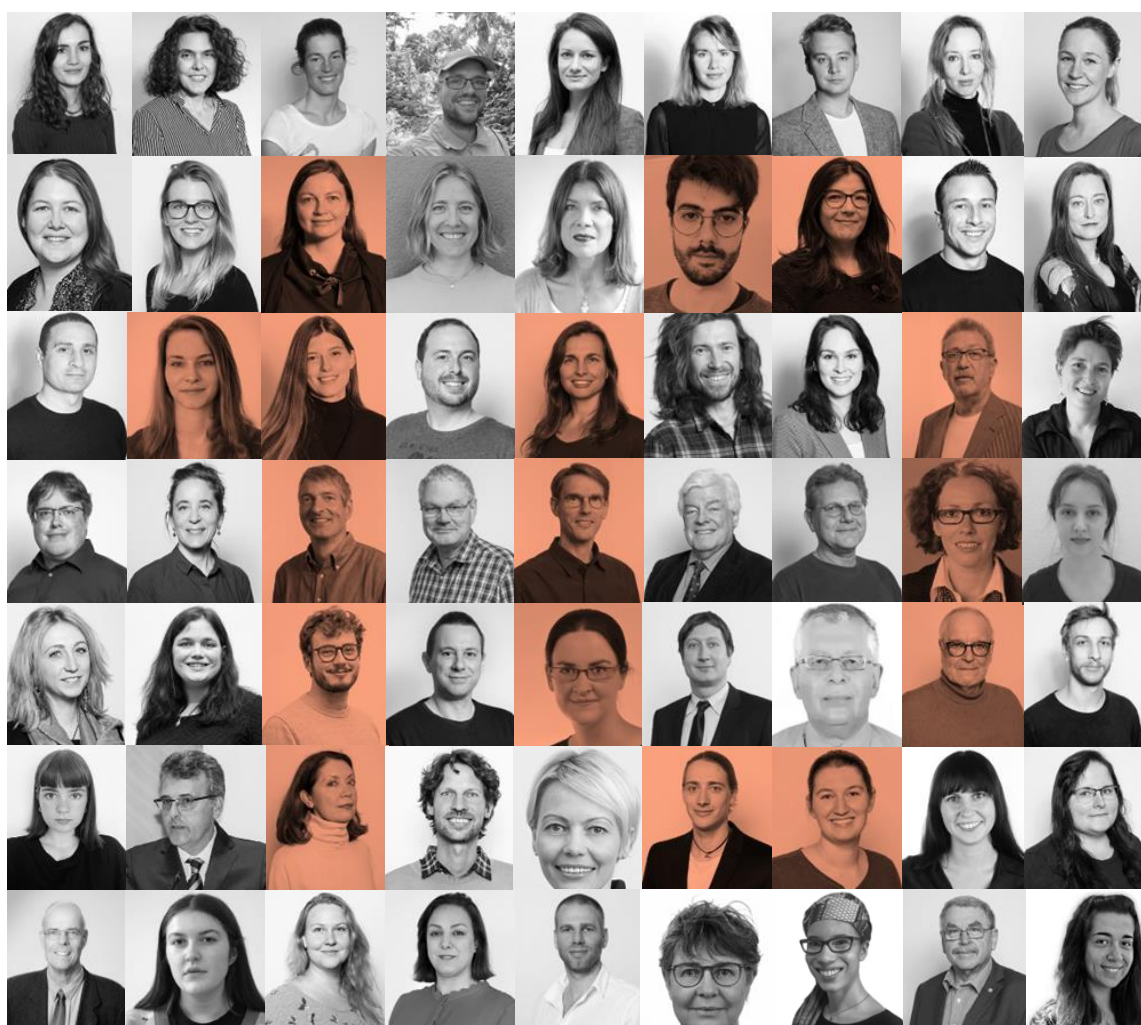




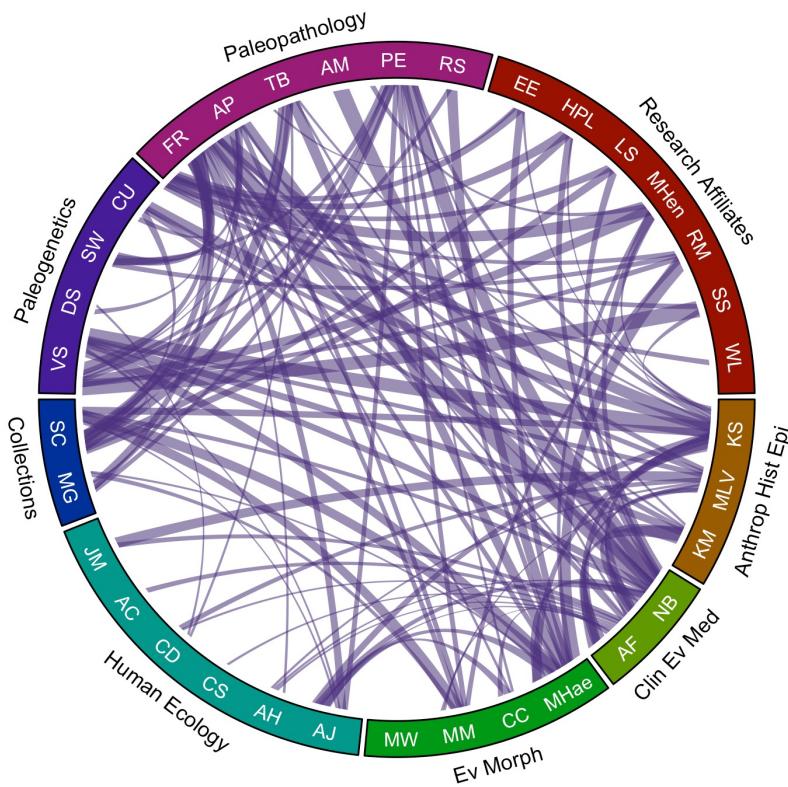
University of
Zurich ^{UZH}

INSTITUTE OF EVOLUTIONARY MEDICINE



10 YEARS ANNIVERSARY NEWSLETTER

Institute of Evolutionary Medicine (IEM)
Institut für Evolutionäre Medizin (IEM)
Newsletter No. 17 - September 2024



In an internal survey at the end of 2023, 34 IEM members (indicated by initials) from the 7 IEM research groups (sections on the circle) reported over 170 collaborations with each other within the IEM. The strength of the lines reflects the strength of the collaboration.

The IEM turns 10 years old - reflections on the past, present, and future

Congratulations - 10 years ago the Institute for Evolutionary Medicine (IEM) was launched. Countless people have made an indispensable and tireless contribution so that we can now celebrate this anniversary.

In the meantime, the IEM has grown organisationally and currently comprises seven different research groups, demonstrating its enormous breadth in terms of content and subject matter. Representatives of the IEM have contributed to more than 550 publications and hundreds of conference papers since 2014, and in teaching, numerous new lecture series and modules have been developed in several faculties at the University of Zurich and beyond. Countless student theses have been written and numerous employees have successfully left the IEM for a further career step. The deliberate promotion of young talent has therefore paid off in many ways. Pride is always felt when - sometimes even unexpectedly - former employees carry on the 'intellectual fire' of the IEM somewhere out in the academic world or elsewhere in society. This multiplication of the IEM's ideas is important internationally. But the many long-serving employees are also the key to the IEM's success. An institute is only as good as the people behind it.

Over the years, the atmosphere at the IEM has made it possible to engage in academic work while maintaining the greatest possible freedom of research. We also have a strong culture of interdisciplinary collaboration across group boundaries within the IEM. The IEM's research results are widely recognised, and the IEM itself has assumed a pioneering role in the specialist community and research field as the world's first evolutionary medicine institute in a leading medical faculty. IEM activities regularly attract global media attention. The IEM website has recorded over 85,000 views since 2014. This also reflects the social appreciation of the diverse research at the IEM. Topics such as diseases in mummies, pandemics or palaeo-life style attract great public interest.

This unique establishment of the IEM was made possible by the leadership of the University of Zurich at the time, combined with years of extremely generous financial support from the Mäxi Foundation. Over the past decade, the IEM has also been able to count on further structural and financial support from many institutions, foundations and individuals. The University of Zurich in particular was and still is the ideal location for a new type of biomedical institute such

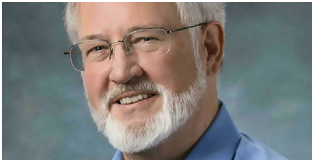
as the IEM. As a full university, the University of Zurich offers a perfect environment to promote the often highly interdisciplinary research at the IEM. After 10 years of existence, the IEM is unsurprisingly embedded in a broad local and international university network, and we also have these partners to thank.

The most important thing, however, is that the novel - often somewhat out-of-the-box - perspective of evolutionary medicine has been able to further establish itself at the University of Zurich in the last decade. Evolutionary medicine is now better known and widely respected.

In the future, the IEM will continue to promote the recognition of this novel concept as part of medicine and related fields. The social and clinical significance of evolutionary perspectives will be emphasised, the innovative spirit of the first decade will be continued and high-quality research and teaching will continue. So, birthday child IEM - keep up the good work!

Prof. Dr. Dr. med. Frank Rühli
Founder & Director of the IEM

Words from a pioneer in Evolutionary Medicine



Randolph M. Nesse, MD
 Arizona State University

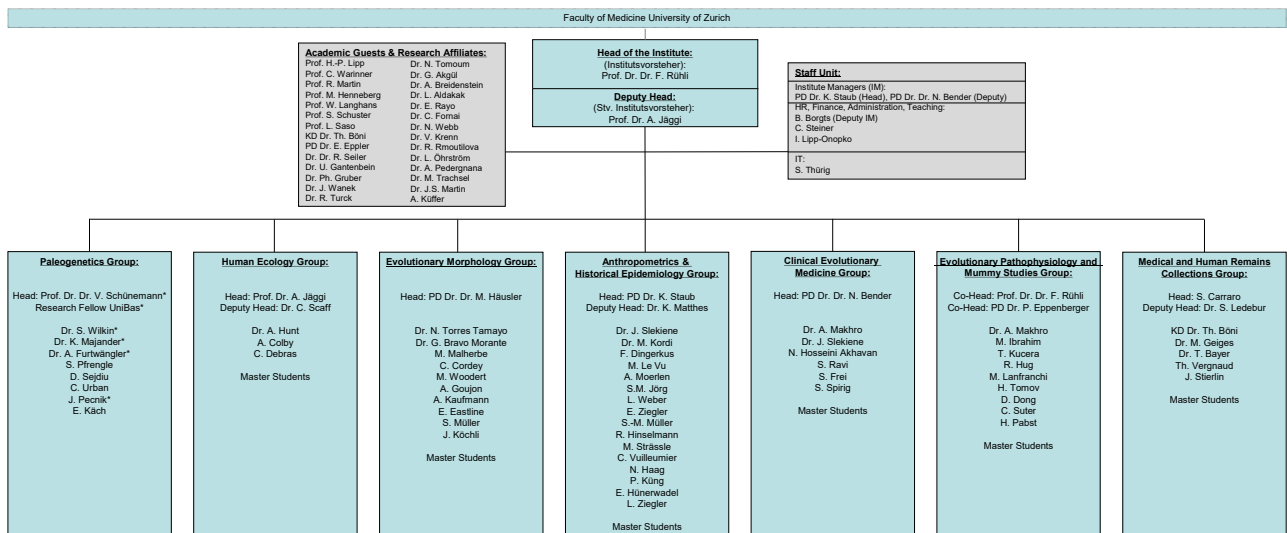
Natural selection is slow, but social systems created by the right people can develop very fast in the right environment! It was just over a decade ago when I began reading articles by someone in Switzerland who was studying mummies to explore diseases two millennia ago! When I met Frank Rühli it was immediately clear that the Center for Evolution and Medicine I was starting in Arizona would have wonderful companion in the Institute for Evolutionary Medicine at the University of Zurich. And now it is already celebrating its tenth anniversary.

The 2015 conference in Zurich was crucial for bringing together experts from around the world to compare notes and make plans. In 2019, with lots of help from Nicole Bender, the IEM did it again, staging the first European university-hosted meeting of the International Society for Evolution, Medicine, and Public Health, a seminal event for the field. Soon, everyone in the field wanted to come to Zurich, because that is where the most interesting things were and are happening. Studies of ancient DNA, infectious disease, life history theory, nutrition, and mental disorders, conducted by a fast-growing cadre of experts soon brought acclaim and many talented students. They not only publish scores of articles each year, but they have also somehow managed to find funding to support the projects and students and superb teaching.

Frank Rühli's leadership has been so widely recognized that his talents have been demanded at higher levels, the medical school, the university, and international commissions on medical education. Wherever he goes, I hear later from people who grasp for the first time that evolutionary biology really is a core basic science for medicine ripe for diverse applications. With colleagues in Zurich, Frank and the IEM are changing the academic landscape for medicine.

When George Williams and I published *The Dawn of Darwinian Medicine* almost 30 years ago we thought that the question of why natural selection left humans so vulnerable to so many diseases would provide a stage broad enough for every possible application of evolutionary biology to the health sciences. But we never imagined the power of ancient DNA, life history theory applications were just getting going, and while we advocated for studies of health in hunter-gatherer cultures, they seemed impossible at the time. Now the IEM is a leader in all these areas. And the students it is educating are spreading their expertise around the world.

All this progress is, however, only bare beginning. Most doctors have still not heard about evolutionary medicine. Growing clinical applications in infectious disease and cancer are likely to convince other deans that teaching evolutionary biology as a basic science is crucial, but the real key will be educating future doctors and medical researchers. I will wager than history books about the medicine in the 21st century will recognize the special role of the very Institute at the University of Zurich in bringing evolutionary biology to bear on human health problems.



Words from the Vice President Research at UZH



Prof. Dr. Elisabeth Stark
UZH Vice President Research

Congratulations to the Institute of Evolutionary Medicine (IEM) on this special anniversary! It is impressive to look back on the journey that began with Frank Rühli's 'Swiss Mummy Project' at the University of Zurich in the 1990s and has continued to develop ever since. Since its foundation, the IEM has embodied the values of the University of Zurich in an outstanding way: Interdisciplinarity, innovation and societal relevance.

Interdisciplinarity is one of the core strengths of the IEM. Through close collaboration with various disciplines across faculties involving in particular the Faculty of Mathematics and Natural Sciences and the Faculty of Arts and Social Sciences, the IEM is able to generate innovative and in-depth knowledge. By its leading role in the new interdisciplinary Crisis Competence Centre or in the newly founded One Health Institute, the institute demonstrates how progressive thinking can combine research and practice. The IEM also takes an active part in UZH's strong innovation activities, e.g. by its patent for a portable CT device. In research and 'out of the box' teaching, the IEM finally addresses topics of high societal relevance. From its research into mummies over the history of pandemics

A look back at the beginnings: [Symposium on the occasion of the opening of the former Center for Evolutionary Medicine \(ZEM\) at the Irchel Campus in fall 2010 \(in 2014, the ZEM became the IEM and thus an independent institute\).](#)



to the fundamental question of how humans will develop in the future - the institute combines medical and evolutionary biology topics and makes an important contribution to issues that affect us all. Evolution and medicine are two central topics at the University of Zurich, and the IEM is a pioneer in combining both fields.

The IEM's focus on promoting young talent is very pleasing. Over the past ten years, the institute has produced numerous young researchers who are advancing science all over the world (incl. several professorships). Research thrives on the ideas of the next generation - and this is where the IEM provides valuable impetus.

The question of the future of research at the University of Zurich is an exciting one. Understanding our past will path the ways towards a sustainable future for mankind. Bridging institutional and disciplinary borders will be key in doing so, and the IEM is without any doubt both a pioneer and a central player in the transformation process towards a highly visible, agile and excellent up-to-date research-focused university.

For all its achievements, activities and future plans, I would like to thank the entire IEM team for their great work. Your commitment and passion have made the Institute what it is today - and I am sure that many more successes will follow to the benefit for our whole scientific community at UZH!

A few IEM key facts and figures since 2014:

- 556 publications
- Over 85,000 hits on the website
- Over 60 third-party funding grants acquired
- Over 100 former and current employees
- Countless media reports worldwide

More on our website:

