

Editorial



In 2000–2001, the first call for the ‘SNF-professor’ stipends from the Swiss National Science Foundation allowed 26 promising young researchers to start or continue an academic career with a professorship that did not depend on the succession plans of individual Swiss institutions. The program is today in its eleventh round, and its success is indisputable.

Why was such a program a necessity in Switzerland? There were at that time very few instruments for integrating young researchers into the Swiss academic system other than the traditional habilitation. Although this mentoring approach for an independent career has shown its benefits over centuries, it carries the intrinsic risk of inbreeding, because the relatively modest size of the academic market in Switzerland prevented an efficient reshuffling at each significant phase. Another system, now operating in the United States, uses a *ca.* five-year tenure-track phase, in which a candidate can prove his/her ability to carry out cutting-edge independent research, to attract external funding and to teach at all levels. This system has also shown its benefits over several decades, but needs a large pool of positions *and* candidates. Again, the size of our ‘academic market’ made its implementation difficult. The new program of the SNF was a first step towards true academic mobility, where promising young researchers could shape their careers in the best possible institutions, beyond issues of affiliation or political schemes.

This program is clearly a success, as 42% of the awardees since 2001 found a position in the institution where they started the program, 24% in another Swiss institution, 34% in institutions in a different country and less than 5% gave up their academic ambitions. Clearly, the worrisome brain drain was stopped and has now even reversed, since foreign applications are possible. There was still, however, a missing step in order to have the necessary experience to enter the program. After 1–2 years of postdoctoral study, few candidates had enough independence to convince the appointment board of the SNF that they would succeed in flying solo. Thus, another program, called *Ambizione*, was introduced three years ago, with the purpose of bridging the gap between postdoc and SNF professorship. During three years, the successful candidate has funds to cover his/her own salary and, under some particular circumstances, that of one PhD student. In the mean time, other similar programs specifically designed for chemistry have been established in Switzerland, by the Alfred Werner Foundation or the Sandoz Family Foundation.

Chemistry has benefited well from this program, as this special issue of CHIMIA attests. Eight awardees from the last three rounds of SNF-professor and *Ambizione* fellowships present their research, covering a large breadth of our field. On the life sciences end of the spectrum, a fascinating journey into how the ribosome is assembled is brought to us by **Vikram Panse** (ETHZ), while **Marcel Hollenstein** (UniBE) presents how nucleic acids can catalyse chemical reactions (DNAzymes). Targeting medical application, **Henrik Braband** (UZH) uses radioactive organometallic technetium complexes, while **Corinne Vebert-Nardin** (UniGE) uses DNA to assemble new nanomaterials. Such materials are also tackled by **Marco Lattuada** (ETHZ), who explores the influence of external factors on the formation of nanoparticles, and **Mihaiela Stuparu** (UZH) who designs large aromatic building blocks for polymerization. At the molecular level, **Clément Mazet** (UniGE) exploits the unique properties of chiral iridium complexes to prepare chiral aldehydes by a clever catalytic enantioselective isomerization of allylic alcohols. As the reader can see, we have progressively moved from biology towards inorganic chemistry, and the picture would not be complete without the other end of the spectrum, with the contribution of **Laszlo Kocsis** (UniLS), who examines the chemical composition of marine fossils to reconstruct prehistoric environment.

Prof. Christian Bochet
University of Fribourg

The Editorial Board of CHIMIA would like to thank the guest editor Prof. Christian Bochet for putting together a very interesting range of articles highlighting both young researchers at the start of their independent careers and the institutional instruments that allow for their integration into the Swiss academic system.