A message from the Chair

Dr. Mary Ann Raghanti

I am excited to share with you news from the students and faculty of the Department of Anthropology. A lot has happened since our last newsletter and much more is in store! I am so proud and honored to be a member of this vibrant and productive department. It seems like Lowry Hall is in constant motion, with no lack of new discoveries and reasons to celebrate!

New initiatives within the last year included the introduction of a new Medical Anthropology minor, a rapid growth and early successes for the Forensic Anthropology Minor (launched last year), and unprecedented successes for both faculty and students alike. In addition, we just began advertising for TWO new faculty positions, and we plan to begin interviews early next year for hires in time for Fall, 2019.

In case you hadn’t heard- next year’s AAPA meeting will be close to home - in Cleveland! More importantly- a group of our alumni organized a special symposium in honor of Dr. Owen Lovejoy this year. The line-up of poster presentations is fabulous and represents the dizzying breadth and depth of research that Owen has spearheaded and delved into throughout his distinguished career. This is one meeting you don’t want to miss!

Stay up to date with what is happening in the department by following updates on our website www.kent.edu/anthropology
Dr. Linda Spurlock has been lending her expertise on cold cases in Cleveland

How one of the latest stories unfolded:

Sept. 20, 2017 - The Cuyahoga County Medical Examiner’s Office and Cleveland Police Department responded to 12902 Longmead Avenue, where remains were found in a plastic bag in the backyard of an unoccupied home. Cleveland Police Detectives Kathleen Carlin and Tim Entenok begin to investigate the case and potential leads.

Sept. 21, 2017 - An autopsy is conducted, and a DNA profile is developed by the Parentage & Identification Department at the Medical Examiner’s Office. The autopsy reveals the remains belong to a child.

Sept. 25, 2017 - Dr. Linda Spurlock, Associate Professor of Anthropology at Kent State University, examines the skeletal remains to obtain demographic information for a forensic sketch.

Oct. 10, 2017: DNA profile of the decedent determined the decedent's sex is male, which will be used for comparison with potential matches.

Dec. 6, 2017: The Cuyahoga County Medical Examiner's Office and Cleveland Police Department hold a joint press conference with the local media, asking the public for their assistance in identifying the decedent. A forensic sketch is released to the media and estimates the child is approximately 4 years old. Race could not be determined at that time. Cause and manner of death are still pending, but the case is being investigated as suspicious.

Dec. 6, 2017: Local media outlets and community partners help distribute the sketch to the public through news stories, social media posts, and billboards.

Jan. 8, 2018: Additional news stories are produced and aired, providing increased visibility for the sketch.

Jan. 9, 2018: A tipster contacts investigators after seeing sketch in the media. The sketch was only noticed by the mother during the second round of publicity. She was in jail at the time & didn't know her boy was missing. She thought he was with his godmother.

Jan. 19, 2018: Through collaborative investigative efforts between the Medical Examiner’s Office and Cleveland Police Department, a tentative ID was obtained. Furthermore, a positive identification was made through DNA comparison to match:

Eliazar Ruiz
Hispanic Male
Age 4

The city of Cleveland and the Division of Police and Fire honored Dr. Spurlock with a Salute to Women in Public Safety, a Community Service Award, for her contributions to this case.
Early in October, KSU cultural anthropologist Dr. Richard Currie Smith, along with graduate student Samuel Thomas and undergraduate student Samuel Sharp presented research papers at the Semiotic Society of America’s 43rd annual conference at Berea College in Berea, Kentucky. Dr. Smith, Thomas, and Sharp approached the conference theme, “Signs of Resilience in a Complex World”, through a cultural anthropology perspective. Anthropology has a long and robust presence at the annual meetings and in the society due principally to the work of the eminent linguistic anthropologist Thomas Sebeok [1920-2001] who shifted semiotics back to its biological and ecological roots.

Dr. Smith’s paper co-authored with semiotician and historian Brooke Williams Deely is entitled, “The Semiotic Age or Age of Relation: John Deely’s Human Sustainability Legacy”. The development of a *Semiotic Animal* definition of human being that embeds us within nature by John Deely [1942-2017] is discussed as a replacement for Descartes *thinking thing* definition that severed us from nature. A chronology of events leading up to John Deely’s “Age of Relation” proclamation is explored in terms of his human sustainability legacy.

Samuel Sharp’s paper, “Fostering a Semiotic Framework Towards the Conservation of the Mexican Gray Wolf”, provides critical insight into the existing strategies of conservationists working to restore Mexican gray wolves. Sharp draws attention to the interplay between cultural interpretations of the highly endangered wolves as well as their eosemiotic significance, thus providing a communicative lens to aid current conservation efforts.

Samuel Thomas’s paper, “Integrating Indigenous Knowledge into Modern Conservation: An Ecosemiotic Case Study of the Australian Aborigines”, uses the lens of semiotic anthropology to understand the Australian Aborigines deep connection to the ecological web in which they are embedded. Thomas argues that there is inherent worth in traditional ecological awareness because it provides localized, long-term research and developmental knowledge to modern ecologists.

As global sustainability crises become more complex and widely spread, the perspective of anthropology is being increasingly appreciated and readily applied to these efforts. Cultural anthropologists like Dr. Smith are actively engaging the relationship between humans, culture, and nature, through a unique semiotic lens. This research will be peer reviewed and, if accepted, published in the collected papers of the conference in book form.
Department of Anthropology Endowed Fund for Graduate Student Research- UPDATE

The 2017-18 research awards from the Endowed Fund were granted to doctoral students Michelle Bebber and Dexter Zirkle. The Endowed Fund for biological anthropology doctoral students was fully endowed in 2016, an effort spearheaded by Bob Tague (Ph.D. ’86) and supported by numerous alumni, faculty, and friends.

Michelle used the award monies to fund her dissertation research which focuses on early copper metallurgy in the Great Lakes region of North America. My research applies evolutionary theory and experimental archaeological methods to the study of ancient tools—specifically the relative performance characteristics of tools made from stone and copper. Part of the award was used to fund travel to and from the University of Michigan’s anthropological collections to record data on their copper tools. In addition to data collection, while in Michigan, raw copper was purchased from the Adventure Mining Company in Greenland, MI. While there I was able to tour the ancient copper mine and learn about the geology of the Upper Peninsula region and get a better understanding of the how ancient groups would have identified and accessed native copper. Since returning from my research trip I have used the raw copper to produce my datasets. These copper replicas form a major portion of my dissertation research and will be used to assess the relative functional efficiency of North American copper tools to their stone and/or bone counterparts.

Dexter’s research focus is growth and development of the ilium under the direction of Dr. Owen Lovejoy. Dexter is examining a unique growth center on the human ilium that appears to have a dedicated vascular system. Dexter is using the money awarded by the BAP Endowed Fund to obtain nonhuman primate biological material. He will be employing a radiologic method to visualize the internal structures of bone and vessels using CT scans.

We want to continue increasing the amount of the principal in the account (and, more importantly, increasing the amount of awards to doctoral students). Our long-term goal is to augment the fund by $10,000 every seven years. We can achieve this target if 15 people donate $100 each year. Please consider being one of the 15 people. You do not have to donate every year, but consider doing so once every other year. Here is information on how you can help. Checks should be made payable to: Kent State University Foundation. You can also pay by Mastercard or Visa; call the Foundation Office at 330-672-2222. Include our account number – 34363 – on your check or letter accompanying your payment. The title of our account is “Department of Anthropology Endowed Fund-Graduate Student Research.” The postal address is: Kent State University Foundation, P.O. Box 5190, Kent State University, Kent OH 44242.
NEW Endowed Fund: The Robert J. and Lauren E. Patten Endowment for student archaeological research

The Eren Laboratory for Prehistoric and Experimental Archaeology received a generous gift from Lauren E. Patten, the wife of the late Robert J. Patten. Robert Patten was one of Dr. Eren’s closest colleagues and best friends. In addition to gifts of over $19,000.00 in laboratory materials and another $20,000.00 in books, Lauren E. Patten established the Robert J. and Lauren E. Patten Endowment for student archaeological research at Kent State University. The endowed fund, currently at $27,600.00, will support student research in archaeology at Kent State in perpetuity. Donations to the endowment are welcome, as increasing the principle will increase the annual interest with which student materials can be purchased.

We also have two books by Bob Patten for sale:

**Peoples of the Flute**
and
**Old Tools – New Eyes**

All proceeds will go directly to the endowment.
Books are $20.00 each + shipping

Contact Metin Eren for information: meren@kent.edu
UPDATE: The Mark F. Seeman Fund for Archaeological Research

The kiln purchased by the Mark F. Seeman fund in 2016 for The Eren Lab has resulted in its first scientific success! Graduate student Michelle Bebber and undergraduate student Mike Wilson used the kiln to fire ceramic arrowheads. These specimens comprised a study entitled "Why wasn't the ceramic arrowhead invented", for which Bebber and Wilson won the 2018 Society for American Archaeology (SAA) Student Paper Award. This research is currently being written up for publication in a scientific, peer-reviewed journal.
I am a forensic investigator at the Summit County Medical Examiner’s Office located in Akron, Ohio. My job is to be the eyes and ears for the medical examiner, who is a forensic pathologist that performs autopsies and makes a final ruling on cause of death. As an investigator it is my responsibility to handle incoming death notifications from police/fire departments, hospitals, and nursing homes, and to determine if the death is a case for the medical examiner. Typically, if a death is reported as anything other than natural it falls under the medical examiner’s jurisdiction and an investigation must be performed. It is my job to respond to the death scene and to document it as accurately as possible. Photographs of the scene itself, the body, and any evidence such as blood, weapons, drugs, or paraphernalia must be taken. A physical examination of the body will take place at the scene. This includes taking body temperatures, observing rigor mortis and livor mortis, and checking for any injuries or abnormal markings on the body. In certain cases, a search of the deceased’s residence is performed for information such as medical history, contact information for next-of-kin, and receipts or mail with dates to help establish when the deceased was last known to be alive. If any witnesses are present at the scene, they will be interviewed. Finally, the deceased will be transported to the medical examiner’s facility where they will stay until they are released to a funeral home. After a scene visit, I write a short narrative highlighting the points of my investigation. This is important because it will aid the medical examiner in understanding the circumstances surrounding a death. Working at a medical examiner’s office has allowed me to utilize my anthropology background in many ways. What I enjoy most about my job is getting the opportunity to analyze unidentified skeletal remains that are brought in by police departments in order to determine if they are of human origin. As a nightshift investigator, I’ve learned to expect the unexpected and to be prepared for anything because you’ll never know when death is around the “coroner”.
Associate Professor Jeanne Marie Stumpf-Carome was awarded the Connie Towson Ford Teaching Fellowship from the Cleveland Museum of Art (CMA) for the 2018-19 academic year. The Teaching Fellowship began in July and will continue through the year.

Dr. Stumpf-Carome, along with nine other Fellows, is participating in a collaborative “think tank” with the support of the Cleveland Museum of Art’s Public and Academic Engagement team. In the realm of ideas, Fellows are given free reign to develop their own project based in an action-based research question, or in object-based, or gallery-based learning experiences. Experimentation, innovation, anything to push the boundaries of gallery-based experiences are their guiding principles. As structure for this process, the Fellows meet four times during the year to share, work through, test out, or reflect on their ideas.

Prior to the Fellowship, Dr. Stumpf-Carome explored the CMA collections by using them as examples for her courses in cultural anthropology, archaeology and human evolution. She has regularly incorporated the CMA’s Art to Go program into her courses. One of these, The “Art of the Alphabet” program, brings objects from the museum’s Education Art Collection to campus—providing students with a unique hands-on experience. For example, but with gloved hands, they hold a Mesopotamian cylinder seal (2750–2334 BC), a Tablet, about 541 BC. Akkadian cuneiform fragment (Mesopotamia, Babylon), a modern papyrus sample, and much more.

Based in these same exciting opportunities to use the CMA collection, Dr. Stumpf-Carome is exploring ways to use the existing context of the museum’s programs, like the Art Cart, Art to Go, and Distance Learning, to develop anthropological orientations for the use of the collections. Aimed, initially, for use in her own courses, she hopes to broaden these opportunities for use by anyone on the Kent State University campus and for community wide access. Now, at the beginning of her project, she explains: “In general, the scope of what I would like to accomplish is to develop a context to relate aspects of human evolution based in, or on, the collections. In this sense, I would like to reframe the art museum experience. CMA is not "just" about art as objects. Art, as an apogee of human evolution, is both the products and processes. The museum functions both, as a shrine to human evolution, and as evidence of this process with its collections. I would like to broaden the perspective of the museum experience.” She notes that, “So far, I have spun many ideas for this project. As experiments, I am already testing and rejecting various ways to make these connections with the collections.” With eight more months ahead, she looks forward to hours in Ingalls Library and Museum Archives, time in the galleries, and to further collaboration with the staff and her colleagues. The results of her work will be made available in June, 2019.
Dr. Tosi attends international symposium
In March, Dr. Anthony Tosi attended a symposium in honor of retiring Professor Hirohisa Hirai – former director of the Primate Research Institute (PRI) of Kyoto University (2012-2016) and a close friend of Dr. Tosi for more than 20 years. Many of Dr. Hirai’s collaborators and previous students from the United States, Indonesia, Italy, Korea, and from across Japan were in attendance. Dr. Tosi gave a presentation on “Sex chromosome introgression in cercopithecine monkeys,” highlighting a study co-authored with Dr. Hirai. At the end of the symposium, Dr. Tosi presented Dr. Hirai with a pair of framed stone tools, one knapped in an ancient American (PaleoIndian, ca. 9,000 BP) style, and the other knapped in an ancient Japanese (Jomon, ca. 14,000 BP) style. The inclusion of both styles was purposeful to commemorate Dr. Hirai’s efforts to establish the connection between Kent State University and the Primate Research Institute. Dr. Hirai, Dr. Tosi, and the current PRI director, Dr. Takakazu Yumoto, together developed the Memorandum of Understanding that formalizes the research relationship between Kent State and Kyoto University.

Dr. Tosi meets President of Kyoto University
A few days after the symposium, Dr. Juichi Yamagiwa, President of Kyoto University, kindly accepted a meeting with Dr. Tosi. President Yamagiwa recently formulated the WINDOW concept, a new framework for training Kyoto University students to meet the global challenges of the 21st century. One of the pillars of WINDOW is greater internationalization of education and research, and some of the strategic priorities include expanded exchange programs with foreign institutions, and the development of laboratory partnerships between universities. President Yamagiwa and Drs. Tosi, Hirai, and Yumoto discussed opportunities for more extensive graduate level exchange between Kyoto University and Kent State University. It was a fruitful first meeting, and the discussions are ongoing. With deep gratitude for his initiative to increase international opportunities for students, Dr. Tosi – on behalf of Kent State University – presented a gift to President Yamagiwa: a gorilla silhouette knapped in obsidian by Kent State’s Dr. Metin Eren. (President Yamagiwa has studied gorillas in the wild for nearly 30 years and is a world-renowned expert in their behavior and ecology.)
Thanks to generous contributions during our Giving Tuesday fundraising campaign, Master’s student Kristen Hirter was able to conduct an internship at the Primate Research Institute this summer. For five weeks in June and July she joined the laboratory of Dr. Hiroo Imai and researched bitter taste receptors in Japanese monkeys. She learned techniques in cell culture and transfection, and conducted analyses of calcium signaling in response to bitter substances. In collaboration with her labmates, she discovered that a relatively rare type of taste receptor in Japanese monkeys has low sensitivity to bitter substances – which may serve an adaptive function in that the population in which it is found is subjected to harsh winter conditions when only marginal foods, such as bitter berries and tree bark, are available. Kristen also enjoyed many opportunities to learn about Japanese culture and history, as she took weekend trips to the nearby cities of Nagoya, Kyoto, Osaka, and Nara. She developed lasting friendships not only with Japanese students at the Institute, but others visiting from Indonesia, China, and Thailand, as well. She is looking forward to continuing her international collaborations and is seeking future opportunities to visit Japan and the Primate Research Institute, perhaps as a postdoctoral scholar.
NEW! Medical Anthropology Minor

The Department of Anthropology at Kent State University offers several undergraduate degrees which include two B.S. tracks (biological anthropology and archaeology), a B.A., and minors in anthropology and forensic anthropology. We are excited to announce that we have added a new medical anthropology minor. Medical anthropology is the fastest growing sub-discipline of anthropology with a variety of applications. It is a broad field that includes medical and psychiatric anthropology, global health, disability, social suffering, humanitarianism, death and dying, caregiving, public health, medical ethics, human rights and medical humanities.

NEW!!

Medical Anthropology Minor

- 18 credit hours -

Active: Fall, 2018

✓ Will provide knowledge, perspectives, and insights on health, healing, medicine, society and culture
✓ Designed to help students prepare to provide culturally sensitive and effective health care
✓ Excellent for students in nursing, pre-med, public health, psychology, sociology, and related disciplines

To learn more: https://www.kent.edu/anthropology/news/new-medical-anthropology-minor
The human lineage is characterized by remarkable demographic success relative to our nearest relatives and by advanced social traits such as language, empathy, and altruism. Explaining how human social behavior could have evolved through improving individual reproductive success has, until now, been difficult. However, Dr. Mary Ann Raghanti compared neurochemical profiles in the striatum, a brain region that modulates social behavior, among humans, chimpanzees, gorillas, and monkeys and found a unique profile in humans. The levels of striatal dopamine and acetylcholine were essentially reversed in humans compared to other primates, and humans have dramatically increased dopamine levels. The human profile is consistent with exquisite sensitivity to social cues, social conformity, and reduced within-group aggression. Essentially, this shows that there has been a long history of intense selection for an extremely socially sensitive personality style, one end of the personality continuum. This “dopamine-dominated striatum” personality could have encouraged male provisioning and monogamy in early hominids, which according to the authors would have improved female and offspring survival.

This observation is in perfect accord with evidence about earliest humans provided by *Ardipithecus ramidus* (“Ardi”), which is about 4.4 million years old and probably lies near the origin of the human lineage. “Ardi” shows two special characters that make it differ profoundly from any other primate. Males show dramatic reduction of the sectorial (“slashing”) canine tooth—sometimes referred to as the “social tooth” because it plays a prominent role in communicating aggression in other primates. Its reduction in “Ardi” signals pronounced reduction in aggression among males, consistent with a dopamine-dominated striatum personality. Ardi also shows early evidence for upright walking, which could have played a prominent role in male provisioning of females and contributed to the success of the species. This would also be fully consistent with the dopamine-dominated striatum personality style because it would reflect both pair bonding and social cue sensitivity.

In a related study led by Dr. Richard S. Meindl, Ph.D., the researchers examined the mortality and fertility of macaques, the most demographically successful primates after humans. They determined that a key to macaques’ reproductive success was elevated female survivorship, which is fully consistent with the changes in social structure likely produced by the dopamine-dominated striatum personality style. They suggest that a socially monogamous lifestyle would have elevated female life expectancy in early and later hominids.

“Humans are characterized by remarkable demographic success relative to our nearest relatives and by advanced social traits such as language, empathy, and altruism,” said Dr. Owen Lovejoy. “Explaining how human social behavior could have evolved through improving individual reproductive success has been difficult.”

Modern chimpanzees and humans shared their last common ancestor somewhere between 7 and 9 million years ago. Chimpanzees and humans differ extraordinarily in their social behavior and also, these authors now report, in their striatum. This brain region contributes substantially to “personality style” and social behaviors. Early human ancestors had chimpanzee-sized brains, and this change in neurochemistry was able to have a dramatic impact in the absence of brain expansion.

“This difference in neurochemistry, when viewed from the perspective of the human fossil record, is likely to lie at the root of hominid origins, and to have been responsible for their early unqualified success,” Raghanti said.
Alumni Spotlight: Phil Reno, Ph.D. ‘06

Phil Reno came to Kent State after graduating from Washington University (St. Louis) in 1994. He quickly got his M.A. from KSU in 1997, while initiating work on the effects of homeobox alleles on the metapodial length in primates. This led him to a longer term effort to examine the molecular forces at work in initiating and completing the vertebrate growth plates. From there, he examined these structures in taxa as far apart as alligators and duck-billed platypuses, and to develop specialized mouse strains. Phil then became a post-doctoral fellow in the Howard Hughes Medical Institute (Stanford) where he worked closely with David Kingsley (“King” of the enhancer—no pun intended—think stickleback fish). He left that post in 2011 to join the faculty at Penn State, but in 2017 joined another of our former graduates, Chris Adams at the Philadelphia Osteopathic School of Medicine where is now an Associate Professor. He has published widely including more than 25 articles in venues that include Scientific American, Science, Nature, PNAS, and JEZ, and has also marshaled a rich history of extramural funding with many moderate level grants topped by an NSF of $800K devoted to the genetics of the carpus and tarsus—which remain the most enigmatic of the vertebrate limb bud. Phil is married with two children and now lives in suburban Philadelphia.