

Editorial



Collectively, the Swiss National Science Foundation (SNSF) and the European Research Council (ERC) are two of the most important pillars of extramural funding for the academic chemical sciences in Switzerland. They offer diverse funding programs which aim to support independent principal investigators at all career stages (Starting, Consolidator and Advanced Grants), *via* project specific grants, through to other initiatives that foster collaborative research groups. In each case, the goals remain the same – to support the best scientists with the best ideas.

Many colleagues in the Swiss Chemistry community (myself included), owe a debt of gratitude to the faith and generous support that the award of an SNSF or ERC grant provides at crucial stages of their careers. Indeed, mechanisms like the SNSF Professorial Fellowships (formerly known as the SNSF Professorships, *Excellenza*, or *PRIMA* schemes), the ERC Starting Grants, and in recent years during Switzerland's exile from Horizon Europe, the temporary backup schemes provided by the SNSF, have been instrumental in helping countless researchers set forth on the road to scientific independence. The impact of these early-stage career awards is profound, often setting in place new research themes that continue far beyond the initial lifetime of the grant, helping to shape the future scientific landscape across Switzerland.

In this issue of *CHIMIA*, we sought to highlight some of the exciting and diverse chemistry that is taking place under the auspices of the ERC & SNSF-ERC mechanisms awarded to individual researchers between 2019 and 2023. The invitations were sent to recipients that were awarded grants *via* the ERC Chemistry panels PE4 (Physical and analytical chemical sciences) and PE5 (Synthetic chemistry and materials), or equivalently the Mathematics, Natural and Engineering Sciences Research Council at the SNSF. Before pressing ahead, it's important to note that in restricting invitations to these 'traditional' chemistry panels, we undoubtedly missed many excellent chemistry colleagues who work at the interface of chemistry and other disciplines like Physics, Medicine, and the Environment, which highlights the broad range of impact that chemists have across all sciences.

In the pages that follow we are delighted to present some excellent, cutting-edge scientific projects that span the Starting, Consolidator, and Advanced programs. **Jean-Louis Reymond** and his team start with an account of the expanding chemical space for peptide-based antimicrobials. **Stefan Willitsch**, **Prerna Paliwal** and co-workers introduce us to the world of chemistry to control molecular quantum (logic) technologies. Our new colleague, **Yang Yao** at the University of Basel shares her exciting ideas for studying water under confinement. **Stefan Matile** and co-workers delve into the fascinating chemistry of thiol-mediated cellular uptake mechanisms. **Helma Wennemers** and co-workers elaborate on their innovative approaches for targeting collagen with new chemical tools. Finally, **Michal Juríček** offers his fascinating perspective entitled, '*Hack Your Chemistry*', discussing his cutting-edge methods for harnessing the extreme reactivity of carbon-based radicals to access new materials.

My hope is that the articles in this *CHIMIA* collection will provide inspiration and encouragement to the next generation of aspiring scientists to write down their ideas and shoot for the stars.

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