



## **Institute of Evolutionary Medicine (IEM)**

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### **Annual Report 2014 – Management Summary (English Version)**

The Institute of Evolutionary Medicine (IEM, [www.iem.uzh.ch](http://www.iem.uzh.ch)) was founded on 1 September, 2014. It was formed from the former Centre for Evolutionary Medicine (ZEM) at the University of Zurich's Institute of Anatomy coming together in 2015 with its new partners, the former Medical Historical Institute (the former Medical Historical Museum and the Medical Historical Object Collection) and the University of Zurich Museum.

The IEM is active in research, teaching and services over the entire field of evolutionary medicine and is part of the University of Zurich Faculty of Medicine. At the Institute of Evolutionary Medicine, we analyse historical and prehistoric biological samples and data to gain a better understanding of today's human health and the emergence and development of diseases. This is achieved by excellent scientific expertise, an appropriate infrastructure and "state-of-the-art" methods. The institute has a flat organizational and hierarchical structure and currently consists of three research groups, a unit head, as well as associate members.

The IEM is embedded locally and internationally in various other centres and institutions. The Institute operates, among other things, the only DNA laboratory in Switzerland to be able to analyse ancient human tissues. In addition, the IEM has various imaging options – for example, we acquired an excellent portable X-ray machine suitable for field tests – and operates the Clinical Anatomy Skills Lab together with the Institute of Anatomy at the University of Zurich (see the annual report).

Interdisciplinary approaches are often pursued in research, which is why the Institute wants to be close to related disciplines such as anthropology, forensics, molecular biology, evolutionary biology, anatomy, palaeopathology, veterinary medicine, Egyptology, history, epidemiology, imaging, etc. One of the focal points is studies on mummies and mummified human tissue.

The IEM also deals for example with ethical issues related to the research of historical human tissues. One of the scientific highlights of the reporting year must be the publication of a mostly ZEM-based molecular work on historic tartar – published in *Nature Genetics* – which was also voted one of the world's "Top 100 Scientific Stories".

Approximately 40 peer-reviewed original papers have been published during the reporting year. In addition, staff have acquired extensive third-party funding, e.g. the Swiss National Science Foundation.

Training students in medicine and dentistry as well as mathematics and natural sciences is at the foreground of our teaching activities. The Faculty of Medicine offers lectures, seminars and internships in the core and elective studies, whilst the basic and technical areas are covered at the Faculty of Mathematics and Natural Sciences, the Faculty of Philosophy as well as at external universities. This curriculum was significantly expanded in 2014.



An important objective of the Institute is to encourage and further young academic talent, as well as to promote the advancement of women in academic positions. The infrastructure of the institute is very well placed. However, our successes in obtaining an increased level of external funding, leading in turn to greater numbers of staff and research groups, means that space is becoming increasingly limited, and this will need to be dealt with in the future.

The Institute's management is represented in the Conference of the Institutes of Museums and Collections (KIMS) which was instigated by the delegates of the university management. The objective is the coordinated planning of museums and collections.

This annual report covers the whole 2014 calendar year, in other words the activities of the former ZEM and the IEM. However, it is not to be regarded as the usual annual report for a normal calendar year because of the re-establishment of the Institute and the migration of staff and research projects from the Institute of Anatomy into the newly founded IEM. The 2015 Annual Report will report the first full year as an independent group rather than many separate units, also reflecting the completion of the infrastructure and restructuring work.