

2017 has been an eventful year for the [Initiative for the Science of the Human Past at Harvard \(SoHP\)](#), marked by the launch of the new [Max Planck-Harvard Research Center for the Archaeoscience of the Ancient](#)



Vice-Provost Elliott and President Stratmann

[Mediterranean \(MHAAM\)](#). The **first ever** such collaboration for Harvard, MHAAM brings together Harvard's unique array of faculty and students with the German Federal Republic's intellectual powerhouse, the federation of the research institutes that constitute the Max Planck Society. SoHP is partnering with the newly founded Max Planck Institute for the Science of Human History (MPISHH) in Jena, Germany. An initial **MHAAM**



Inaugural luncheon; MHAAM advisor Prof. Sue Alcock, Prof. McCormick, VP Rosovsky, Dr. Malcolm Wiener, Pres. Stratmann, Dean Michael D. Smith

Harvard University Town Hall meeting at Harvard in February presented the new research center and scientific platform to the Harvard faculty, and initiated interdisciplinary discussions on our

recent ancient DNA

collaborations focusing on the molecular and archaeological discovery of ancient diseases and the genetics of migration, using the latest high-throughput ancient DNA technologies. The rapid research advances were highlighted at the official Inauguration of the new center in October, during which the path-breaking formal agreement was signed by **Prof. Dr. Martin Stratmann, the President of the Max Planck Society**, and Prof. **Mark Elliott**, Harvard Vice Provost for Research, for a first-of-kind collaboration at Harvard, followed by [public lectures](#) including material on **Minoan and Mycenaean genetics** recently published in *Nature*. A forthcoming publication will consider the implications of the new discipline for a unifying nomenclature for genomes, and archaeology .



Prof. Smail chairs Inaugural Lectures

We are already looking to **the next generation of transdisciplinary researchers** in the Science of the Human Past. Thanks to our generous supporters, MHAAM is funding full 5-year PhD study in the new discipline **for two new graduate students** at Harvard. This fall, **Aurora Allshouse** and **Megan Michel** entered, respectively, Anthropology/Archaeology and Human Evolutionary Biology. MHAAM was also able **to fund dissertation research** in **ancient Mediterranean genetics** by graduate student **Eadaoin Harney** in Organismic and Evolutionary Biology. Additionally, MHAAM has appointed its **first post-doc. Dr. Saskia Ryan**, a former Fulbright Fellow who has just earned her Ph.D from Trinity College, Dublin, has joined the project this year, working **on isotopic markers of ancient Mediterranean migration** in the laboratory of Clay Professor of Archaeological Science **Noreen Tuross**. Finally, both new and continuing **MHAAM and History/SoHP graduate students**, along with Prof. Michael McCormick, traveled to **Jena** this summer to discover the research facilities at MPISHH, meet with key members of the Jena team, and advance our various research projects with **active and interactive collaboration** as we re-define the **archaeology and history of the Ancient Mediterranean**.



Aurora Allshouse presents her scientific findings

In other news, the SoHP and the Climate Change Institute **joint Historical Ice Core Project** (HICP) published in *GeoHealth* its [first major research article](#), discovering a **dramatic drop in atmospheric lead pollution during the Black Death** –the only such drop in 2000 years– which generated much positive press. HICP also sponsored the first Harvard [undergraduate publication](#) in *Geochemistry, Geophysics, Geosystems*, a journal of the American Geophysical Union (the premier global climate science organization) on probable **Icelandic tephra** he discovered in the Colle Gnifetti glacier,



Henry Gruber, Jake Ransohoff, Michael McCormick, Megan Michel in Jena, Germany

contradicting the conventional scientific opinion that such volcanic

particles are absent from Alpine glaciers. That undergraduate, **Matt Luongo**, also won a coveted **Hoopes Prize** for one of the best senior theses at Harvard. Advised by Professors **Peter Huybers** (Earth and Planetary Sciences; SoHP) and McCormick, Matt developed coordinated **statistical testing of medieval written records and modern paleoclimate reconstructions**. With support from the Classics and History, SoHP also sponsored a **lecture series, “What’s New in the Fall of the Roman Empire.”** Talks included **Kyle Harper** (University of Oklahoma) on the impact of global infectious diseases, **McCormick** on new insights from science, and **Johannes Krause** (MPISHH) on the genetic history of plague. Most recently, **Gideon Avni** (Israel Antiquities Authority) showed how advanced scientific dating techniques illuminate the technology behind the much debated “**Islamic**



Matt Luongo speaks at Young Investigator Symposium

Agriculture Revolution” that introduced new plants and foods –**sugar, citrus, durum wheat**, etc.– into the medieval Mediterranean basin and Europe. Commenters on the talks included Professors Dimiter Angelov, Kathleen Coleman, Emma Dench, Joseph Lassiter, Irwin Shapiro, Christian Tryon, and many other invited colleagues.

In a lively spring workshop, “**Reccopolis Revealed**,” researchers from Germany, Spain and the U.S. detailed the exceptional discoveries of an **archaeological exploration**, jointly funded by SoHP and its supporters, by the University of Alcalá, and the Roman-German Committee and the University of Frankfurt, at the **Visigothic royal foundation of Reccopolis** in central Spain: **geomagnetic prospection**, advanced **core sampling** and **XRF technologies** led to spectacular results as this Iberian site was indeed “revealed” to be a **real town**, and not just a royal residence. Prof. McCormick and SoHP graduate students again teamed with Prof. Lauro Olmo Enciso and his group at the Universidad de Alcalá to continue archaeological research at Reccopolis during the **2017 summer excavation season**.

SoHP also sponsored a workshop on new **radiocarbon dating technologies** in light of recent scholarship on **dendrochronology** and **solar storms**, and a seminar on “**Deep History**” to prepare for a **new undergraduate course** offered by Prof. Daniel Lord Smail (SoHP, History). Prof. McCormick gave further talks at **the American Academy in Rome (AAR)** and the **Southern University Conference** on the Science of the Human Past, and offered an archaeoscience seminar on the **AAR coin collection** to its current Fellows.



Prof. McCormick opens Inaugural Lectures

As the year draws to a close, planning is underway for another vigorous year of interdisciplinary inquiry into the **science of the human past**, as we utilize cutting-edge

technologies to pursue unanswered questions of our collective history – questions that shape who we are, and what we can become, and all of which is made possible by the generous support of our donors.