has recently grown and is currently composed of six full professors, three professors with dual appointments, two assistant professors, and two titular professors. A broad range of pharmaceutically relevant disciplines are taught and researched, 'Therapeutics Technologies' and 'Pharmacogenomics' being the most recent chairs established at the institute. In addition, a former assistant professor at the institute (Prof. Leonardo Scapozza) has recently been appointed full professor of Medicinal Chemistry at the University of Geneva.

Second, there has been a steady increase in the number of students of Pharmaceutical Sciences, with over 100 freshmen in the Winter Semester 2003/2004. The new curriculum is to a large extent identical to the Biology curriculum in the first two years, shifting its focus towards pharmaceutics during the last three years of the study program.

Last but not least, the Institute of Pharmaceutical Sciences has recently merged with the Department of Chemistry of ETHZ, giving rise to a larger Department of Chemistry and Applied Biosciences, which is currently headed by Heidi Wunderli-Allenspach, professor of Biopharmacy at the institute.

At the beginning of this issue of CHIMIA, you will find an article by Otto Sticher, Emeritus Professor of Ethnopharmacy and Pharmacognosy, on the history of the institute. In the second article, Prof. Wunderli-Allenspach details the new study program in Pharmaceutical Sciences. Our curriculum, which used to last five years, has been shortened by one year and is now fully compatible with the Bologna Declaration, offering degrees at the Bachelor's, Master's, and PhD level. After having taken their Master's degree, our students may choose to qualify as Federal Pharmacists by attending a needs-based training program and passing the final exam. In addition, continuing education is actively promoted at the institute by offering post-graduate study (theoretical and practical courses as well as special seminars) open to a broad audience.

Following these introductory articles, the professors at the institute present their research activities in short overviews. Faithful to our motto 'From Concepts to Prototypes', research activities range from investigating the mechanisms of action of pharmaceutical compounds and the validation of novel targets to the development of new diagnostic and therapeutic agents. A number of compounds developed at the institute have been licensed to industrial partners and entered clinical development programs.

Over the years, the Institute of Pharmaceutical Sciences has established a number of privileged collaborations. It is worth mentioning the fruitful collaboration with the University of Zürich and with the Paul Scherrer Institute, as well as the joint-venture with the University of Basel in the form of the 'Pharma Center Basel-Zürich'. Furthermore, scientists at the institute are engaged in numerous collaborations both at the national and international level, including representation in Pharmacopoeia and WHO commissions, as well as active participation in several European Union projects. Collaborations with industrial groups are actively promoted at the institute. Recently, and in partnership with Schering AG, a large PET imaging project has been initiated, which is coordinated by Prof. August Schubiger. The project could be realized due to the availability of an animal PET scanner, a cyclotron for the production of radionuclides, as well as a GMP facility for the production of clinical-grade radiopharmaceuticals.

Pharmaceutical scientists trained at our institute are being hired for a broad variety of professional activities, ranging from the traditional pharmacy to various positions in the industry, in academia, and in other fields of the health care sector (hospitals, insurance companies, financial analysts, medicinal agencies, *etc.*).

In August 2004, the Institute of Pharmaceutical Sciences relocated to the new chemistry building at the Hönggerberg Campus of ETHZ. The institute is now in the immediate vicinity of the other laboratories and institutes of the Department of Chemistry and Applied Biosciences, and profits from the close proximity of several institutes of the departments of Biology, Physics, and Material Sciences. I have no doubts that the critical mass generated by this concentration at the Hönggerberg Campus of research activities in the Life Sciences area will keep on strengthening biomedical research within ETHZ.

Solidly anchored in its traditions, the Institute of Pharmaceutical Sciences has expanded its activities into emerging fields of modern pharmaceutical research, thus projecting itself into the future.

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Prof. Dr. Dario Neri Head of the Institute of Pharmaceutical Sciences