



# **IHO FACTS 2024**

# THE INSTITUTE OF HUMAN ORIGINS IS ONE OF THE PREEMINENT CENTERS IN THE WORLD FOR THE STUDY OF HUMAN ORIGINS AND EVOLUTION

The Institute of Human Origins is one of the preeminent research organizations in the world devoted to the science of human origins. A research center of The College of Liberal Arts and Sciences, the Institute of Human Origins (IHO) pursues an integrative strategy for research and discovery central to our founding mission – bridging social, earth, and life science approaches to the most important questions concerning the course, causes, and timing of events in the human career over deep time.

IHO's strategic vision reaches across the broadest range of transdisciplinary research to create novel approaches to the solution of pressing and newly emerging scientific questions relevant to our society – from the emergence of modern humans in Africa, and human behavioral and genetic adaptations to a changing planet, to what understanding the behavioral ecology of nonhuman primates informs us about how we developed culture and cooperation.

IHO fosters awareness of our place in nature and relevance of our deep past to modern society through innovative outreach programs that provide timely and accurate information for both educators and the public.

# **MAJOR RESEARCH INTERESTS**

- High-profile discovery
- The emergence of modern humans in Africa
- Human adaptations to a changeable planet
- Human uniqueness
- Primate behavior
- Genetic inquiry

#### LINKS AND RESOURCES

Main website: iho.asu.edu

Education Outreach AskAnAnthropologist.asu.edu BecomingHuman.org

CONTACTS iho@asu.edu 480.727.6580

Julie Russ Communications/External Relations jruss@asu.edu 480.727.6571

# LEADERSHIP AND RESEARCH SCIENTISTS

Yohannes Haile-Selassie PhD, Director Virginia M. Ullman Professor of Natural History and the Environment

Donald C. Johnson PhD Founding Director Virginia M. Ullman Chair in Human Origins

# **Research Scientists**

Robert Boyd PhD, Professor Christopher Campisano PhD, Associate Professor Helen Elizabeth Davis PhD, Assistant Professor Ian Gilby PhD, Associate Professor Kim Hill PhD, Professor Kevin Langergraber PhD, Associate Professor Curtis Marean PhD, Foundation Professor Sarah Mathew PhD, Associate Professor Sarah Mathew PhD, Associate Professor Charles Perreault PhD, Associate Professor Charles Perreault PhD, Associate Professor Gary Schwartz PhD, Professor Joan Silk PhD, Professor Anne Stone PhD, Regents' Professor Denise Su PhD. Associate Professor

# **POINTS OF PRIDE**

Point #1: A Preeminent Research Institute	<ul> <li>IHO's international prominence in human origins flows from:</li> <li>Long-term commitment to strategically important field sites that pay off in streams of high-profile discoveries</li> <li>Investment in cutting edge analytical expertise and technology, making interpretation of the evidence an equal partner to discovery</li> <li>A strategic vision reaching across traditional disciplinary boundaries to create novel approaches to the solution of pressing and newly emerging scientific questions</li> </ul>
Point #2: High-Profile Discovery	The Institute of Human Origins was founded in 1981 by Donald C. Johanson, world-renowned paleoanthropologist and sought-after public advocate for science outreach and education. In 1974, Johanson discovered the 3.2-million-year-old fossil bones of a new species, <i>Australopithecus afarensis</i> , now popularly known as "Lucy." Lucy has been called the "Queen of the Hominid Skeletons" by the journal <i>Science</i> , which reflects the scientific position of this discovery, often used as the yardstick by which every discovery in human origins science is measured. In 2013, an IHO team discovered a jawbone in Ethiopia of our species <i>Homo</i> , that predates previously known fossils of the <i>Homo</i> lineage by approximately 400,000 years. In 2024, IHO is celebrating the 50th anniversary of the Lucy discovery (read more at iho.asu.edu/Lucy50).
Point #3: Research Across All Scales	IHO Research Scientists are involved in research across all scales and disciplines for understanding how we "became human." IHO scientists:
	<ul> <li>Analyzing microscopic glass shards from volcanic eruptions to date ancient archaeological artifacts to within two to four weeks of its age</li> <li>Are studying the isotopic chemical signatures and microwear of ancient teeth to identify the diet and development of human ancestors</li> <li>Are investigating DNA to open exciting new research paths to ancient human origins and the gentic bases of primate behavior</li> <li>Are showing how the production of stone tools 71,000 years ago provides evidence for early human cognition and that the production of stone tools began 500,000 years ago – 200,000 years earlier than previously thought</li> <li>Have uncovered a stratigraphy of over 50,000 years of human habitation in caves at the edge of South Africa to show how early modern humans used shellfish rich in braindevelopment booster Omega 3s and tubers known as fynbos to survive a human population bottleneck around 100,000 years ago</li> <li>Are investigating geological cores from paleolakes near significant sites where the fossil bones of ancient human evolution</li> <li>Have field sites at the Jane Goodall Institute in Gombe, Tanzania, and Kibale National Park, Uganda, to study chimpanzee behavior to understand how our earliest ancestors may have developed cooperative behaviors</li> </ul>
Point #4: Scientific and Academic Achievement	In addition to a high level of scientific achievement – IHO faculty include a Fellows of the American Association for the Advancement of Science (Haile-Selassie, Sillk), Fellow of the American Academy of Arts and Sciences (Boyd), Nobel Symposium invited speaker and ASU Foundation Professor (Curtis Marean), and Fellows of the National Academy of Sciences (Silk, Stone). Faculty members have received excellence in teaching and innovation awards – Provost's Faculty Achievement Awards for Defining Edge Research in Social Science (Curtis Marean and Gary Schwartz). IHO faculty, who have academic homes in the School of Human Evolution and Social Change, also hold two special designations for endowed chairs – Founding Director Donald C. Johanson is the Virginia M. Ullman Chair in Human Origins and Director Yohannes Haile-Selassie is the Virginia M. Ullman Professor of Natural History and the Environment.
Point #5: International Network of Scientists	The Institute of Human Origins extends its scientific research through a network of Research Affiliates, which provides an intellectually potent source of perspectives, expertise, and tools on the leading edge of research via formalized institutional partnerships and individual collaborations from American School for Classical Studies in Athens (Greece), The Hebrew University of Jerusalem, Tel Aviv University, University of Chicago, and University of Missouri, among others.
Point #6: Model for Public/ Private Partnership	The Institute of Human Origins is a model for a strong public/private partnership between ASU and its Research Council and Executive Board of Directors. The IHO Board, comprised of individuals across business, education, and scientific arenas, is a source of strategic guidance and financial support for operations, research, and outreach, and, through its broad network, provides diverse outlets for IHO's public programs.