Historic Paleo Meeting in Cleveland, Ohio

by Dr. Yohannes Haile-Selassie
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Cleveland Museum of Natural History
Leakey Foundation Grantee

In September, The Leakey Foundation’s Board of Trustees and staff members were in Cleveland, Ohio, on a mission to promote public education on human origins. The Foundation, in collaboration with Case Western Reserve University; the Cleveland Museum of Natural History; The Institute for the Science of Origins; and National Public Radio affiliate Ideastream, organized the public symposium “On the Trail of Lucy: A Collaborative Exploration of Australopithecus.”

The public symposium brought together 28 prominent paleoanthropologists from Africa, Europe, and the United States. Most of these scientists are multiple-time Leakey Foundation grantees. The symposium attracted more than 450 attendees across all ages and educational backgrounds.

The symposium was opened with a keynote lecture by Dr. Bernard Wood on September 19, “Relatives and Ancestors” at the Strossacker Auditorium of Case Western Reserve University. The public symposium followed the next day at the Cleveland Museum of Natural History, an institution with a long history on research in human origins and evolution.

The opening of the symposium coincided with the unveiling of the museum’s new human origins gallery portraying a new fleshed-out reconstruction of Lucy as its centerpiece. The symposium was divided into three lecture sessions and one panel discussion. Dr. Terry Harrison, a member of The Leakey Foundation’s Scientific Executive Committee, opened the morning program with his lecture on the earliest human ancestors preceding Lucy’s genus Australopithecus. This was followed by Drs. William H. Kimbel and Carol Ward’s lectures on “What was Australopithecus?” The audience found these lectures informative and they asked many questions during the discussion session, which was moderated by Dr. Zeray Alemseged.

The second session, “Australopithecus: how it moved,” addressed the bipedal anatomy of Lucy and her relatives. Dr. Jeremy DeSilva’s lecture on the locomotor adaptations of early Australopithecus was followed by the most public-friendly lecture, by Dr. Bruce Latimer, on the perils of bipedality. This talk left the audience with a tantalizing question: “Why did we become bipedal?” More questions were raised during the discussion that I moderated, and most of these questions were related to understanding the selective advantages for the evolution of bipedality in our lineage.

The last session of the morning was “Through the Eyes of Australopithecus.” Drs. Kaye Reed and Thure Cerling talked about ancient trees and landscapes and the chemistry of Australopithecus food,

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Dear Friends of The Leakey Foundation,

The word legacy means many things to many people. To some, it rouses thoughts of a dusty shelf of books, written by people whose names sound vaguely familiar. To others, including myself, legacy embodies something powerful and important.

Many of today’s leaders in human origins research had the opportunity to meet Louis and Mary Leakey. Some sat in crowded university auditoriums as students, their inspiration coming from the stories amplified through the speakers. Other researchers had the opportunity to work in the field beside these pioneers, finding and studying fossils and stone tools, and even sharing a whiskey and cigar. For these researchers, inspiration came through a physical connection that, for many of them, changed their lives and helped shape a part of their own legacy.

For many scientists, legacy may represent the knowledge they are leaving behind for future generations, not necessarily through citations and impact factors, but rather through their approaches, concepts and philosophies of science.

In this issue of AnthroQuest, you will learn about some of the global, long-term field studies we support; also events in Cleveland we sponsored, bringing together 28 human origins scientists; and a special project funding Dr. Leslea Hlusko’s curation of Mary Leakey’s Bed III/IV assemblages from Olduvai Gorge. These are the scientists who are shaping the legacy our children will come to know.

And finally there is the legacy of those people whose scientific curiosity helped establish the Foundation 46 years ago, and whose commitment continues today with their generous contributions. In the donation section of our website, you can view a list of the patrons who have provided the Foundation financial support on an annual basis for over 25 years!

As we look to this new year, so full of possibilities, let’s also reflect on the past. To remember the researchers who’ve left a legacy of incredible discovery, to think about those who work so tirelessly today to make new discoveries, and to acknowledge those individuals whose patronage make those discoveries possible.

To those who have shaped and defined the legacy of The Leakey Foundation, I thank you.

Donald E. Dana
President of The Leakey Foundation

Carole Travis-Henikoff recently made a generous donation in memory of her dear friend, Dr. Garniss Curtis.
The Gordon Getty Grant Legacy Begins

by Dr. Terry Harrison
Professor & Chair, Anthropology Dept., Director, Center for the Study of Human Origins, New York University

The very first recipient of the Gordon Getty Grant is Dr. Sileshi Semaw for his project titled: Continued excavations exploring the Oldowan–Acheulian transition at Gona, Ethiopia. This newly established grant was created in 2013 to honor Mr. Getty’s 40 years with the Foundation and to celebrate his 80th birthday. With this award, the Foundation can acknowledge Mr. Getty’s leadership and contributions to human origins research, while honoring his special relationship to The Leakey Foundation, for all time.

The Gordon Getty Grant will be awarded each year to an investigator and project that are considered to be of exceptional merit. As of receiving the news that he had been awarded the inaugural Gordon Getty Grant, Dr. Semaw stated, “I have no words to express how happy I am to receive the Gordon Getty Grant. The generous grants from The Leakey Foundation have been the cornerstone for the success of the Gona Project, beginning with the first grant I received 15 years ago. The consistent financial support from the Foundation is much appreciated—and now this prestigious and special research grant honoring Gordon—this is indeed an exceptional opportunity for me and my colleagues!”

Dr. Semaw is Senior Research Scientist at Centro Nacional de Investigación Sobre la Evolución Humana in Burgos, Spain. Since obtaining his Ph.D. from Rutgers University in 1997, he’s been Director of the Gona Paleoanthropological Research Project in the Afar region of Ethiopia. Semaw’s research, with consistent support from The Leakey Foundation, has produced a wealth of remarkable paleontological and archaeological discoveries. These include 4.3–4.5 million year old fossils of *Ardipithecus ramidus*; the oldest known stone tools, dating to 2.5–2.6 million years; and a well-preserved pelvis of a female *Homo erectus* individual.

Dr. Semaw’s current research project aims to continue excavations at archaeological sites in the Gona region, dating to 1.7–1.8 million years, which may provide important clues to understanding the nature of the transition from the Oldowan to the Acheulean lithic industries. His continued excavations, with support from the Gordon Getty Grant, will contribute crucial new evidence towards a better understanding of the nature and timing of the transition to the early Acheulean, one of the most important events that occurred during the first 2 million years of human cultural development.

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Sterkfontein Caves, South Africa. Photo: Maropeng

Hadza montage: Joey Roe. Photos: Idobi; Andy Lederer/ flickr: 7177420@N03
Olduvai Gorge, Tanzania, is perhaps the most famous of all archaeological sites informing on human evolution. First discovered to science in 1911 by Germans, this site has since been a productive source of data on human biological and cultural evolution.

The site was made famous by Drs. Louis and Mary Leakey through their major discoveries of early human fossils and magnificent antiquities, documenting the evolutionary history of our species and vertebrate fauna over the past two million years. Olduvai was the first place where the evidence of early stone tool use, known as the Oldowan industry, was discovered. This discovery led us to find the oldest evidence of our own genus, Homo (Homo habilis), and the first evidence of our odd ancestor Australopithecus boisei (aka “Zinjanthropus”). It was the Olduvai record that first indicated that by 2 million years ago our stone tool-using ancestors had evolved complex, social behavior, including hunting and eating meat at prehistoric campsites.

Olduvai continues to yield a wealth of evidence of human origins. In fact, it remains the best-dated geological sequence over the last 2 million years in Africa. Olduvai provides a yardstick for rates of evolutionary changes in human form, stone tool technology, numerous animal lineages, vegetation, climate change, African environments and paleolandsapes. The site is still the best place in the world to investigate the behavior and ecology of the earliest species of the genus Homo, Homo habilis, due to the richness of its fossil and archaeological records.

In light of this history and continued the scientific importance, Dr. Jackson Njau (Assistant Professor of Geology, Indiana University) and I received assistance from the Foundation with the preservation of the scientific context for a collection of fossils excavated by Mary Leakey, which were left at the Olduvai Leakey Camp.

Dr. Njau and I co-direct the Comprehensive Olduvai Database Initiative (CODI), which is working to bring this irreplaceable heritage into a unified database. The century of research at Olduvai Gorge has involved numerous scientists from different backgrounds of expertise and countries of origin, resulting in fossils from this site being dispersed on a global scale (Munich, Berlin, Lieden, London, Tanzania, and the through out the United States).

Unfortunately, much of the knowledge about where Olduvai fossils can be found is part of an “in-crowd” network. If a researcher is looking to access fossils for study and does not contact the right person,
they’ll never know that a significant part of the bird collection, for example, can be found in someone’s basement in Florida.

Before these connections are lost to time, the CODI project is working to unite all of the various collections into one online space. CODI is a user-friendly database that provides information on which fossils exist and where they are housed. It includes photographs when possible.

This database is a valuable resource for scientists, as it points them to the multiple collections that contain fossils of specific interest to their research projects, maximizing the scientific value of the assemblage. Additionally, it provides considerable assistance to the Department of Antiquities in Tanzania as they confront the monumental task of caring for these materials. Given that the scientific community is responsible for transporting and disarticulating these materials over the past 100 years, Dr. Njau and I feel that it is the scientists’ responsibility to help get this collection in order.

During the 2012 field season, Dr. Njau and I were surprised to discover that one of the old buildings/labs at the Leakey Camp at Olduvai contained not yet taxonomically-described material from Mary Leakey’s archaeological excavations of the upper beds (material that is between 1.2 million and 780,000 years old – the time during human evolution when *Homo erectus* starts to transition towards “archaic” *Homo sapiens*). This material was organized decades ago, but with the rats, cats, weather, heat, dust, and other forms of entropy, the bags, labels, boxes, trays, and shelves have fallen into disrepair. Provenience information that Mary Leakey meticulously recorded is rapidly being irretrievably lost!

We spent a couple of days during the 2012 field season just gathering a sense of what was in the building and how much work would go into inventorying it. We found that much of the materials are important for paleontological study, and were able to curate just over 200 specimens in 2 days in the initial stage of the project. Curating involves a great deal of work. Each fossil must be washed, inventoried, photographed, and then placed in a new bag, with indelible labels. With the Foundation’s assistance, we were able to curate the rest of the collection.

We’re grateful to The Leakey Foundation for helping to preserve the tremendous scientific discoveries that Mary and Louis Leakey made at Olduvai Gorge.

To learn more about CODI, and to see the progress being made, visit olduvai-paleo.org A search for specimen numbers “OVPP-L” will give results from this project.
respectively. These two lectures gave the audience insights into how paleoanthropologists reconstruct past environments in which our earliest ancestors lived and also the food they ate. Dr. Rene Bobé moderated the discussion of this session.

The morning sessions were followed by a six-member panel discussion, moderated by Dr. Bernard Wood, in the afternoon. Panel discussants were Drs. Alemseged, Kimbel, Ward, Harrison, Fred Spoor, and myself. Numerous topics were raised, ranging from the place of *Australopithecus* in the human family tree to its life history and social structure. Dr. Spoor explained how new imaging and visualization techniques such as computed tomography (CT) are advancing the field of paleoanthropology.

One of The Leakey Foundation sponsored events that took place in Cleveland was high school outreach, which took place a day before the public symposium. Three of the symposium participants, Dr. Fredrick Manthi, Dr. Stephanie Melillo, and Dr. Bence Viola visited high schools in the Cleveland area, together with Leakey Foundation staff and board members. All three paleoanthropologists had very positive impressions about their visit to the various schools. Dr. Melillo visited the Hathaway Brown School and presented a general overview of paleoanthropology to the students. “I was impressed by how much the students knew about the topic, despite the fact that it is not covered in their curriculum” noted Dr. Melillo, adding that, “It was a pleasure to speak to a room full of bright, young women interested in human evolution.” It was also impressive to see a number of these students attend the public symposium the next day.

Dr. Viola, who visited the Cleveland School of Science and Medicine at the John Hay High School, a public school in Cleveland’s University Circle area, focused his talk on how advances in technology in deciphering ancient DNA and medical imaging has changed the way we look at human evolution. After his talk, the students were very interested in the subject and in fact, "asked many (and good) questions.” Dr. Viola explained the overall reaction from the students, “One of the important things for them was to see that things like genetics, which they have mostly heard of in medical settings before, are also used for very different questions.” Some of the students ended up inquiring about things such as, “What would I have to study to work in paleoanthropology?” Another student asked, “How could I participate in excavations?” Needless to say, it was a captivating experience for the students.

Another event that took place during The Leakey Foundation’s visit to Cleveland was a workshop organized by Drs. Alemseged, Kimbel, and myself to discuss collaboration and data sharing among paleoanthropologists. The title of the workshop was “The Paleobiology, Taxonomy, and Paleoecology of Early *Australopithecus*: A Collaborative Approach to Synthesizing the Evidence.” This one-day workshop was funded by the Wenner-Gren Foundation, with support by The Leakey Foundation. All of the 28 scientists who travelled to Cleveland participated in the workshop. They each began by discussing how to best enhance collaboration among the different research projects, followed by identifying key research questions related to our evolution between 3 and 4 million years ago-creating informal working groups responsible for coming up with ideas for collaborative research. The spirit of the workshop was so positive that it felt like the idea of collaboration and data sharing was in the hearts and minds of each participant.

This is, I believe, one of the most successful workshops in the history of paleoanthropology and every member of the workshop hopes that it will set the standards of how paleoanthropology will move forward. This workshop will be followed by other similar...
A few years ago, at the Annual Leakey Fellow’s Dinner and Auction, my husband, George, and I held the winning bid for a visit to the atelier of Elisabeth Daynès, the world renowned French sculptor who specializes in life sized reproductions of early hominins based on facial reconstruction and data from the fossil record.

We were quite excited to finally visit Atelier Daynès, in Paris, where Elizabeth explained her process for creating the realistic hominin reproductions seen in many of the world’s finest prehistory museums. It is quite a unique, and thrilling, experience to stand in front of a full size Australopithecine reproduction and look into its eyes. It truly brings prehistory to life!

Our time with Ms. Daynès did not end at her workshop. Once she learned we were heading to the Dordogne to visit several of the region’s archaeological sites, she invited us to join her for the unveiling of a new exhibit at the Cap Blanc cave site, near Les Eyzies-de-Tayac-Sireuil. George and I spent two days exploring French food, wine and cave art with Musée National de Préhistoire (MNP) Director Jean-Jacques Cleyet-Merle and his staff, Elizabeth Daynès and her assistant Peggy Martin, and Joyce and Bruce Chelberg (donors of both the Field Museum and The Leakey Foundation.) We had recently seen the Daynès bust of the woman of Cap Blanc as part of the Cave Paintings of Lascaux exhibit at the Field Museum, during a Leakey Foundation trip to Chicago. This second bust, just unveiled by Daynès, will provide Cap Blanc visitors with a stunning reproduction of what this Magdalenian woman might have looked like.

The highlight of our trip to the Dordogne was another Leakey Foundation auction item that we had won—a day spent with New York University Professor and leading Paleolithic art specialist, Dr. Randall White. Dr. White showed us several cave sites, including the fabulous Fonte-de-Gaume. The artwork in these caves is exquisite and there is much of it to see. We’ve been visiting the Dordogne for years, yet we both feel as if we see something new each time we visit a cave. Dr. White also gave us a nice tour of the area and took us to lunch at one of his favorite restaurants. After a leisurely meal and more touring, we ended the day with a visit to his home for drinks and good conversation with him and his wife Helene.

On our last night in the Dordogne, we were invited to join MNP staff member Pascal Villesuzanne and friends for a final night of food, wine and music at Pascal’s home near the site of Le Moustier. While I sampled local wines, George played music into the night with Pascal and other members of the newly formed musical group Troupe Saiga. This troupe consists of 13 musicians/actors. They have created a diverse group of “Paleolithic” musical instruments from shell, bone, wood and animal skins. They perform at local archaeological sites, and they are a wild group! Thank you, Leakey Foundation, for providing these wonderful opportunities to explore human prehistory! 🎵

These types of opportunities are only available to Leakey Foundation Fellows, so join today!

The Annual Fellow’s Dinner & Auction is April 25, at the Chateau Carolands. Membership information is on page 11 or at leakeyfoundation.org

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Reflections on Dmanisi, Being a Leakey Grantee

by Dr. David Lordkipanidze
Director of the Georgian National Museum

It is almost impossible to believe that 15 years have passed since I first became the beneficiary of a Leakey Foundation grant. Many things have changed and evolved since 1998, except my enormous gratitude for the indispensable support of my research funded by The Leakey Foundation.

The initial Leakey Foundation grant for the Dmanisi site, and my work, provided the lifeline to bring Dmanisi to the forefront, and allowed Dmanisi to take its place on the world stage. Over the years, it has been an incredible privilege to meet dedicated people involved with the day-to-day activities of the Foundation. It has been an amazing experience to witness the incredible synergy between the Board of Trustees, the donors, and the Scientific Executive Committee (once led by the legendary scientist Dr. Francis Clark Howell.)

Philanthropy and fundraising for the pursuit of science are a new frontier for the Republic of Georgia, if not the whole of the former Soviet Bloc. I have been most impressed and dazzled by the dedication of professionals from a variety of disciplines, so committed to advancing research around the world by sharing ever-scarce resources.

It’s remarkable to see how Dmanisi has benefited from The Leakey Foundation’s support, including 10 research grants with additional work by Reid Ferring, James Macaluso, Philip Rightmire, and Martha Tappen.

It is a magnificent opportunity and an honor to have had the exposure I have had in the course of the past 15 years with The Leakey Foundation. It will be an honor to be associated with the Foundation as it continues helping us learn more about human history.

Don’t miss Dr. Lordkipanidze in San Francisco on April 28th! To hear “First Out of Africa” (a previous Leakey Lecture) visit bit.ly/leakey-dmanisi

To learn more about Dmanisi visit dmanisi.ge
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