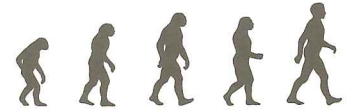


# AnthroQuest



The Newsletter of the L.S.B Leakey Foundation

No. 7, Fall 1998

## Panel Workshop: The Role of the Leakey Foundation Past & Future

By Dr. Karla Savage and Amy Merickel

This year the Leakey Foundation celebrates its 30<sup>th</sup> anniversary. This milestone presents an opportunity to reflect on the many accomplishments of the Foundation, as well as set directives for the future. To this end we held an informal workshop at the National Geographic Society's (NGS) headquarters in Washington D.C. on October 9, in conjunction with our Board of Trustees' annual meeting.

The main objective of the workshop was to clarify the role the Leakey Foundation has played over the past thirty years in the study of human origins. The underlying intent was that the workshop might steer future plans to best support scientific research in this interdisciplinary field. We were honored by the participation of three guest panel members: Dr. Sydel Silverman, President of the Wenner-Gren; Dr. George Stuart, Chair of the Committee for Research and Exploration at NGS; and Dr. John Yellen, Program Director for the Archaeology, Archaeometry & Systematic Anthropological Collections of National Science Foundation (NSF).

Overviews of the Leakey Foundation's history, funding trends, and highlights of our past achievements were provided by members of the Scientific Executive Committee (SEC) and staff.<sup>1</sup> The panelists from other fund-



John Fleagle,  
Workshop Moderator

ing agencies followed with background information on how their organizations distribute research funding. During a later discussion session, the panel members lent expertise and offered insights on practical and visionary goals for the next three decades.

Several interesting issues surfaced during these dynamic deliberations. All of the other organizations represented fund some projects in the area of human origins research. Nevertheless, the guest panelists agreed that the Leakey Foundation's unique focus

on this research area makes our impact on advancing knowledge about human origins even greater than that of other agencies which distribute more funds overall. Another major point was that, although many of our grants are small, the "start-up" funds we provide to promising new researchers have been crucial. Receiving a Leakey Foundation grant sets the stage for many grantees to receive larger grants from other sources such as NSF—our risk-taking pays off! The invited panelists concluded that the Leakey Foundation has

Continued on page 3

<sup>1</sup> Dr. Karla Savage, Program & Grants Officer, as well as the following SEC members: Drs. Frank Brown, John Fleagle, Clark Howell, Richard Klein, and Carel van Schaik.

## The Search and Discovery of Our Earliest Ancestors: An Update

by Dr. Meave G. Leakey

*In conjunction with our 30th anniversary celebration, the Leakey Foundation recently co-sponsored public lectures by Richard and Meave Leakey at National Geographic's headquarters in Washington D.C. This special evening carried on a tradition that began over thirty years ago when Louis Leakey (Richard's father and the Foundation's namesake) gave his first lecture at National Geographic. Louis' 1961 lecture was an overwhelmingly success and introduced the science of paleoanthropology to many Americans, including several of the founders of the Leakey Foundation. With Richard and Meave's daughter Louise now joining the search for our earliest ancestors, it's not hard to imagine that a third generation of Leakeys might one day enthrall an audience with tales from the field.*

*Richard Leakey, who was recently reinstated as the Director of the Kenya Wildlife Service, reflected on the direction of research in human origins in the new millennium. Meave Leakey, now head of the paleontology division at the National Museums of Kenya, offered insights on her headline-making fossil discovery earlier this year—this find confirmed the existence of bipedalism in human ancestors more than four million years ago. The Leakey Foundation would like to thank the National Geographic Society's Grosvenor Council for helping to support these notable lectures. A summary of Meave Leakey's talk on October 9, 1998 follows.*

Following the discovery in 1994 of the new and earliest species of

Continued on page 3

## President's Message: 30 Years of Funding for Human Origins Research!

December 1998

Dear Members,

Thirty years! This landmark year, the Leakey Foundation celebrates the advances we have made over the last three decades in understanding our origins and renews our commitment to the questions that remain unanswered. Louis Leakey would be delighted to know that his enthusiasm and dedication continue to inspire generations of scientists looking for evidence of our earliest beginnings.

We took the opportunity to mark the celebration by holding our annual meeting in October at the National Geographic Society's (NGS) offices in Washington, D.C. The trustees and scientists were pleased to meet with colleagues and friends who are at the forefront of research and funding for the many fields involved in unraveling the mysteries of human origins. The panel workshop, discussed in the front page article of this issue, allowed us to get perspective on our objectives and fine-tune our methods and direction. It was wonderful to hear from representatives from NGS, National Science Foundation, and Wenner-Gren Foundation, just how valuable our support has been. In fact, the Leakey Foundation is the largest non-governmental source of funding for research specifically in human origins.

Public lectures by Richard and Meave Leakey, were reminiscent of past talks at the NGS by both Louis and Mary Leakey. We congratulate Richard on his reinstatement as Director of the Kenya Wildlife

Service, and were pleased to hear his perspective on the tremendous advances in many fields as well as the daunting problems which are faced by researchers and wildlife conservationists. A summary of Meave's lecture on her most recent discoveries appears in the fieldnotes section of the newsletter which also begins on the first page of this issue.

For me, the most rewarding moment was the presentation of the Mary Leakey Award to Emma Mbuu. Mary had the highest level of standards and expectations for everything she set out to do—Ms. Mbuu has already displayed the same level of dedication in her years of work at the National Museums of Kenya. The trustees and scientists wish Ms. Mbuu the best and look forward to hearing more about her achievements in the future. (See page 4.)

Upon reflection, the first thirty years of the Leakey Foundation show a picture we can be proud of: significant research accomplishments, overall financial strength, educational progress, and membership participation are solid features of our track record. We move toward the new millennium with resolve to continue our efforts to provide much-needed funds, as well as anticipation of the discoveries yet to come.

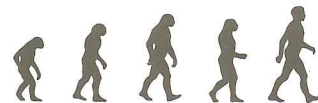
Sincerely,



Kay Harrigan Woods  
President



Left to right: Bill Richards, Meave Leakey, Gilbert Grosvenor (Chairman of the Board, NGS), Samira Leakey, Gordon Getty, Kay Woods, and Richard Leakey at NGS headquarters



**The Leakey Foundation**

FOR RESEARCH RELATED  
TO HUMAN ORIGINS

#### Officers of the Board

Gordon P. Getty, *Chairman*  
Kay Harrigan Woods, *President*  
Mrs. A. Watson Armour IV, *Vice-President*  
Mr. Barry H. Sterling, *Vice-President*  
Frank Montgomery Woods, *Vice-President*  
Mr. William P. Richards, Jr., *Treasurer*  
Mr. Owen P. O'Donnell, *Secretary*

#### Trustees

Lawrence Barker, Jr.  
Mrs. John L. Bradley  
Mrs. Fred L. Carroll  
Fleur Cowles  
Mrs. Peter H. Dominick, Jr.  
Mrs. Robert Donner  
Mrs. Carolyn Farris  
Mr. John Heminway  
George D. Kirkham  
Barbara Newsom  
Mason Phelps  
Nancy Clark Reynolds  
George D. Smith  
Mr. Richard Thieriot  
Margo Geer Walker  
Ann Deming Willis  
William M. Wirthlin II

#### Scientific Executive Committee

Dr. F. Clark Howell, *Co-Chairman*  
Dr. Irvan DeVore, *Co-Chairman*  
Dr. Ofer Bar-Yosef  
Dr. Francis Brown  
Dr. J. Desmond Clark  
Dr. John G. Fleagle  
Dr. Alexander Harcourt  
Dr. Kristen Hawkes  
Dr. Richard G. Klein  
Dr. Maryellen Ruvolo  
Dr. Carel van Schaik

#### Staff

Jeanne H. Giaccia, *Executive Director*  
Julia B. Hand, *Development & Events Associate*  
Bernadette Lee, *Accountant*  
Amy Merickel, *Program & Editorial Associate*  
Dr. Karla Savage, *Program & Grants Officer*

#### The L.S.B. Leakey Foundation

P.O. Box 29346  
Presidio Building 1002A  
O'Reilly Avenue  
San Francisco, CA 94129  
Telephone (415) 561-4646  
Facsimile (415) 561-4647  
E-mail [info@leakeyfoundation.org](mailto:info@leakeyfoundation.org)  
[www.leakeyfoundation.org](http://www.leakeyfoundation.org)

Join us for our next event  
"Language and Human Evolution,"  
a lecture by Dr. Matt Cartmill of  
Duke University at the California  
Academy of Sciences on  
Thursday, February 18, 1999!

## Workshop *continued from page 1*

provided a unique service to a specific area of science; they encouraged our organization to maintain its particular breadth and scope. It was gratifying to be acknowledged so positively by this distinguished group.

In the second half of the workshop, Moderator John Fleagle fielded

questions from the floor. This discussion session raised the practical concern that in order to sustain the quality of our small grants program and meet the rising costs of research, it will be necessary to increase fund raising efforts. Visionary recommendations for the future included a possible expansion of our special research grants program by offering more competitions for larger,

long-term grants. Throughout all of the discussions, the most evident focal point was that the Leakey Foundation is the only granting agency with a focus on scientific research related to human evolution which also encourages interdisciplinary investigations—a distinctive niche which must be preserved! ■

## Update *continued from page 1*

*Australopithecus (A. anamensis)* field work continued at Kanapoi for a subsequent three field seasons between 1995 and 1997. During the same years, excavation of a rich, 3.9 Ma bone bed was carried out at Allia Bay. Both sites yielded additional *anamensis* specimens so that the collection now amounts to almost 80 individuals.

Among the original specimens from Kanapoi was a tibia (lower leg bone) which showed *A. anamensis* to have been bipedal, thus taking back the earliest evidence of bipedality (previously known from the 3.5 Ma footprints at Laetoli) to over 4 Ma. However, at the time of the announcement of this new species in 1995, geological studies by Dr. Craig Feibel and dates obtained by Dr. Ian MacDougall indicated that although the majority of the Kanapoi *A. anamensis* specimens were aged between 4.17 and 4.12 Ma, a few specimens, including the tibia, derived from horizons above this. In spite of the geological evidence to the contrary, these factors led to concerns that the evidence for bipedality was perhaps significantly younger than 4.12 Ma.

During the subsequent field seasons, MacDougall and Feibel located good pumices in the Kanapoi Tuff, a volcanic horizon higher in the section. MacDougall was able to successfully date these pumices so that we now know that all but one of the hominid specimens (derived from only just above the Kanapoi Tuff) are between



Meave Leakey at Kanapoi

4.17 and 4.07 Ma, a time interval of only 100,000 years. Additional specimens recovered as a result of these recent field seasons to Kanapoi included a large male mandible, two hand bones, and a large collection of teeth including an important lower milk molar. These specimens showed that, *A. anamensis* is demonstrably more primitive than

*A. afarensis*; but that, like *A. afarensis*, it varied widely in size perhaps even more than the most sexually dimorphic of modern primates, the gorilla. The finger bone indicated similar strong flexing muscles to those characteristic of *A. afarensis* and modern African apes, but the hand bone showed less mobility of the hand than is typical of *A. afarensis*. The first milk premolar, from a young *A. anamensis*, is of intermediate morphology between that of the 4.4 Ma *Ardipithecus ramidus* from Aramis in Ethiopia (discovered by an expedition led by Tim White and Berhane Asfaw) and the later 3-3.6 Ma *A. afarensis*.

Excavations were carried out at Kanapoi in 1996 and 1997 in the hope that more complete hominid specimens would be discovered in situ and that they would be found to derive from tightly constrained beds which could be followed and excavated in the future. However, the hominids were found to be randomly distributed through a consolidated paleosol (fossil soil) over three meters thick and to have been broken and damaged prior to burial and fossilization, probably from weathering, trampling, and carnivore

activity. Although future excavations at Kanapoi would undoubtedly yield additional specimens in situ these will be slow and costly to carry out.

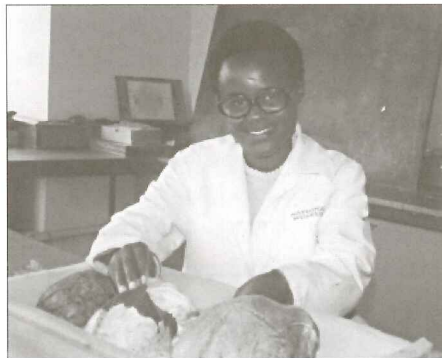
It was therefore decided that the 1998 field expedition should move further north to resurvey sites on the western shores of the lake that were known from work in the 1980s coordinated by Richard Leakey. These richly fossiliferous sites are famous for the discovery by Kamoya Kimeu of the Nariokotome Boy, an *Homo erectus* youth, and for the discovery by Alan Walker of the Black Skull, the earliest good skull of a robust australopithecine. Frank Brown's earlier detailed geological studies and John Harris's and my own paleontological studies had laid a sound foundation for continued field work in the West Turkana localities.

The 1998 expedition was a joint project which was fortunate to have Frank Brown return to the field to continue his geological studies, which are so crucial to the interpretation of the fossil record. Half the field crew, under my own direction, resurveyed sites aged between 4 and 3Ma, while the other half led by my daughter Louise, resurveyed sites aged between 3 and 1.6 Ma. I felt that further evidence from the time interval between 4 and 3 Ma would provide details of habitats known to be frequented by early hominids that could be compared with those of similar age to the north (at Hadar) and south (at Laetoli) that had yielded *A. afarensis*. I also hoped to determine whether or not the hominids in the Turkana Basin at this time would represent *A. anamensis*, *A. afarensis*, or

Continued on page 4

# Kenyan Woman Receives First Mary Leakey Award

Emma Nguvi Mbuu has been chosen as the first recipient of the "Mary D. Leakey Award for the Research and Study of Human Origins." On October 9th, Meave and Richard Leakey's lectures were followed by another momentous occasion capping off the Leakey Foundation's 30th anniversary celebration—the first presentation of this special award honoring Mary Leakey's many contributions and accomplishments. Mbuu has worked at the National Museums of Kenya for over twenty years, most recently as Curator of Hominids and Research Scientist with the Palaeoanthropology section. She has already established an international reputation because of her extraordinary dedication to taking care of some of the world's most important fossils. Mbuu received a Master of Philosophy degree from the University of Liverpool in



Emma Mbuu with hominid fossil specimens

1995 for her research on Holocene human remains from Kenya's Lake Turkana region. She will use the \$10,000 in prize money toward the pursuit of a doctorate in palaeoanthropology under the direction of Gunter Brauer at the University of Hamburg.

Scientific Executive Committee member Frank Brown made the award presentation by recalling several distinc-

tive qualities of Mary's personality which Emma shares: honesty and forthrightness, perseverance, and a deep regard and compassion for all creatures. While the foremost purpose of this award is to recognize and encourage further contributions to palaeoanthropology, it is also the hope of the Leakey Foundation that each recipient will continue to develop these personal qualities throughout his or her professional career. Mbuu is currently a student and, therefore, was unable to accept the award in person. However, Meave Leakey accepted a certificate on Mbuu's behalf. Meave thanked the Foundation and expressed that "this award is going to mean a lot to Emma and will set a tremendous example for all those who follow in her job. I do believe she deserves it more than anyone else who could possibly be given this award." ■

## Update *continued from page 3*

something new. With her surveys of the more recent deposits, Louise hoped to add to the already extensive fossil assemblage from this area in order to test Elizabeth Vrba's "turnover Pulse Hypothesis" that predicts a major change in fauna 2.5 Ma ago coincident with the earliest evidence of our own genus *Homo*. This analysis will form the basis for her Ph.D. dissertation. She too hoped to find hominids that would provide new evidence of either the robust australopithecine lineage or that of *Homo*. During the course of the 1998 field season, between us we collected over 1200 additional fossils, including isolated teeth of ten hominid individuals that lived approximately 3.3 Ma ago and of six hominids that lived a little less than 3 Ma ago. These discoveries indicate the considerable potential for additional important finds to be made at the west Turkana sites. The sites are extensive and there remains much to do. The field work will continue in 1999. ■



## The Leakey Foundation

P.O. Box 29346  
Presidio Building 1002A  
O'Reilly Avenue  
San Francisco, CA 94129