



ANTHROQUEST

**THE LEAKEY FOUNDATION
NEWSLETTER**

**Volume 46 Issue 1
March 2021**

Origins: Ethiopia

A Lifeline for Primate Research

Science at Home

Spring 2020 Grant Recipients

2020 Baldwin Fellows





About the cover:

A group of Leakey Foundation Trustees and Fellows visited fossil sites and the research base camp with grantee Yohannes Haile-Selassie in January, 2020. The cover shows Dr. Haile-Selassie in his Land Cruiser at the Burtele Foot fossil site. Read more on page 20.



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I first attended a Leakey Foundation lecture in the early 1970s in Southern California, where I became fascinated with the scientists and the science. As an English major, and later a book editor in New York City, I was interested in what great authors and literature tell us about the human condition. Paleoanthropology revealed another avenue to investigate that most interesting of all questions, “What is it to be human?”

I have now been a trustee of the Foundation for 17 years. I will end my six-year term as President of the Board of Trustees in May, which inspires me to look back at all I have learned about humans. With the Foundation, I visited the painted caves of Southern France and Northern Spain with Jean Clottes, the great French expert on prehistoric art. The Foundation has since returned to northern Spain to see Atapuerca’s hominin fossils, the earliest in Western Europe.

We visited the Max Planck Institute in Leipzig, Germany, where Svante Pääbo explained how they extract and analyze ancient DNA from Neanderthal and Denisovan fossils. We visited the museum in Schöningen displaying the ancient 300,000-year-old spears found at a wild horse hunting camp near an ancient lake shore.

In January 2020, we visited Charles Darwin’s home in Downe Village of Greater London. To see his study, his desk chair put on wheels and the back



stairs where he built slides to amuse his 10 children, gave a sense of the man behind the theory of evolution. The most thrilling experience of that trip was traveling to Addis Ababa, Ethiopia, to see the actual fossils known as Lucy, Selam (the three-year-old child), and Ardi. Then we joined scientists in the Afar desert region to see where these treasures were found. In the Simien Mountains we sat with researchers among the gelada monkeys.

Twice a year, at the Foundation's board meetings, we learn from the scientists on our Scientific Executive Committee about cutting edge research grant proposals. We are introduced to the latest scientific techniques.

I think what we do at The Leakey Foundation is the most fun that can be had in life. I have been lucky to be part of planning these great adventures in learning and sharing the knowledge the scientists acquire. I hope I can continue the association for the rest of my life.

Camilla Smith
President
The Leakey Foundation

*Above:
Camilla Smith (with
blue tote bag) and
Leakey Foundation
travelers in front of
Charles Darwin's
home in England in
January 2020.*



A Lifeline for Primate Research

John Mitani

*Co-chair, Leakey Foundation
Scientific Executive Committee*

*Professor Emeritus
University of Michigan*

Above:

A bonobo mother named Agbaya with her infant Alali. These bonobos are part of the Luikotale study group living in the Solonga National Park, Democratic Republic of the Congo.

Photo courtesy of Barbara Fruth

Louis Leakey was an early proponent of primate field studies, as he recognized that information about the behavior of our closest living relatives could furnish insights into human evolution. The Leakey Foundation remains committed to funding research on primate behavior, and offers grants to students, postdoctoral scholars, and senior researchers.

In 2017, generous donations by Anne and Jeff Maggioncalda and Ann and Gordon Getty allowed the Foundation to create the Primate Research Fund, whose purpose is to provide urgently-needed bridge funds to maintain long-term primate

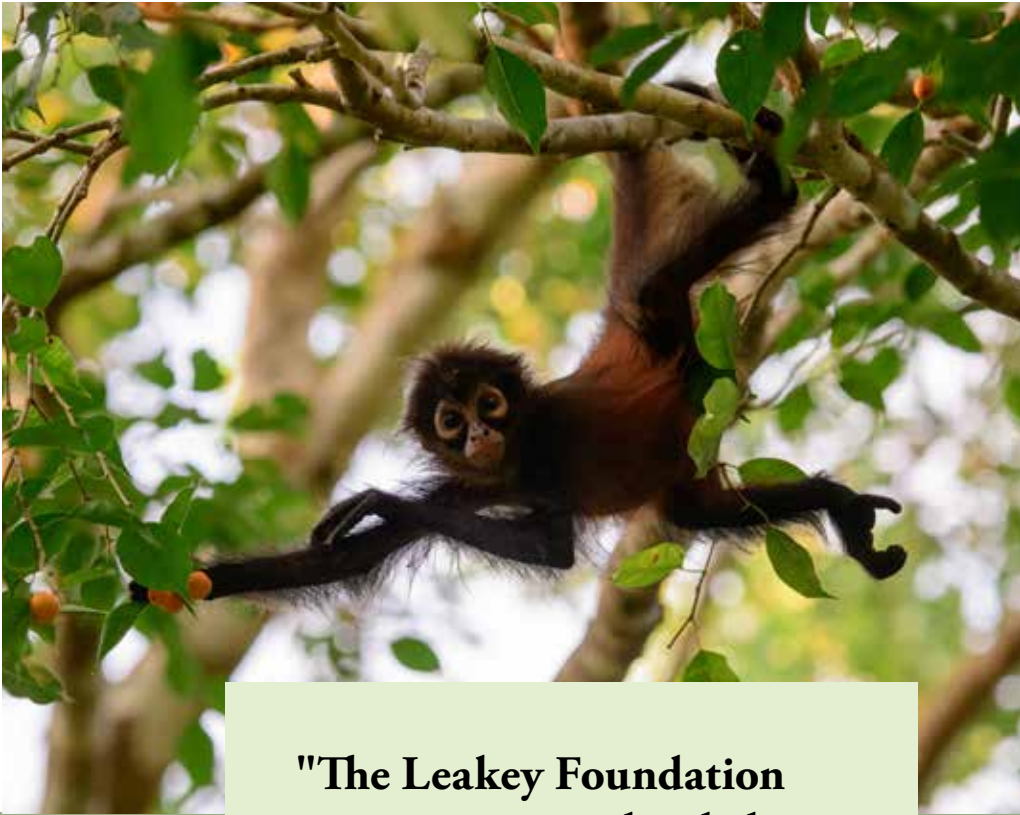
behavior research projects that have operated for 10 or more years.

These projects are especially important because primates live a long time, and observations of individual animals must be made over many years to understand their behavior. Long-term research is also necessary to protect vulnerable primates that stand at the brink of extinction.

During the past year, awards were made to five projects that span the Primate Order, including studies of spider monkeys in Mexico and Costa Rica, red colobus monkeys in Uganda, crested macaques

in Indonesia, bonobos in the Democratic Republic of Congo, and chimpanzees in Tanzania. By ensuring that continuous observations of these primates will be maintained by the dedicated directors and field researchers associated with these projects, funds provided by the Primate Research Fund promise that significant findings regarding these long-lived animals will continue to emerge.

The following are testimonials from the directors of projects funded by the Primate Research Fund in 2019 and 2020.



"The Leakey Foundation was instrumental in helping local families during the COVID-19 emergency."

-Filippo Aureli

"The Primate Research Fund has been a life saver for our long-term project during a funding gap. We were able to continue field work in Mexico and Costa Rica where the longest continuous studies on individually identified spider monkeys have been carried out. Most of our important findings have been obtained because of the continuous long-term nature of our data. The governmental agencies running the protected areas in Mexico and Costa Rica recognize the importance of our long-term project and granted us permission to continue to carry out field work despite the COVID-19 pandemic. The backbone of our project are highly knowledgeable local field assistants who have worked for the project since its inception. Most of the funds we received went to pay their salaries. Hence, The Leakey Foundation was instrumental in helping local families during the COVID-19 emergency."

Filippo Aureli, University of Vera Cruz

*Above:
A young spider monkey reaches for fruit in the forest in Costa Rica.*

Photo by J. Platt /Adobe Stock

"Support from the Primate Research Fund allowed us to maintain our 30+ years of data collection on the primates of Kibale National Park, Uganda. The pandemic made this year a difficult one, but we have been able to conduct another census and demonstrate that in general, primate numbers are increasing throughout the park. This is a very good sign, and in combination with the fact that most of the ungulate populations and elephants are also increasing, indicates that despite the ever present threat of poaching, the park is doing very well under the management of the Uganda Wildlife Authority and with the help of many people."

Colin Chapman, Director, Kibale Monkey Project, George Washington University



**Please give to support the
Primate Research Fund.
All donations will be quadrupled.**

leakeyfoundation.org/primate-research

*This page:
Pascal Marty observes a crested macaque at the
Tangkoko Nature Reserve. Photo by Ugiek, MNP/PKT*

*Facing page:
Chimpanzees at the Greater Mahale Ecosystem Research
and Conservation project in Tanzania photographed
performing a 'grooming handclasp.'*

*An infant bonobo named Orly clings to its mother.
Photo courtesy of Barbara Fruth*

“The Issa chimpanzees are only recently habituated and so it feels like each day we are learning something new about their behavior, social relationships, and how they interact and respond to their dry, open, and remarkably seasonal environment. At the same time, we know from our experience that there are serious threats to the ecosystem and the chimpanzees, namely via poaching. That is why we sought support from The Leakey Foundation when our project was at risk of closure last year, and it was unclear how we could maintain a permanent presence, both for continuity of long-term data and to protect vulnerable habituated primates. We couldn't be more grateful for the support we received from the Primate Research Fund and The Leakey Foundation.”

Alex Piel, Director, Greater Mahale Ecosystem Research and Conservation Project, University College, London



“Emergency bridge funding from The Leakey Foundation allowed continuation of the LuiKotale Bonobo Project. We managed to keep our permanent presence and continue long-term observations of two habituated bonobo communities that have been monitored since 2004 and 2011, respectively.

Of particular interest during the funding period were the births of six and the death of two infants, as well as of one adult. These were important observations contributing to our understanding of the life history of bonobos. Moreover, the two habituated communities experienced dramatic shifts in their relationship, including patterns of range use. Thanks to funds provided by the Primate Research Fund, this information was not lost and added to our knowledge of wild bonobos.”

Barbara Fruth, Director, LuiKotale Bonobo Project, Liverpool John Moores University

“The Macaca Nigra Project is a long-term project established in 2006, studying one of the most tolerant but critically endangered primate species, the crested macaques (*Macaca nigra*). With the help of the Primate Research Fund, we have followed up to four groups daily with only a few interruptions and able to bridge two full study years. Our work relies on training local people to collect data and manage our field site at the Tangkoko Nature Reserve in North Sulawesi. Most of our findings rely on continuous long-term data, and our main goal is to collect complete life history data on as many individuals as possible. We collaborate closely with local authorities and NGOs who support us continuing fieldwork even during the COVID-19 pandemic. With the financial help of The Leakey Foundation, we were able to support local staff, villages, and partners during these challenging times. We are extremely grateful for this.”

Anja Widdig, Co-Director, Macaca nigra Project, University of Leipzig ❖



Spring 2020 Grant Recipients

Behavioral Research

Margaret Corley, Yale University:
Hormonal correlates of pair-bonding and biparental care in owl monkeys

Patricia DeLacey, University of Michigan:
Is the chest patch a sexually selected signal in geladas?

Jacob Feder, Stony Brook University:
Patterns of social bonds and developmental outcomes in juvenile geladas

Anthony Massaro, University of Minnesota:
Demographic effects on reproductive competition and cooperation in male chimpanzee

Lais Moreira, University of Calgary:
The potential use of chemical communication in black-handed spider monkey

Sandro Sehner, Anthropological Institute and Museum UZH: *The evolution of teaching: A broad perspective on information donation in primates*

Antoine Souron, Université de Bordeaux:
Detecting seasonal consumption of plant underground storage organs by geladas

Samantha Stead, University of Toronto:
Allomaternal care and maternal energetics in wild Rwenzori Angolan colobus monkeys

Shasta Webb, University of Calgary:
Understanding digestive flexibility through gut microbiome changes at short timescales

Eva Wikberg, University of Texas at San Antonio:
*Causes and consequences of behavioral flexibility in the Boabeng-Fiema population of *Colobus vellerosus*: Is social flexibility sufficient for coping with changing environments?*

Above:

Patricia DeLacey with geladas in the Simien Mountains of Ethiopia.



Antoine Souron



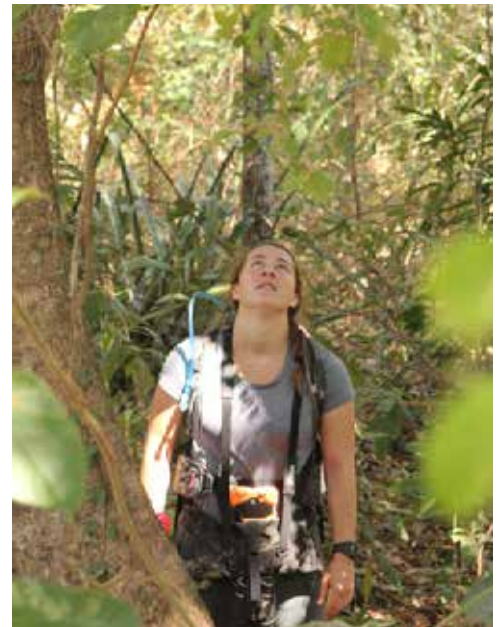
Jacob Feder



Anthony Massaro



Lais Moreira



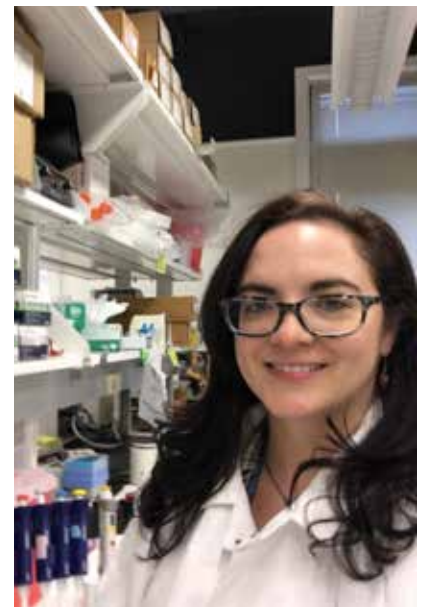
Shasta Webb



Eva Wikberg



Samantha Stead



Margaret Corley

Mariam Bundala received both a research grant and a Baldwin Fellowship in 2020. She is pictured here with field assistant (left) Mr. Gido Lasway surveying at Makuyuni site 4 in Tanzania in 2019.



Paleoanthropology

Daniel Adler, University of Connecticut:
The Early to Late Pleistocene settlement of Northern Armenia

Julia Arenson, Research Foundation of CUNY:
Hominin phylogenetic methodology: A comparative test using colobine evolutionary history

Lucinda Backwell, University of the Witwatersrand:
Border Cave: Cradle of early modern humans in South Africa

Mariam Bundala, University of Calgary:
Paleoenvironmental reconstruction of the Manyara Beds (Tanzania) using phytolith analysis

Habiba Chirchir, Marshall University:
Trabecular bone morphology, gracilization and locomotion in Koobi Fora hominins

Tessa Cicak, University of Minnesota:
Examining the role of competition in primate dietary morphology and isotopes

Robert Davis, British Museum:
Burning question: Fire-use in northwest Europe 400,000 years ago

Hyunwoo Jung, University at Buffalo SUNY:
Developmental and functional integration in the axial skeleton of anthropoids

Somaye Khaksar, University of Minnesota:
The effect of edge segmentation on lithic blank cutting efficiency and technological transitions in the Pleistocene

John Kingston, University of Michigan:
Beyond the “mosaic paradigm”: Characterizing habitat heterogeneity in hominin evolution

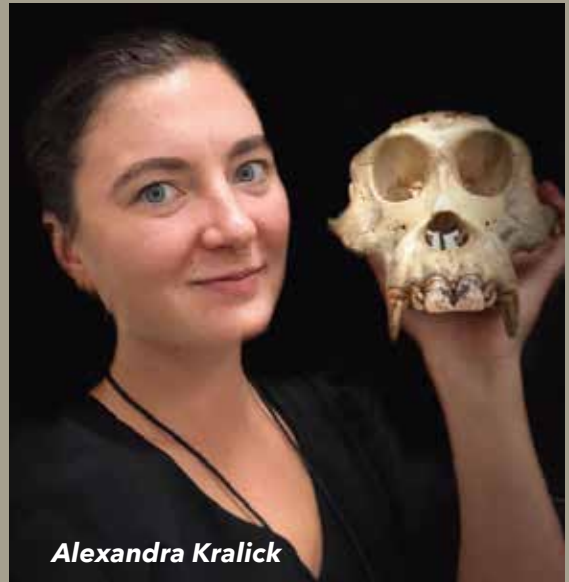
Alexandra Kralick, University of Pennsylvania:
CT scan analysis of orangutan skeletal measurements and its relationship to secondary sexual characteristic development



Habiba Chirchir



Alexander Mackay



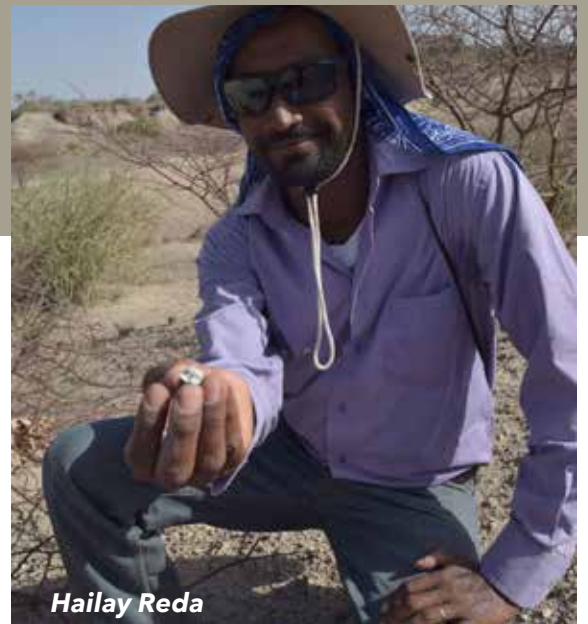
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William Lukens, James Madison University:
Paleoenvironments of early-middle Miocene catarrhine localities in West Turkana, Kenya

Alexander Mackay, University of Wollongong:
The organization of Still Bay technology in southern Africa

Carrie Mongle, American Museum of Natural History:
Re-evaluating human evolution: The role of postcranial data in reconstructing hominin evolutionary relationships

Samantha Queeno, University of Oregon:
MicroRNAs, myofibers, and the evolution of endurance locomotion in hominins

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Reconstructing the paleoecology of Woranso-Mille hominins using cercopithecids.

Jonathan Reeves, Institute for Archaeological Sciences:
Detecting signatures of social information transfer in the Early Pleistocene: A least effort approach

Jeffrey Spear, New York University:
Integration and homoplasy in the forelimb of suspensory primates

Jessica Thompson, Yale University:
Late Pleistocene environments and hunter-gatherer adaptations in the Kasitu Valley of Malawi

Yossi Zaidner, The Hebrew University of Jerusalem:
New Middle Paleolithic human fossils from the Levant: Excavations at Tinshemet Cave, Israel

Angel Zeininger, Duke University: *Foot posture in orangutans (*Pongo pygmaeus*) and the evolution of human heel strike*

Baldwin Fellow Deepak Choudhary recording data at Ramnagar, a hominid fossil site in India.



2020 Baldwin Fellows

Franklin Mosher Baldwin Memorial Fellowships are awarded to graduate students from countries where there are limited opportunities for advanced training and education in fields of research related to the study of human origins. By enabling bright young scholars to obtain graduate education, The Leakey Foundation is helping equip them to assume a leadership role in the future of paleoanthropology and primatology.

The Baldwin Fellowship program was established in 1978, and since then, Baldwin Fellows such as Berhane Asfaw, Job Kibii, Mzalendo Kibunja, Jackson Njau, Agazi Negash, Emma Mbua, and Fredrick Manthi (to name only a few), have gone on to have distinguished careers.

New Baldwin Fellows



Nico Alamsyah is a graduate student from Indonesia who is pursuing a master's degree at Lakehead University in Ontario, Canada. Building on his work at Liang Bua, he intends to learn zooarchaeological analysis in order to study the 270,000+ faunal specimens from this site to elucidate the paleoecology of *Homo floresiensis*. Upon completion of his studies, he will return to his permanent position at the Indonesian National Research Centre of Archaeology where he plans to establish a dedicated zooarchaeological laboratory. He also intends to seek government funding to build a stable isotope facility at the University of Indonesia.



Penina Emanuel Kadalida is a graduate student from Tanzania who is pursuing a PhD at the University of Minnesota in order to become a broadly trained paleoanthropologist. Her research will focus on investigating the evidence for early paleolithic toolmakers at a newly discovered site in northern Tanzania. She is currently an assistant lecturer at the University of Dar es Salaam, teaching archaeology. Upon completing her doctoral studies, her goal is to become a senior researcher in paleoanthropology and to expand research capabilities in Tanzania by establishing a paleoanthropological lab there.



Alaz Deniz Peker is a PhD student from Turkey who is conducting her doctoral research at Olduvai Gorge in Tanzania. During her Master's studies at Olduvai, she learned survey and excavation techniques, stone tool identification, paleobotany, paleoenvironmental research, zooarchaeology, geology, and geochemistry. She became particularly interested in taphonomy and zooarchaeology. After completing her PhD she plans to teach at Istanbul University where, despite the need for qualified researchers, zooarchaeology is not a course that is available to students. Her ultimate goal is to establish a Paleolithic research center in Istanbul.



Wasim Abass Wazir is a graduate student from India who is pursuing a PhD at CUNY. His focus is on Oligo-Miocene catarrhine evolution, including the initial dispersal and radiation of hominoid apes that appear in the later Middle-Late Miocene of Asia. He intends to conduct fieldwork in the Himalayas. He has already done pilot research, during which he collected fossil and rock samples for stratigraphic and paleontological studies for his doctoral thesis. His broad career goal is to promote and train students in primate evolution and paleontology in India.

Returning Baldwin Fellows



Niguss Baraki is a PhD candidate from Ethiopia who is working on his doctorate at George Washington University. His research interests include examining the relationship between human behavior, anatomical development, and the influence of cultural innovation over time on the evolution of human adaptive changes. He is a lecturer in the Department of Archaeology and Heritage Management at Addis Ababa. Upon completion of his PhD, he intends to return there to train students. He is pictured here with his advisor, David Braun (left) who said, "I have no doubt that Mr. Baraki will be a major figure in the study of human evolution within the coming years."

GRANTS



Mariam Bundala is a University of Calgary PhD candidate from Tanzania. She is studying how environmental change has impacted human evolution. For her PhD project, she is analyzing phytoliths from some of the most important Middle Pleistocene sequences in East Africa. Her research will contribute to our knowledge of archaic *Homo sapiens* and the disappearance of the Acheulean Industry in Africa. After earning her doctorate, she intends to return to her position as an assistant lecturer in the Department of Archaeology and Heritage Studies at the University of Dar es Salaam where she would be the only woman on the academic staff.



Deepak Choudhary has a master's degree in earth and geological sciences from the University of Punjab and is now pursuing his PhD at CUNY. His research focuses on primate paleontology and evolution. He will conduct research in the Siwalik collections at the American Museum of Natural History where he hopes to expand his ability to identify Miocene mammalian fauna. After obtaining his PhD, he plans to continue in academia in India.



Husna Mashaka is a graduate student from Tanzania who is pursuing a master's degree at the University of Nairobi. Her area of interest is phytolith analysis. For her master's thesis, she plans to reconstruct the paleoenvironment of the Kisese II landscapes at Kondoa, Tanzania, by using proxy data from phytoliths. Her ultimate goal is to earn her PhD and return to Tanzania to pursue a career in archaeological research and cultural heritage management.



Nadia Saidani is a PhD candidate at the University Rovira studying micropaleontology. She is from Algeria, where she has participated in excavations at the Oldowan sites of Ain Boucherit and Ain Hanech, and the Acheulean site of Tighennif under the supervision of Professor Mohamed Sahnouni. She intends to gain scientific expertise in microvertebrate paleontology and to fill a gap in microfaunal studies in Algeria.



Peiqi Zhang is a PhD student in paleoanthropology at the University of California, Davis. Her home institute is the Institute of Vertebrate Paleontology and Paleoanthropology (IVPP) at the Chinese Academy of Sciences, where she obtained a master's degree of paleontology and stratigraphy. She hopes to address long-standing scientific questions regarding modern humans in north China and the subsequent adaptation to high-altitude environments and she would like to contribute to increased collaborations between Chinese-and English-speaking researchers.



Dr. Tekie Fisseha Tesfamichael Awarded the 2020 Francis H. Brown African Scholarship

The stratigraphic layers of the Mush Valley of Ethiopia were formed around 22 million years ago by a long-since vanished lake. When the lake dried up, it left behind exceptionally well-preserved fossil leaves that Dr. Tekie Fisseha Tesfamichael uses to reconstruct the ancient environment of East Africa. In 2017, his research resolved a prehistoric climate puzzle and confirmed the link between carbon dioxide in the atmosphere and global warming.

Now, with funding from the Francis H. Brown African Scholarship fund, Dr. Tesfamichael will be able to continue his research in the Mush Valley. "This award means a lot for me and my career," he wrote. "It has allowed me to collect more field data, which was not possible through the normal budget of Addis Ababa University. It has also allowed me to conduct continuous surveying of the site, which produces new stratigraphic exposures almost every year as a result of heavy summer rain in the area. These new exposures containing unique fossil leaves would have disappeared if they were not surveyed and documented frequently."

The Francis H. Brown African Scholarship was established in honor of geologist Frank Brown in 2018. The fund's purpose is to help scholars from Ethiopia, Eritrea, and Kenya pursue research in geology or botany related to human origins. Dr. Tesfamichael's work on fossil leaves combines both disciplines to reconstruct the climate of a time period marked by a sharp increase in temperature. "The Mush basin is the only fossil site found in Africa for this age; hence it is a great place to learn about historical climate change, and to make comparisons with current climate change studies," wrote Tesfamichael. "The Mush Valley fossil leaves not only have the potential to reconstruct the paleoclimate, they also help us study the plant evolution and biogeography of the African low-latitude flora."

Dr. Tesfamichael is the second recipient of this award. Although he didn't have an opportunity to work with Dr. Brown, he has benefitted from Brown's publications on the Omo volcanic ash layers of Ethiopia. "Those volcanic ash layers," he wrote, "are the best studied ash layers in the world. ❖"

Thank you to the donors who made The Leakey Foundation's work possible in 2020

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Dr. Diana McSherry and
Mr. Patrick Poe
Mr. and Mrs. John Mead
Mrs. Vera Meislin
Mr. David Melton
Charles Menzel
Lindsay Merryman
Ms. Susan Messinger
Ms. Sharon Metzler-Dow
Kelcy Meyer
Mr. Fred A. Middleton
Kendrick Miller
Mr. James Mills and
Jennifer D. Walters, Ph.D.
Mrs. Karen P. Miner
Dr. and Mrs. John Mitani
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Mrs. Paddy Moore-Goodhart
Roland Morley
Ms. Ka Ying Moua
Dr. Martin N. Muller and
Dr. Sherry Nelson
Mr. and Mrs. David Mulliken
Connie Murray
Patrick Murphy
Kevyn Myers
Ms. Mary M. Myers

N

David Nelson
Ms. Jeanne Newman
Mr. William K. Nisbet
Rory Nunn
Jamie Nulph

O

Mr. Michael O'Hara and
Mrs. Bette Meers O'Hara
Mr. and Mrs. Dudley Omura
David Orenstein
Sannie Osborn

P

Mr. James Pasik
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David Peterson
Mr. Eric Peterson
Alex Piel
Dr. Tom Plummer
Dr. Anne Pusey

Q

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Heidi Quist
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R

Mathieu Reeves
Mr. and Mrs. Bruce Reichardt
Ms. Susan Reynolds
Mr. and Mrs. William P. Richards Jr.
Eileen Richey
John Rinear
Ms. Sandra Weil Rushworth and
Mr. David Risch
Mr. and Mrs. Lee Rismiller
Stephen Rockower
Mrs. Jo Rainie Rodgers and
Mr. George Rodgers
Mr. Edward W. Roloson
Robin Rome
Ms. Colleen Rooney
Dr. Sandra Miller Ross
Mr. and Mrs. Richard B. Ruge
Michèle Rusconi
Jane Russell

S

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Pedro Santos
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David Schlossman
Dr. Peggy Scully-Linder
Mr. and Mrs. Bernard Seguy
Mr. and Mrs. David Seigle
Molly Selba
Dr. Robert M. Seyfarth
Dr. Warren Sharp and
Dr. Louise Laufersweiler
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Dr. Joan Silk and Dr. Robert Boyd
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Nirali Singh
Mr. Andrew Smith
Mr. and Mrs. George D. Smith
Dr. Geoffrey Smith and
Mrs. Catherine Stewart
Mr. Mike Smith
Dr. and Mrs. Benjamin Smith-Donald
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Dr. and Mrs. David Soffa
Ms. Meg Starr
Ms. Joy Sterling
Mr. Billie J. Stem
Dr. Anne C. Stone and Mr. Eric Hiser
Mr. and Mrs. Rocky Stone
Randy Stotland, Ph.D
Mary Strasser
Dr. Lawrence Straus and
Mrs. Mary Carmen Rapado Straus
Dr. Denise Su and
Dr. Yohannes Haile-Selassie
Mr. Nick Sutton
Bradley Swift
Mr. John Frederic Swift
Ms. Roselyne C. Swig

T

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Stephen Tannas
Mr. Peter Robert Tarr
Ms. Naoma Tate
Ms. Abby Terhune
Mr. and Mrs. Tony Thacher
Nicole Thompson Gonzalez
Dr. Cole T. Thomson Jr. and
Ms. Cheryl Ursin
Mr. and Mrs. Cole Thomson
Mr. and Mrs. David A. Thurm
Mr. Alan Tindell
Ian Tindell
Mr. and Mrs. Tom Tisch
John Tummon
Dr. Jenny Tung

U

Das Ulf
Richard Ullom
Dr. Kevin Uno
Ms. Rosemary Urbigkit

V

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Stephen Vasques
Dr. Charles J. Vella
Dr. Paola Villa and Mr. Peter Robinson

W

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Dr. Carol Ward
Paul Watkins
Ms. Jaime Watson
Mr. Walter Watson
Dr. Tim Weaver and Dr. Teresa Steele
Mr. Matt Webb
Linda Wedel
Mr. Irving Weissman and
Mrs. Ann Tsukamoto-Weissman
Dr. Adam Wetsman
Mr. Peter Booth Wiley
Anne Williams
LaShanda Williams
Ms. Natalie Williams
Suzi Wilson
Mr. and Mrs. William M. Wirthlin II
Mr. John Wolf
Dr. Bernard Wood and
Ms. Carol Rabenhorst
Ms. Hannah Wood and
Mr. Christopher Balmes
Mrs. Kay Harrigan Woods
Mr. and Mrs. Erik Wright
Mr. Geoff Wynne

Y

Drs. Mary Alice and
E. William Yund

Z

Dr. Adrienne Zihlman
Patrick Zickler

AmazonSmile
Benevity Impact
Dal Poggetto & Company LLP
Stephen W. and
Susan M. Baird Foundation
Straw Restaurant
The Brown Foundation Inc.
The Cedars Foundation Inc.
Upscale Constuction Co., Inc.
Wetherby Asset Management

The Estate of Mr. Donald Carlson

2020 Impact Highlights

62
Research
Grants Awarded

\$1,000,000+
in science funding was distributed.

Although some grantees had to delay projects due to the pandemic, they can still count on our funding!



10
Baldwin
Fellowships



20,000
people participated in
17 online educational
programs. 10x as many as
our in-person programs
typically reach.

5
Primate
Research Fund
Grants



Thank you for supporting The Leakey Foundation.



When other organizations had to put their programs on hold- we were able to continue our work.

No other nonprofit in the world invests in human origins research and outreach like we do. We can't do it without you.



Origins: Ethiopia

By Carol Broderick
Leakey Foundation Fellow

Above: Leakey Foundation travelers with scientists from the National Museum of Ethiopia in the museum's hominin fossil vault. The boxes on the table contain the original fossils of Lucy, Selam, and the Omo crania. Photo courtesy of Berhane Asfaw.

The January 2020 Leakey Foundation trip to London and Ethiopia was an unforgettable journey, and a chance for 16 Foundation Fellows and trustees to meet some of the world's most important paleoanthropologists and view their fieldwork and discoveries firsthand.

Our first stop in Ethiopia was a behind-the-scenes tour of the National Museum of Ethiopia in Addis Ababa, led by Dr. Mulugeta Feseha and Dr. Agazi Negash. The tour began in a room filled with Axumite and pre-Axumite archaeological treasures dating from as early as the 8th century BC, giving our group insight into the cultural history of Ethiopia.

Next, we visited the Museum's vast non-hominid fossil collection. This collection holds specimens gathered from sites across Ethiopia with fossils dated at 200 million years old.

We were then led to what was perhaps the greatest highlight of our trip: the hominin room where more than 71,000 hominin fossils are catalogued representing our family history back nearly six million years. Of the more than twenty species of hominids that have been found and named, an astonishing fourteen are from Ethiopia.

Dr. Berhane Asfaw, former director of the museum and mentor to the many students working there, was our guide. Dr. Asfaw walked to the locked vaults and pulled out trays containing two



Life Trustee William Wirthlin spends a moment with Lucy. This rare privilege was an unforgettable experience for the travelers.



Dr. Mike Rodgers shows stone tools from Gona to Lisa Wirthlin and Nikki Shields.



Dr. Berhane Asfaw shows Camilla Smith a fossil cranium from the hominin collection. Photo: John Broderick.

of the most famous *Australopithecus afarensis* specimens in the world, and the most complete skeleton of our ancient relative *Ardipithecus ramidus*. Opening those doors was like opening a door to our past, as Lucy, Selam and Ardi came out to greet us. These are the original fossils of some of our oldest relatives— all representatives of our hominin lineage.

Dr. Asfaw explained that these fossils are rarely taken out of the vault. He made it clear that he took this extraordinary step for the guests of The Leakey Foundation because of its early and ongoing funding of paleoanthropologists across East Africa and the world. It was an honor we will never forget.

Later, we were met by Dr. Mike Rogers who showed us stone tools made by hominins as far back as 2.5 million years ago. Dr. Rogers's excitement grew as he showed us a small, almost complete *Homo erectus* cranium that a member of

his team, Ibrahim Habib, discovered at a site we would visit later in our trip.

Our adventure continued in Ethiopia's Simien Mountains where primates called gelada monkeys live. Scientists from the Gelada Research Project study every aspect of these animals' lives, and we joined them as they worked. We were allowed to sit among hundreds of geladas, silently watching them groom, mate, eat, fight, and play. As dinner time approached, the grassy landscape looked a bit like a typing class as the gelada's hands jabbed at the grass, their primary food, in staccato rhythm. After our day in the field, we visited the research station and heard presentations from project co-directors Dr. Jacinta Beehner and Dr. Noah Snyder-Mackler.

Our next site visit was to the Woranso-Mille Paleontological Project in the Afar region with Dr. Yohannes Haile-Selassie, who is famous for his many fossil discoveries. We visited the

Leakey Foundation grantee Noah Snyder-Mackler (left) with Bill and Lisa Wirthlin and Dave Thomas among the gelada monkeys in the Simien Mountains.

Photo: John Broderick.



Burtele Foot site and the Kadanuumuu site where Dr. Haile-Selassie has found over 120 hominin fossils. His finds include a partial hominin foot with a puzzling opposable big toe, which Dr. Haile-Selassie believes to be a new species, *Australopithecus deyiremeda*, and a partial skeleton of an *Australopithecus afarensis*. In 2019, he found an extraordinarily complete cranium of a 3.8-million-year-old *Australopithecus anamensis*, earning him international acclaim. Clearly, more than one species co-existed here, and these finds give us a new perspective of our family tree.

The next day we visited Gona, a paleontologist's dream: six million years of continuous history in one area. It was here that Dr. Mike Rogers, Dr. Sileshi Semaw, and their team found the 2.5-2.6-million-year-old Oldowan stone tools we had seen at the Museum. The Gona study area has also produced a number of early hominin fossils dated from 4.5 to one million years ago. In fact, this unassuming landscape and other sites in the Afar region of Ethiopia are considered by many paleontologists to be the world's oldest archaeological sites.

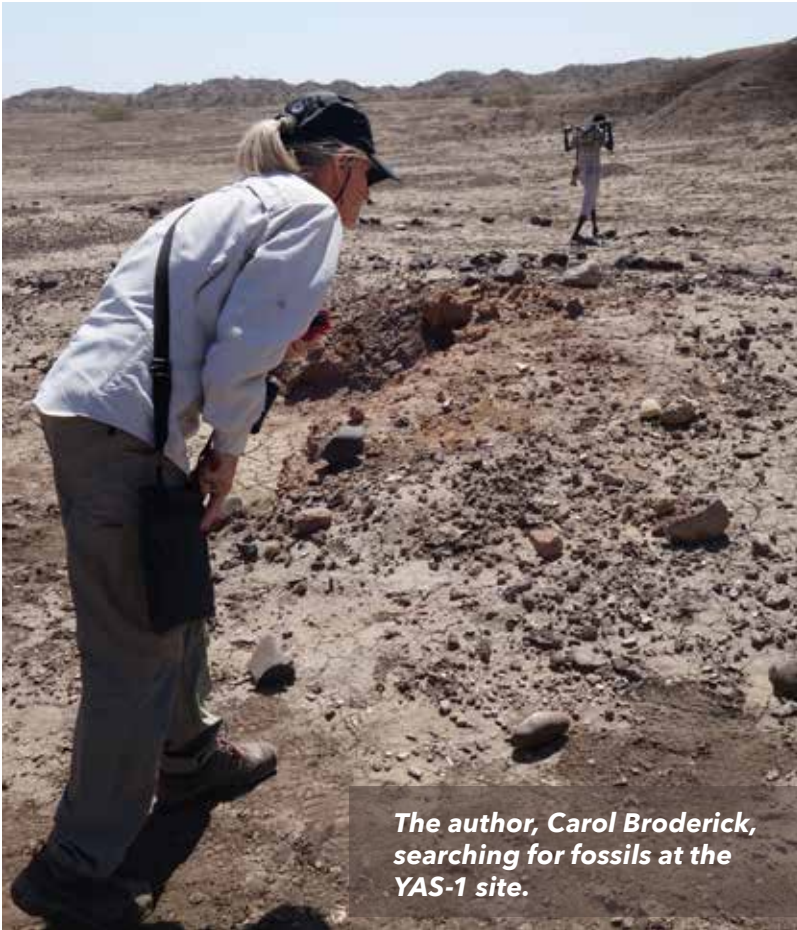
Our next stop was a Middle Stone Age site called YAS-1. An active research site, it undoubtedly

holds many future discoveries. I have read stories of paleontologists surveying landscapes "teeming" with fossils, and it was difficult to imagine until we arrived at YAS-1. After driving for hours over hills, up dry riverbeds, and across rocky terrain, we walked single-file, following Dr. Rogers to the site of some of his team's most important discoveries. As our eyes focused on the landscape, we could see accumulations of artifacts and fossils scattered across the surface.

My excitement was only surpassed by my fear of stepping on something important, when I noticed a small saw-like projection near my foot. I asked one of the scientists what it was. He picked it up and said that it was a rodent mandible, a "beautiful specimen" worthy of collecting for the National Museum in Addis Ababa. My hiking shoes did a little dance on the rocky Afar soil.

The generosity of the scientists we met on this trip was awe-inspiring. Every one of them thanked the Foundation for its support, many tracing funding back to the start of their careers. That enthusiasm, the quest for knowledge, the thrill of adventure, and the excitement of discovery is something we all shared on this journey. ❖

Facing page, bottom photo: Leakey Foundation travelers with researchers and staff at the Gona Research Project base camp in the Afar Region, Ethiopia. Photo courtesy of Sileshi Semaw and Mike Rogers.



The author, Carol Broderick, searching for fossils at the YAS-1 site.



The travelers' caravan heads into a dry river bed for a two-hour journey through the Afar.



Dr. Yohannes Haile-Selassie and President-elect Jeanne Newman at the Burtele Foot site.



**Want to learn more about Ethiopia?
Check out episodes 1, 4, and 45 of our
award-winning *Origin Stories* podcast.**



Leakey Foundation travelers at the famous Betse Giyorgis (Church of St. George) in Lalibela. This church was carved downward into the volcanic tuff which is the sole building material used in its construction.



Origins: Ethiopian Culture

Ethiopia is a land of awe-inspiring beauty, ancient culture, unique traditions, and incredible festivals, food, and coffee. In January 2020, 16 travelers joined The Leakey Foundation on a 14-day journey exploring Ethiopian culture and heritage.

By Sharal Camisa
Executive Director

We arrived in Addis Ababa in time to celebrate Ethiopian Christmas on January 7th. (The holiday is observed on the 29th day of the month of Tahsas using the Ethiopian calendar.) We celebrated at a local restaurant, alongside Ethiopian families and special guest Yohannes Haile-Selassie. That night “Santa” delivered postcards to mail home and hand-woven scarves to each of our travelers’ rooms.

While the majority of its citizens practice Ethiopian Orthodoxy and Islam, Ethiopia became the spiritual home of the Rastafarians when Emperor Haile Selassie was declared by adherents to be the incarnate of God. We visited his former palace, where he was overthrown in 1975. We also visited Holy Trinity Cathedral, where his body was interred 25 years after his death.

Our group then journeyed to Lalibela, one of the most important religious locations in Africa and the entire Christian world. Lalibela is renowned for its 11 churches hewn from stone around 800 years ago. It was designated a UNESCO World Heritage Site in 1978.

Upon our early morning arrival at the most recognizable of the churches, Bete Giyorgis (Church of St. George), which is shaped like a crucifix, we were the only Westerners present. We listened to the priest reciting prayers below us as his words echoed off the rock. Then we climbed down the well polished rock and joined him.

In the Amhara Region, after hiking up a steep hill, we reached Yemrehana Krestos, one of the best-preserved late Axumite churches tucked away in a huge basalt cave.



The church is not built from stone, rather horizontal beams of wood alternating with white stonework in stripes. We met the priest inside the church, which was small yet elaborately decorated with murals on every surface from the floor to the ceiling.

Some of the most remarkable paintings we viewed were inside the Debre Birhan Selassie Church in Gondar. Once inside, we looked up to see the faces of 123 Ethiopian winged cherubs with the walls depicting biblical scenes and saints. Art is integral to Ethiopian religion and culture, and we saw additional examples of ancient art at the Ethnographic Museum and contemporary art at the Zoma Museum.

Between our visits to research sites and churches, our group also visited the UNESCO Site and first capital of the Ethiopian Empire, the Royal Enclosure, as well as the Bath of King Fasiledes, where modern-day Timkat ceremonies are performed. The group enjoyed coffee ceremonies and sweet tej, shopping at the St. George

Gallery, and boating on Lake Tana.

With tourism still in its infancy, our experiences amongst the astonishing landscapes and ancient wonders were wholly authentic. It was a privilege to discover the secrets of a nation like no other, seldom explored by tourists, and a country in transition. Ethiopia is not a destination for those who seek thrills; it is a destination for those who wish to be moved. ❖

Our sincere thanks to our extraordinary guide Ashenafi Negalign and the talented teams at Ethiopian Quadrants and Rothschild Safari for safely and expertly showing us the beauty of Ethiopia.

If you are interested in becoming a Fellow and joining the Foundation for future travel, please contact sharal@leakeyfoundation.org

Above:
Ashenafi Negalign leads the group into Yemrehana Krestos, a late Axumite church built inside a cave.



Top row:
(left) Vera Meslin in Lalibela.
(right) Bettina Hughes enjoys a contemplative moment at Fasilides's castle in Gondar.
(left) A waitress at The Four Sisters Restaurant pours tej, a sweet wine made from honey, water, and a medicinal shrub.
(right) Chet Kamin, Bettina Hughes, Bill Wirthlin, and Lisa Wirthlin enjoy lunch and an unmatched view at Ben Abeba in Lalibela.
Bottom row:
Travelers boating on Lake Tana.

Photos by Sharal Camisa



Leakey Foundation Leadership News

We are pleased to announce that **Dr. John Mitani** was appointed as the co-chair of our Scientific Executive Committee (SEC). He and his counterpart, **Dr. John Fleagle**, lead our committee of distinguished scientists who volunteer their time and expertise to help determine which grant applications are approved for funding.

Dr. Mitani is a primatologist and professor emeritus from the University of Michigan, and co-director of the Ngogo Chimpanzee Project in Uganda. He joined The Leakey Foundation's SEC in 2011. Dr. Mitani said, "It's been a pleasure to serve as a member of the Foundation's Scientific Executive Committee for the past decade, and my recent appointment as co-chair of the Committee is one of the honors of my career."

*Above:
Dr. John Mitani
at his research
site in Uganda.*



The COVID-19 pandemic has created new challenges for all of us, especially graduate students and early career scientists. The Leakey Foundation remains committed to funding research during this difficult time. The study of human origins will emerge stronger and continue to thrive as a consequence.

-John Mitani

Mr. William "Billy" Getty, Dr. Henry Gilbert, Mrs. Dana Lajoi, and Mr. Mike Smith have accepted invitations to join The Leakey Foundation Board of Trustees.

Mr. Guy Chriqui, Ms. Ashley Judd, and Mrs. Ria Wright have joined the leadership as advisors to the board. Mr. Chriqui and Mrs. Wright are founding members of the Foundation's Young Professionals Group.

Mrs. Carolyn Farris and Mr. Cole Thomson have been named Life Trustees. This honorary title is given to express appreciation for outstanding leadership and commitment to the mission of the Foundation. Mrs. Farris joined the board in 1991, and Mr. Thomson was reelected to the board in 2010. ❖

Ashley Judd Joins The Leakey Foundation



Egalitarian, co-dominant, lacking sexual coercion, featuring strong female cooperation and coalitions, bonobos speak to my life's work as a humanitarian and leader.

-Ashley Judd

Activist, humanitarian, author, and actor Ashley Judd has joined The Leakey Foundation as an advisor. "I am delighted to have been asked to join The Leakey Foundation as an Advisor to their Board of Trustees," she said, "It matters deeply to me because of my passionate professional and personal involvement with bonobos."

Ashley Judd is Leader in Practice at Harvard Kennedy School's Women and Public Policy Program. She serves as Global Goodwill Ambassador for the United National Agency for Sexual and Reproductive Health and Rights (UNFPA). Since 2004, she has traveled to 22 countries, visiting with girls, women, and families in slums, brothels, refugee camps, hospices, and orphanages, hearing their stories of trauma and resilience. A leader of the #MeToo movement, and founding member of Time's Up, she also works with sex slavery abolition organizations Polaris Project, Demand Abolition, and Apne Aap Worldwide.



Photo: Victor Demalchier

Ms. Judd also serves on the advisory boards of the International Center for Research on Women, The Rape, Abuse, & Incest National Network, and is chairperson of the Women's Media Center Speech Project: Curbing Abuse, Expanding Freedom.

A University of Kentucky graduate, she earned her MPA from Harvard's Kennedy School in 2010. Her paper "Gender Violence: Law and Social Justice" won the Dean's Scholar Award.

She is a sought-after public speaker and a widely published OpEd author with a diverse and unique social media presence. Her book, *All That Is Bitter & Sweet*, detailing her visits to grassroots programs in developing countries, was a *New York Times* bestseller. She is also an actor both on film and stage and has been nominated for several Golden Globe and Emmy awards. A native Kentuckian, Ashley Judd currently resides in Massachusetts and Tennessee. ❖



My interest in, and admiration for, The Leakey Foundation originates from the rewarding friendships I made at Cal with some amazing evolutionary scientists, including Desmond Clark, Garniss Curtis, Clark Howell, Tim White, and Paul Renne.

-Mike Smith

Trustee Spotlight: Mike Smith

Newly-elected Leakey Foundation trustee Mike Smith is putting his experience as an attorney to work in his new role as chair of the Foundation's Governance Committee. Although new to our board, Mr. Smith has been active with The Leakey Foundation since 1996.

Mike Smith was raised in West Los Angeles and has lived in the East Bay area of Northern California for 40 years. He is a graduate of the University of California Berkeley, and of Boalt School of Law where he received the Bancroft Whitney award in constitutional law. Upon graduation he joined the Peace Corps serving on the law faculty at the University of Ife in Nigeria.

Following a brief time in private practice, Mr. Smith worked in Washington D.C. as Assistant General Counsel and Senior Staff Attorney at the U.S. Commission on Civil Rights. Major assignments with the commission concerned civil rights problems of Mexican Americans (particularly farm labor issues of migratory workers) and Native Americans, which entailed extensive travel to reservations and urban Native American communities, and writing Commission publications *American Indians*,

Tribal Sovereignty and the 1968 Bill of Rights (1970), and the *American Indian Civil Rights Handbook* (1973).

Mr. Smith returned to the University of California Berkeley in 1973 where he held the positions of Chief Campus Counsel and Assistant Chancellor, Legal Affairs upon his retirement in 2010. During his tenure at Cal he advised the administration and faculty on a wide range of higher education legal matters. He taught constitutional law, served on the local ACLU board, the City of Berkeley Personnel Board, the University Art Museum Board of Directors. He also published "Protecting the Confidentiality of Faculty Peer Review Records: Department of Labor vs. The University of California" in the *Journal of College and University Law* (1981). He presently serves on the Board of Directors of the Wright Institute and Theater Comique.

Mr. Smith now holds the title of Assistant Chancellor and Chief Legal Counsel, UC Berkeley, Emeritus. ❖

Above:
Mike Smith (left) with Betty and J. Desmond Clark at a Leakey Foundation event.



I believe that a better understanding of who we are can only be derived from knowing where we came from. All our prejudices and logical fallacies will eventually wither under the scrutiny of rigorous science.

-Billy Getty



I believe this science helps build understanding and empathy, and offers a world view sufficiently flexible to accommodate life's variation while also remaining grounded in science and our natural world.

-Ria Wright



I've always been a science fiend but I only really got into anthropology after reading *Sapiens* and getting involved with The Leakey Foundation. It's the science that's helped me understand who we are and how people work best.”

-Guy Chriqui





Ann joined The Leakey Foundation in 1973 as a Fellow with her husband Gordon Getty who later became the Chairman of the Board. Together, they helped the Foundation grow to become what it is today.

“She viscerally understood the importance of human origins research and saw the value of those who devoted their lives to the pursuit of knowledge,” said Ann’s nephew Dr. Henry Gilbert. “She knew that by understanding our natural origins, we would better understand how to exist in the present.”

In the early 1990s, Ann Getty began to visit Ethiopia on paleoanthropological expeditions with Dr. Tim White and others. The Gettys provided funding for the expedition and support for the National Museum of Ethiopia, and they lent logistical help by flying team members from San Francisco to Addis Ababa in a private 727.

Dr. White said, “Early in the 1990s Ann completed courses in biological anthropology and human osteology at Berkeley. This kindled a deep and lasting enthusiasm for human evolution—a passion that immediately drew her to fieldwork in Ethiopia and Turkey.

Remembering Ann Getty

By **Sharal Camisa**
Executive Director

Ann Getty, known for her work as a philanthropist, interior designer, publisher, and author, died on September 14, 2020, at the age of 79.

Ann Getty was born in California and grew up working on her family’s peach and walnut farm. She dreamed of becoming a scientist or explorer, and after graduating from high school, she attended UC Berkeley where she studied anthropology and biology. She remained devoted to science for the rest of her life.

Above: Ann Getty exploring for fossils in a coal mine in Turkey in 1993.

Photo © Tim White



Ann Getty (center) working with other members of the Middle Awash research project in 1993. Photo © Tim White

“Ever alert to identifying a need and then generously meeting it, Ann made foundational contributions to the development of infrastructure and professional personnel in both countries, and at Berkeley. An accomplished field and museum paleontologist, Ann was one of the few who excavated the *Ardipithecus* fossils in the 1990s.

“As a long-term member of the Middle Awash research project, Ann worked with Desmond Clark and Clark Howell in a laboratory she renovated and equipped in Addis Ababa. There, and in the field, she tirelessly and inspirationally worked shoulder-to-shoulder with generations of younger scholars such as Berhane Asfaw, Giday WoldeGabriel, Yonas Beyene, Yohannes Haile-Selassie, Sileshi Semaw, Erksin Savas, and Cesur Pehlevan. Ann’s kindness, work ethic, insight, dedication, generosity, and humility transcended borders and boundaries. We all deeply mourn her passing.”

Ethiopian scholar and Leakey Foundation grantee Dr. Berhane Asfaw wrote, “I remember how she never took a day off in those hot and dusty, multi-season excavations. The sediment in which *Ardipithecus* was embedded was so hard it had to be sprayed with water to remove the sediment gradually; Ann was on the excavation floor excavating and removing the dirt with us.”

“Besides the scientific work,” wrote Dr. Asfaw, “Ann invested a lot to upgrade the human evolutionary research laboratory in Ethiopia. She toiled like a daily laborer to clean the floor of the laboratory. Then, Ann created a very comfortable research facility by furnishing the lab with fossil storage cabinets she brought from San Francisco. Further, Ann redesigned the National Museum’s garden and worked with gardeners and the Museum staff.”

IN MEMORIAM



Donated lab equipment and cabinets are packed on to a truck in Addis Ababa in 1991. Photo © Tim White

“When President Obama visited Ethiopia in 2015, I had a chance to inform him that the discovery of the special hominid skeleton on exhibit was made possible by the grant from NSF and the participation of multiple USA researchers like Ann Getty. The President was very happy to learn that Ann was one of the excavating personnel of this iconic 4.4 million-year-old early hominid. President Obama told me that she is a good friend of his.

“It was because of the support of Ann and Gordon that our research continued and was successful and strong. Her humbleness and work ethic remains imprinted in all of us who had the chance to work with her. Ann will be missed; she will always live in my memories.”

One of Ann’s collaborators and friends, Dr. Alan Almquist shared, “I had known Ann Getty for many years but only through our mutual field work in Ethiopia did I become aware of her

passion for anthropology and human origins. Ann joined the field team in the Middle Awash, and soon after she arrived in camp, she wasted no time getting to work. Ann worked tirelessly from the early morning to the late hot afternoon when most of us stayed in camp doing lab work and trying to stay cool. Ann was a caring person. She knew drinking water in the Afar was a scarce commodity, so when she arrived, she brought with her dozens of water bottles that she had shipped from the states. It was a welcome treat, sure beat the “filtered” river water we had to deal with, and went great with the scotch that Desmond Clark brought for our nightly single drink.”

In a 2016 interview in *Haute Living*, Ann remembered her time in Ethiopia, “It was very hot, and our biggest luxury was a tent—but I did enjoy the sense of discovery... Working in this large area, we conducted surface surveying to discover any fossils that were exposed. We found



*Fossil storage cabinets being installed in the National Museum of Ethiopia in 1991.
Photo © Tim White*



*Working in the lab in 1998.
Photo © Tim White*



*Surveying for fossils in Turkey in 1993.
Photo © Tim White*

the presence of pig, antelope, and colobus monkey fossils, which were an indication that hominids could be present in the same environment. We even searched for fossil pollen, which takes a very keen eye to find. When exploring the matrix of fossil evidence, you have to discern the very subtle difference between the two. It was a bit challenging, but so rewarding."

Dr. Gilbert said, "Some of the happiest times I saw Aunt Ann were in the field, in the zone. But I saw her happy in many environments; she was happiest when she could have a positive influence on people."

Her impact on the science of human origins is immeasurable. Leakey Foundation Trustee Mike Smith said, "Behind her public persona was a person who very thoughtfully and carefully steered her wealth to deserving humanitarian and academic causes. Ann was exceptional in many ways, very bright, caring, generous of course, and very funny. Like Gordon, she was never self-important."

Ann Getty was more than a benefactor to The Leakey Foundation. We will miss her greatly and remember her as kind, witty, dedicated, and generous beyond compare. ❖



Barry Sterling, A Life Well-Lived

Leakey Foundation Life Trustee and famed California vintner Barry Sterling passed away on July 26th, 2020, at his home in Sebastopol, California. He was 90 years old.

Barry was elected to The Leakey Foundation Board of Trustees in 1991, and he received the honorary title of Life Trustee in 2007. His daughter Joy Sterling joined the board when Barry resigned. Fellow Life Trustee Bill Richards said, "Barry was such a treasure in life, and he will be missed deeply."

Barry had an exciting life. He was a prominent attorney, world traveler, collector of art and antiquities,

philanthropist, raconteur, master gardener, and a loving husband and father.

A Los Angeles native and Stanford alumnus, Barry Sterling graduated law school in the same class with William Rehnquist and Sandra Day O'Connor. In their graduating class of 114 people, Chief Justice Rehnquist was first in the class, Justice O'Connor third, and Barry was eleventh.

He passed the bar exam, was inducted into the army, and married Audrey Shapiro Sterling all in the same weekend in 1952. He served in the Judge Advocate General's Corps in Washington, D.C., and assisted the

Above: Audrey Sterling, Jane Goodall, Toshisada Nishida, and Barry Sterling at the Leakey Foundation's 40th Anniversary Gala in 2008.

Department of Defense's legal staff during the McCarthy Senate hearings.

The Sterlings returned to Los Angeles with their young daughter Joy. Barry opened a corporate law firm, and soon their son Laurence was born. The couple became engaged in Democratic politics and were founding members of the Los Angeles Music Center and the Los Angeles Art Museum.

For Barry's 30th birthday, his wife Audrey gave him his first trip to Europe. He fell in love with France, and the family moved there in 1967. They led a glamorous life, splitting time between a belle epoch apartment in Paris and a villa in the hills above Cannes. They visited wine-making regions, and Barry became a member of the *Confrérie des Chevaliers du Tastevin*, an exclusive group of wine enthusiasts, founded in 1934.

The Sterlings' years in France sparked a dream of living on a vineyard, growing grapes, and making their own estate-bottled wine. They had planned to establish their winery in France, but ended up finding the perfect location in California.

They first saw Iron Horse in a driving rainstorm in 1976. At the time, there was no winery and the 19th century carpenter gothic house was dramatically listing to one side. Nevertheless, after a taste of wines made from Iron Horse grapes, they knew they had found their home.

The Sterlings opened their winery in Sebastopol, California, on Barry's 50th birthday in 1979. Their first vintage of sparkling wines arrived the next year. Iron Horse vintage Blanc de Blancs was served at the Reagan-Gorbachev Summit Meetings on the cold war. Iron Horse wines became a White House tradition that continued for 35 years.

In addition to their acclaimed estate wines, Iron Horse produces cuvées to benefit causes important to the Sterling Family. Ocean Reserve supports ocean conservation, a limited-production vintage Brut called Gratitude benefits the Redwood Empire Food Bank in Sonoma County. In 2016, Iron Horse made a limited-production vintage called "Monkey Cuvee" to benefit The Leakey Foundation.

During his tenure on the board of The Leakey Foundation, Barry served on many committees, including the governance and finance committees. He was an astute advisor who cared deeply about the educational mission of the Foundation.

Leakey Foundation President Camilla Smith said, "He was such a warm presence and a wise counselor. Barry continued to support The Leakey Foundation in so many ways after he left active involvement. I saw him as a role model, supporting human origins research, music, and art."

Profiled in the *Santa Rosa Press Democrat*, Barry said, "We have no regrets. Our life is great. We've had a very good run. Frankly, on our passing, no one is going to say, 'Oh, they never got to enjoy life.' Everyone who knows us knows we've had a hell of a good time."

Barry is survived by his wife Audrey; children Joy, Laurence and Terry; grandchildren Justine, Mike, Barrie and Joseph; great grandson Calvin; nephews and nieces Rand, Pamela, Scott, Susan and Judy Sterling; brother- and sister-in-law Bert and Joan Shapiro. ❖



On January 12, we hosted our first online program, “Why Care about Hair.” The event featured Tina Lasisi, a biological anthropologist and PhD candidate from the Jablonski Human Evolution and Diversity Lab and the Shriver Anthropological Genomics Lab at Penn State University. We also featured Leakey Foundation grantee Elizabeth Tapanes who

is an evolutionary biologist and PhD candidate at the George Washington University’s Center for the Advanced Study of Human Paleobiology where she is part of the Primate Genomics Lab. The program was emceed by me and moderated by Hannah Wood.

The YPG’s approach to the event was informal and conversational, which allowed for fun answers to some big questions – Why do we have hair? Why is there so much variation? What is the role of hair? Is there any relationship between the hair of a lemur and the hair on your head? Are there aspects about our hair that are uniquely human? If you want the answers to these questions, check out the program video on our YouTube channel, youtube.com/TheLeakeyFoundation.

Thanks to Stumptown Coffee Roasters for donating bags of their best-selling Hair Bender Coffee as gifts for donors who gave at least \$25. Together with Stumptown Coffee Roasters, the YPG raised \$1,780 to support The Leakey Foundation. ❖

The YPG: Connecting Your Curiosity to Scientists in the Know

By Ria Wright
*Founding Member
 Young Professionals Group*

The Young Professionals Group (YPG) is united by our belief in the importance of The Leakey Foundation’s mission, our interest in its work, and our desire to share this connection with our peers in order to help secure its future. Many current Leakey Foundation supporters discovered a passion for human origins science when they were young, and their interest was solidified by unique experiences and a strong community. We look to bring that to the next generation of supporters.

The YPG is working to bring this science to life for our peers, and like many organizations, we are doing this through virtual events.

Above:
YPG speakers
Tina Lasisi (top) and
Liz Tapanes (bottom).

Join the YPG today! There is no cost to participate. Sign up at leakeyfoundation.org/ypg



Volunteer in Kenya and Puerto Rico Without Leaving Home

The paleontology collection at the National Museums of Kenya contains over 200,000 fossil specimens from more than 100 sites located within Kenya's Rift Valley. These fossil specimens, some dating from more than 30 million years ago, can help answer fundamental questions about the history of life on earth.

In the early days of paleontology, information about the fossils was written on index cards. Leakey Foundation grantees Fredrick Kyalo Manthi and Job Kibii are leading a new project that invites participants to help transcribe vertebrate fossil specimen cards into a database in order to make the data available to researchers, students, and the public.

Cataloguing the information is too large a task for the museum staff, so the project organizers turned to Zooniverse.org, a website that makes it possible for people from anywhere in the world to assist professional researchers with projects that would otherwise be impossible. So far, approximately 2,000 volunteers have joined the effort to transcribe the collection cards. New images are uploaded regularly.

Visit Zooniverse.org and search for "Cradle of Humanity" to get involved.

If fossils aren't your favorite, there are other Zooniverse projects you can help with. Chimp & See is a project from the Max Planck Institute for Evolutionary Research that uses volunteers to help review nearly 7,000 hours of footage from camera traps located in chimpanzee habitats in 15 countries across Africa. By scanning videos from these traps and identifying the species and activity that you see, you can help researchers understand the lives of these apes.

Researchers studying the macaques at Cayo Santiago in Puerto Rico are looking for people to assist in identifying different blood cell types in order to help them understand which monkeys may be sick and which are healthy. The "Monkey Health Project" is 50% complete at the time of this publication, and there are 5,902 volunteers.

These are only a few examples of the science projects you can contribute to from the comfort of your own home. ❖



Feed Your Brain with Lunch Break Science

By Meredith Johnson
Communications Director

When Education and Events Manager Arielle Johnson had to bring The Leakey Foundation's public programs online due to the pandemic, she took the opportunity to create something new. Within a few months of the cancellation of in-person events, she created and launched *Lunch Break Science*. She has already produced 20 episodes highlighting a wide range of topics related to human origins.

Above:
 Arielle Johnson with
 Dr. Chalachew Seyoum
 on episode 3 of *Lunch
 Break Science*.

Facing page:
 Screenshot of an
 audience participation
 activity on episode nine.

“I thought about what is unique and what I love most about The Leakey Foundation. While planning our public programs, I have the privilege of getting to know many of the scientists we fund. Hearing about

the fascinating paths that they have taken is always my favorite part,” said Arielle. She created *Lunch Break Science* as a platform for Leakey Foundation grantees to share not only their research, but also their stories. “From PhD candidates at the start of their careers to world-renowned experts at the top of their fields, they each tell an integral part of the story of how human evolution research is conducted.”

Lunch Break Science is a live-streamed web series, like a television show, that features interviews with Leakey Foundation grantees and short talks about their research. Viewers who watch *Lunch Break Science* live can join in by submitting questions for each guest to answer during the episode.

Watch *Lunch Break Science* online!
leakeyfoundation.org/live



Which orangutan is the older version of baby Lois? Post your answer in the chat!

EDUCATION



ORIGIN STORIES

THE LEAKEY FOUNDATION PODCAST

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Origin Stories is an award-winning monthly podcast that combines science and storytelling to explore how we became human.

Episodes include stories of fossil discoveries, long-term primate research, new methods in science, and in-depth profiles of scientists at the cutting-edge of human origins research.

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Check out our YouTube channel

Videos from our past lectures and events are available online. Subscribe today to receive notifications when we post new videos, including *Lunch Break Science*!

youtube.com/theleakeyfoundation

"I love how *Lunch Break Science* is providing opportunities for intellectually curious people to 'meet' the amazing scholars The Leakey Foundation supports. Arielle has found a fun way to engage the public, creating a more intimate experience with the researchers and their science." said Executive Director Sharal Camisa.

In addition to presenting educational information about human evolution, this new program, sponsored by Camilla and George Smith and the Ann and Gordon Getty Foundation, is helping early career scientists fine tune their science communication skills.

Not long after earning his PhD, Leakey Foundation grantee and Baldwin Fellow Dr. Chalachew Seyoum was the guest on episode three. "My interview during the *Lunch Break Science* series was a great experience. It gave me the opportunity to share my research and experience with the general public," he said. "I also had a great time with Arielle Johnson, and I would be happy to work with her again."

Lunch Break Science attracts a worldwide audience and creatively showcases the diverse range of research that The Leakey Foundation supports. We hope you will join in, take a break from your day, and feed your brain with The Leakey Foundation's new show.

Grab your lunch and join The Leakey Foundation for *Lunch Break Science* on the first and third Thursday of every month at 11 am Pacific, Find the upcoming schedule and watch past episodes at leakeyfoundation.org/live.

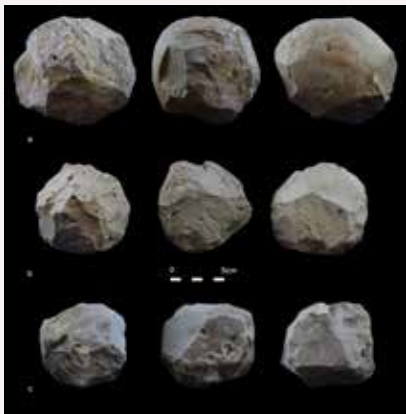
LEAKEY FOUNDATION-FUNDED RESEARCH HIGHLIGHTS



A new study shows how moon cycles impact human sleep.

People stay up later and sleep less during the full moon

New Leakey Foundation-supported research by Horacio de la Iglacia and colleagues found that the cycles of the moon have a profound impact on human sleep. The study, published in *Science Advances*, finds that people have more difficulty sleeping in the days leading up to a full moon. The team studied sleep patterns of three groups of participants living in environments that range from a rural setting with and without access to electricity in indigenous Toba/Qom communities in Argentina to a highly urbanized setting in the United States. They found that sleep patterns among the participants fluctuated over the course of the lunar cycle. Ahead of the full moon, it took people, on average, 30 minutes longer to fall asleep and they slept for 50 minutes less.



These replica stone tools were used by researchers to extract bone marrow.

CC-BY Assaf et. al

Scientists solve ancient stone sphere mystery

Shaped stone spheres were part of humanity's toolkit for over two million years. These artifacts have intrigued scientists since the pioneering work of the Leakeys at Olduvai Gorge in Tanzania, but their purpose has remained a mystery until now. Researchers found 29 of these tools in Qesem Cave in Israel, a site that has evidence of occupation from 420,000 to 200,000 years ago. Using replicas, the scientists conducted experiments and found that these enigmatic stone balls were likely used to smash bones and extract the nutritious marrow inside. In their paper in *PLOS One*, the authors wrote, "Our experimental results show that the morphology and characteristics of shaped stone ball replicas are well-suited for the extraction of bone marrow. We suggest that these features might have been the reason for their collection and use at Qesem Cave."



A young female gelada grooming the dominant breeding male of her group.

Credit: Rachel Perlman

When a new male takes over, female geladas suddenly mature

Leakey Foundation-supported researchers studying geladas in the Simien Mountains of Ethiopia have shown for the first time that females of this species mature suddenly when a new male takes over a group. "We found that prepubertal females are more likely to mature right after a new breeding male arrives in the group—even if it means maturing earlier than expected," said senior author Jacinta Beehner, a Leakey Foundation grantee and professor at the University of Michigan. The findings, reported in the journal *Current Biology*, suggest that maturation in many primates is a lot more sensitive to social environments than scientists had previously thought. The discovery may even have implications for humans, according to the researchers.

Your support made this work possible! Help uncover more of the human story.
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Grantee Giulia Gallo. Photo: Ljubica Stajic

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Here is an example of what a year's worth of donations can do:

- \$5 each month will pay for a permit for a grantee to study primates in the wild.
- \$25 each month will pay for the creation of a lesson plan teachers can use for free.
- \$100 each month will pay for a grantee to travel to their field research site.

If you donate \$100 each month (for one year), you will become a Leakey Foundation Fellow. As a member of this small cohort of scientific patrons, you will receive access to private programs that connect you with researchers and their work like never before.

Donate now. Your monthly gifts will be matched!
leakeyfoundation.org/donate



THE LEAKEY FOUNDATION

1003 B O'Reilly Avenue
San Francisco, CA 94129

Virtual Program Calendar



Virtual Speaker Series on Human Origins Dr. Zarin Machanda and Dr. Alexandra Rosati

In partnership with the American Museum of Natural History.
Sponsored by The Brown Foundation, Inc.



Lunch Break Science Earth Day Bonus Episode

Watch live at 11 am Pacific • 12 pm Mountain • 1 pm Central • 2 pm Eastern

Want more *Lunch Break Science*? Tune in on the 1st and 3rd Thursday of every month!



Annual Fellows Lecture

Dr. Chris Stringer
Research Leader, Human Origins, Natural History Museum, London

This private program is a benefit available only to Leakey Foundation Fellows. Donate at the Fellows level to receive an invitation to this exclusive virtual event.

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