AAPA Poster and Podium Presentation Schedule

For a schedule of all conference events, see page 10

Chair: SUZANNE E. WALKER, Missouri State University.

8:00 – 8:30 am        Poster set-up.
8:30 – 10:00 am       Authors of even-numbered posters present for questions.
10:30 am – 12:00 pm   Authors of odd-numbered posters present for questions.
12:00 – 12:30 pm      Poster take-down.

1. New hand bones of Hadropithecus stenognathus: implications for the paleobiology of the Archaeolemuridae. PIERRE LEMELIN, MARK HAMRICK, LAURIE GODFREY, WILLIAM JUNGERS, DAVID BURNEY.

2. Across the ecological divide: Dental developmental diversity in Madagascar’s giant lemurs. GARY T. SCHWARTZ, LAURIE R. GODFREY, KAREN E. SAMONDS, BILL L. JUNGERS, KIERSTIN K. CATLETT.

3. Ontogeny and functional histology of the first ethmoturbinal in strepsirrhines. TIMOTHY D. SMITH, KUNWAR P. BHATNAGAR, JAMES B. ROSSIE, ANNE M. BURROWS, MARK P. MOONEY, MICHAEL I. SIEGEL.

4. Platyrrhine dental eruption sequences. EMILY I. HENDERSON.

5. 2D vs 3D – Comparison of different approaches to the quantitative description of cusp surface areas on cercopithecoid teeth. ANDREA STADLMAYR, TH. BENCE VIOLA, GERHARD W. WEBER.

6. A comparison of microtomographic systems for the analysis of dental tissues. ANTHONY J. OLEJNIczAK, TANYA M. SMITH, PAUL TAFFOREAU, HEIKO TEMMING, JEAN-JACQUES HUBLIN.

7. A histological analysis of Alouatta palliata dental enamel. STEPHANIE M. MELILLO, SCOTT W. SIMPSON, DAVID DEGUSTA.

8. Anthropoid masticatory adaptations to hard and tough diets. PAUL J. CONSTANTINO.


10. Finite element analysis of craniofacial strain during incision and mastication using a macaque model. BARTH W. WRIGHT, BRIAN G. RICHMOND, DAVID S. STRAIT, PAUL C. DECHOW, CALLUM F. ROSS, MARK A. SPENCER, QIAN WANG.

11. The phylogenetic and functional utility of mandibular depth and maxillary height. JESSICA L. SCIRBONA, CHRISTOPHER C. GILBERT.

12. On using phylogenetically independent contrasts to identify most parsimonious cladograms. AMANDA G. HENRY.

13. Is Papio robinsoni or Papio angusticeps a better dietary ancestor for Papio ursinus? FRANK L. WILLIAMS, GRETCHEN CLYMER, DARBY PROCTOR.


15. Variation in cranial bone thickness in a single population of Papio cynocephalus anubis. ANNIE M. NAGY.

16. Sexual dimorphism in the pelvis of Microcebus. ELIZABETH M. ST CLAIR.

17. Sexual dimorphism in the bony birth canal of Papio and its relationships to true body mass, skeletal size, and cortical area of the femoral midshaft. MATTHEW A. KILBERGER, JOHN KAPPELMAN, BRENDA SANTANA.

18. Sexual dimorphism and indicators of substrate preference: implications for fossil species. KATHLEEN T. BLUE, BENEDIKT HALLGRIMSSON.

20. Comparative morphometrics of chimpanzees and bonobos. KIRSTEN SCHOONAERT, KRISTIAAN D’AOÛT, PETER AERTS.

21. Functional morphology of the hominoid clavicle. KATHARINE B. BARKER, CAROL V. WARD.

22. Moment arm of the triceps brachii and habitual forelimb position in primates. CALEY M. ORR, LISA M. RALEIGH, MARC C. JACOFSKY, MARY W. MARZKE.


24. Anatomical incongruity of the glenohumeral joint in primates. CORNELIA KRAUSE, MANUELA SCHMIDT, MARTIN S. FISCHER.

25. Functional and evolutionary anatomy of the primate atlas: A geometric morphometric approach. EVELYN MANFREDA, PHILIPP MITTEROECKER, KATRIN SCHAEFER.

26. A comparative analysis of the relationship between head posture and occipital condyle orientation in anthropoids. THIERRA K. NALLEY.

27. Age-related changes in trabecular bone mechanical and material properties in baboon vertebrae. LORENA M. HAVILL, MATT R. ALLEN, TODD L. BRED BENNER, DAVID B. BURR, DANIEL P. NICOLELLA, SHAYNA LEVINE, DIANE M. WARREN, MICHAEL C. MAHANEY.

28. Knuckle-walkers unite: separating plantigrade locomotors through talo-calcaneal facet morphology. HANNAH E. MARSH, JOSHUA M. POLANSKI.

29. Cross-sectional geometric properties of the tibia-fibula complex of Hominoidea, and their relationships with locomotor behavior. DAMIANO MARCHI, SILVANA M. BORGOGNINI-TARLI.

30. Functional axis of the foot in primates estimated using the distribution of plantar muscles. EISHI HIRASAKI, HIROO KUMAKURA.

31. The purported anthropoid astragalus from Myanmar. GREGG F. GUN NELL, RUSSELL L. CIOCHON.

32. Locomotion and skeletal differentiation within the *Pitheciini*. LES A C. DAVIS, SUZANNE E. WALKER, SUSAN M. FORD.

33. Sources of mechanical power and work for walking versus running in ring-tailed lemurs. MATTHEW O’NEILL, DANIEL SCHMITT.

34. Tail use during bipedalism in *Propithecus verreauxi*. ROSHNA E. WUNDERLICH, MATT R. HRABAK.

36. Primate evolution in Southeast Asia. HELEN J. CHATTERJEE.

37. The biogeography of Cercopithecini primates and its evolutionary implications. SARA K. MARTIN, JASON M. KAMILAR.

38. Bone cell dynamics of the premaxillary bone and its sutures. KELLY A. CARMODY, MARK P. MOONEY, GREGORY M. COOPER, CHRISTOPHER J. BONAR, MICHAEL I. SIEGEL, TIMOTHY D. SMITH.

39. Heterosis and heterochrony in hybrid macaques. NICOLE D. TAYLOR, MICHAEL A. SCHILLACI.

40. Form, function, and body composition in gray langurs (*Presbytis (Semnopithecus) entellus*): a preliminary report. CAROL E. UNDERWOOD, DEBRA R. BOLTER, ADRIENNE L. ZIHLMAN.

41. Bone microstructure in chimpanzees. DAWN M. MULHERN, DOUGLAS H. UBELAKER.

42. Sexual swelling relative to occurrence and timing of ovulation in *Papio sp*. JENNIFER D. ARANDA, ELEANOR BRINDLE, K.D. CAREY, KAREN RICE, MARC TATAR, KATHLEEN O’CONNOR.
Thursday Morning – March 9, 2006

43.  Dental and skeletal maturation in wild great apes.  DEBRA R. BOLTER, ADRIENNE L. ZIHLMAN.
44.  Taxonomy and Biogeography of Eastern Tarsiers.  MYRON SHEKELLE.
45.  Brain and somatic growth in strepsirrhines: implications for variation in life history.  NANCY L. BARRICKMAN.
46.  Evolution of primate brains: A cell biological perspective.  JENNIFER L. FISH.
47.  Functional architecture of the brainstem trigeminal complex in two callitrichid species with divergent feeding behaviors (Callithrix jacchus and Saguinus oedipus).  LEONARD WHITE, KELLY JONES, CHRISTOPHER J. VINYARD, ANDREA B. TAYLOR.
49.  Hand preference during feeding in white-faced capuchins (Cebus capucinus).  DEBORAH L. MOORE, ANNA E. BARR.
50.  Beyond endocranial capacity and indices: A new multivariate approach to quantify endocranial variability.  SIMON NEUBAUER, PHILIPP GUNZ, GERHARD W. WEBER.
51.  Differential selective pressures at the CD36 locus among primates.  CAROLYN M. BULLARD, MICHAEL E. STEIPER.
52.  Chimpanzee mitochondrial DNA diversity.  KATRINA G. CLAW, HSUIMAN LIN, ANNE C. STONE.
53.  A comparative genomics approach to primate craniofacial evolution.  HEATHER A. LAWSON, ARTHUR M. LESK, WEBB MILLER, KENNETH M. WEISS.
54.  Mitochondrial DNA analysis of Pleistocene bison.  KORY C. DOUGLAS, ROBERT P. ADAMS, LORI E. BAKER.
55.  Genetic mapping of natural variation in the teeth of recombinant inbred mice.  SAMUEL J. SHOLTIS, KAZUHIKO KAWASAKI, KENNETH M. WEISS.
56.  Articular and diaphyseal responses to loading in the subadult femora of mice.  JEFFREY H. PLOCHOCKI, CHRISTA RISCIGNO, MONICA GARCIA, JANELYN RIVERA.

Organizer and Chair: JANE E. BUIKSTRA, Arizona State University.

Colleagues and former students come together to celebrate the many contributions of Charles Merbs to physical anthropology. Although Merbs’ primary contributions are to the study of ancient health and disease, his research also draws heavily upon historical, ethnographic and contemporary biomedical sources. The symposium has been composed to represent this breadth and therefore includes contributions from dental anthropology, skeletal biology, museum anthropology, epidemiology, forensic anthropology, as well as paleopathology.

8:00 am  Introduction: JANE E. BUIKSTRA.
8:15 am  Use of modern Arctic peoples in modeling past behaviors.  SUSAN M. CACHEL.
8:30 am  Self-reported health status of contemporary Alaska Natives.  CHARLES J. UTERMOHLE.
8:45 am  North to Alaska: Fieldwork Among Kobuk Nunamiut and Koyukon Athabascans in the Summer of ’63.  ROBERT J. MEIER.
9:00 am  Tooth wear in 3 dimensions: a longitudinal comparison of 2 widely differing populations.  JOHN T. MAYHALL.
9:15 am  Osteoarthritis as a behavioral indicator: Patterning versus pathology.  BETHEL NAGY.
9:30 am  Capable hands: Osteoarthritis, activity patterns and the sexual division of labor.  DELLA COLLINS COOK.
9:45 am  Skeletal robusticity and economies of the ancient African populations in northern Chile.  BERNARDO ARRIZA, VIVIEN STANDEN.

10:00 am  Break

10:15 am  A paleopathological perspective on coastal adaptations.  PHILLIP WALKER.

10:30 am  What the Moche Giants didn’t have: a medical evaluation of potential causal agents.  ALANA CORDY-COLLINS, JAMES P. KEMP, CHARLES F. MERBS.

10:45 am  Skeletal kinship analysis of Danish skeletons using postcranial anomalies.  D. TROY CASE.

11:00 am  Santeria, or why forensic anthropology IS anthropology.  ELIZABETH MILLER.

11:15 am  Charles Merbs and the San Diego Museum of Man.  TORI D. HEFLIN, TRISHA BIERs, ROSE A. TYSON.

11:30 am  From Matthews to Merbs: bioarchaeology in southern Arizona.  BRENDA J. BAKER, REBECCA J. HILL.

11:45 am  Discussion: JANE E. BUIKSTRA.

**Session 3. Skeletal Biology I. Contributed Papers. Space 2.**

Chairs: JO L. BUCKBERRY (8:00 – 10:00 am), University of Bradford, KENNETH C. NYSTROM (10:00 – 12:00 am), Santa Clara University.

8:00 am  An eye for an eye: the Anglo-Saxon execution cemetery at Walkington Wold.  JO L. BUCKBERRY.

8:15 am  Methods and sources for an informed approach to the identification, quantification, and interpretation of violence-induced trauma in the bioarchaeological record.  PATRICIA M. LAMBERT.

8:30 am  Workloads and activity patterns of three ancient Egyptian populations.  MELISSA ZABECKI.

8:45 am  Identification and interpretation of multiple fractures and inflicted trauma on an Iron Age peat bog body from northern Germany.  HEATHER C. GILL-ROBINSON.

9:00 am  The victimology of warfare and risk of death at Orendorf.  DAWNIE W. STEADMAN.

9:15 am  Identifying the origin of Wari trophy heads in the ancient Andes using bioarchaeology and archaeological chemistry.  TIFFINY A. TUNG, KELLY J. KNUDSON.

9:30 am  The life history of an Inka sacrifice using archaeological chemistry.  KELLY J. KNUDSON, JASON YAEGER, DEBORAH E. BLOM.

9:45 am  Injury and treatment of the pectoral girdle in two medieval populations.  HEATHER JARRELL.

10:00 am  Ossuary taphonomy: patterns and significance of commingled human remains at the colonial Chapel of San Pedro de Mórope, Lambayeque Valley, Peru.  HAAGEN D. KLAUS, MANUEL E. TAM.

10:15 am  Metacarpal fractures as a key to understanding culturally patterned violence in a historic urban cemetery sample.  MARTIN J. SMITH, MEGAN B. BRICKLEY.

10:30 am  First ever multislice-CT and magnetic resonance imaging of the Iceman, ca. 3300 BC.  FRANK J RÜHLI, EDUARD EGARTER-VIGL, PAUL GOSTNER.

10:45 am  The biology of conquest: The effects of Inka imperialism in Chachapoya, Perú.  KENNETH C. NYSTROM.

11:00 am  Investigating intra skeletal stable isotope variation.  MARIE LOUISE S. JØRKOV, JAN HEINEMEIER, NIELS LYNNERUP.

11:15 am  Characterization of a murder victim using stable isotopic analyses.  HENRY P. SCHWARCZ, PHILLIP L. WALKER.
### Thursday Morning – March 9, 2006

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>11:30 am</td>
<td>Session 4</td>
<td>An investigation of amino acid racemization as a method for estimation of age-at-death of skeletal remains.</td>
<td>REBECCA C. GRIFFIN.</td>
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<tr>
<td>11:45 am</td>
<td>Session 4</td>
<td>Value of micro-computed tomography versus light microscopy analysis for human historic bone samples.</td>
<td>GISELA KUHN, RALPH MÜLLER, MICHAEL SCHULTZ, FRANK J. RÜHLI.</td>
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**Contributed Papers. Space 3.**

**Chairs:** STEVEN R. LEIGH (8:00 – 10:00 am), University of Illinois, GARY P. ARONSEN (10:30 – 12:00 am), Yale University.

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<tr>
<td>8:00 am</td>
<td>Congenital limb malformation and a census of the Awajishima Japanese macaques.</td>
<td>SARAH E. TURNER, LINDA M. FEDIGAN.</td>
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<tr>
<td>8:15 am</td>
<td>Relationship between neonatal brain and body mass and menstrual bleeding in primates.</td>
<td>JEREMY M. DESILVA, BEVERLY I. STRASSMANN.</td>
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<tr>
<td>8:30 am</td>
<td>Intrauterine parent-offspring conflict: lessons from the marmoset placenta.</td>
<td>JULIENNE RUTHERFORD GOEHL, DONNA G. LAYNE, SUZETTE D. TARDIF.</td>
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<tr>
<td>8:45 am</td>
<td>Bone density and bone mineral content in premenopausal monkeys are affected by social status but not by high isoflavone soy protein.</td>
<td>JAY R. KAPLAN, CYNTHIA J. LEES, HAIYING CHEN.</td>
</tr>
<tr>
<td>9:00 am</td>
<td>Morphological and hormonal correlates of ‘masculinization’ in ringtailed lemurs (Lemur catta).</td>
<td>CHRISTINE M. DREA.</td>
</tr>
<tr>
<td>9:15 am</td>
<td>Fitness and canine size in male mandrills (Mandrillus sphinx).</td>
<td>STEVEN R. LEIGH, JOANNA M. SETCHELL, MARIE CHARPENTIER, LESLIE A. KNAPP, E. JEAN WICKINGS.</td>
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<tr>
<td>9:30 am</td>
<td>The Primates of El Pital Sector, Ecuador: Pilot data suggest a new Cebus in Machalilla National Park.</td>
<td>ROSE M. HORES, DOUGLAS C. BROADFIELD, LINDA L. TAYLOR.</td>
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<tr>
<td>9:45 am</td>
<td>Contexts of positional behavior in captive pygmy marmosets (Cebuella pygmaea).</td>
<td>COLIN P. JACKSON, SUSAN M. FORD.</td>
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<tr>
<td>10:00 am</td>
<td>Testing clambering, climbing, and leaping: Positional behavior definitions in relation to support use and canopy height.</td>
<td>GARY P. ARONSEN.</td>
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<tr>
<td>10:15 am</td>
<td>Body mass distribution, forelimb kinematics and gait selection in primates: an experimental test of an evolutionary hypothesis.</td>
<td>JESSE W. YOUNG, BIREN A. PATEL.</td>
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<td>11:00 am</td>
<td>Mixed signals: When what you see is not what you get: A study of how female vervet monkeys (Chlorocebus aethiops) interact with males with artificially colored scrotas.</td>
<td>MELISSA S. GERALD.</td>
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<tr>
<td>11:15 am</td>
<td>What failed communication attempts tell us about the mind of the signaler; gestural communication in captive Bornean orangutans (Pongo pygmaeus).</td>
<td>ERICA A. CARTMILL, RICHARD W. BYRNE.</td>
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<td>11:30 am</td>
<td>Personality and subjective well-being in orangutans (Pongo pygmaeus and Pongo abelii).</td>
<td>ALEXANDER WEISS, JAMES E. KING, LORI PERKINS.</td>
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<td>11:45 am</td>
<td>Social influence on the development of foraging in Aye-Ayes (Daubentonia madagascariensis) and Ruffed Lemurs (Varecia variegata rubra).</td>
<td>ELISSA B. KRAKAUER.</td>
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8:00 am  Iterative dispersal across Beringia by early Cenozoic primates.  CHRIS BEARD.
8:15 am  Upper incisor evolution in plesiadapiform primates.  MARY T. SILCOX, JONATHAN I. BLOCH.
8:30 am  Electromyography of peroneus longus in Varecia variegata and Eulemur rubriventer helps in grasping primate origins.  DOUG M. BOYER, BIREN A. PATEL, SUSAN G. LARSON, JACK T. STERN JR.
8:45 am  Fossil data on the evolution of primate orbit orientation and binocular vision.  CHRISTOPHER P. HEESY.
9:00 am  Ecogeographic size variation in small-bodied subfossil primates from Ankilitelo, SW Madagascar.  KATHLEEN M. MULDOON, ELWYN L. SIMONS.
9:15 am  How good is Simpson's "sweepstakes" model in explaining the mammalian colonization of Madagascar? JUDITH C. MASTERS, JACEK STANKIEWICZ, CHRISTIEN THIART, MAARTEN J. DE WIT.
9:30 am  How do environmental and historical effects shape primate communities? JASON M. KAMILAR.
9:45 am  Systematics of the Victoriapithecidae.  ELLEN R. MILLER, BRENDA R. BENEFIT.
10:00 am  Break
10:15 am  Evolution of dental eruption sequences in living and fossil colobine primates.  STEPHEN R. FROST, KATERINA HARVATI.
10:30 am  Hormones and body size evolution in papionin primates.  ROBIN M. BERNSTEIN, STEVEN R. LEIGH.
10:45 am  Primates on the periphery: Current research on the biogeography and paleoecology of fossil primate localities in the Pannonian Basin of Central Europe.  MARIAM C. NARGOLWALLA, DAVID R. BEGUN, MATT HUTCHISON.
11:00 am  Late Miocene primate fauna in Nakali, central Kenya.  MASATO NAKATSUKASA, YUTAKA KUNIMATSU, Y. SAWADA, T. SAKAI, H. HYODO, T. ITAYA, M. SANEYOSHI, H. TSUJIKAWA, E. MBUA.
11:15 am  Stem hominine or hominid? The phylogeny and functional anatomy of Pierolapithecus.  DAVID R. BEGUN, CAROL V. WARD, ANDREW S. DEANE, TRACY L. KIVELL, MARIAM C. NARGOLWALLA, NICOLE D. TAYLOR.
11:30 am  Functional morphology of new Dryopithecus carpals from Rudabanya, Hungary.  TRACY L. KIVELL, DAVID R. BEGUN.
11:45 am  Variation in brain size and ecology in Pongo.  ANDREA B. TAYLOR, CAREL P. VAN SCHAIK.

Thursday Afternoon – March 9, 2006


1:00 – 1:30 pm  Poster set-up.
1:30 – 3:00 pm  Authors of even-numbered posters present for questions.
3:30 – 5:00 pm  Authors of odd-numbered posters present for questions.
5:00 – 5:30 pm  Poster take-down.

1. Traumatic injuries in a skeletal collection of Red Colobus (Piliocolobus badius preussi).  TARA J. CHAPMAN, SCOTT S. LEGGE.
2. Osteological manifestations of cranial trauma in Liberian chimpanzees (*Pan troglodytes verus*): Interpreting patterns of male-male and male-female violence. MALLORIE A. HATCH.


4. Social relationships in Madagascan lemurs. ELIZABETH M. ERHART, DEBORAH J. OVERDORFF.

5. The status of lemur species at Antserananomby: An update. ELIZABETH A. KELLEY, KATHLEEN M. MULDOON, ROBERT W. SUSSMAN.

6. Call structure of ringtailed (*Lemur catta*) and bamboo lemurs (*Hapalemur griseus*). TAMARA N. WATTS, LINDA L. TAYLOR.

7. The influence of feeding behavior on reproduction in *Eulemur rubriventer* in SE Madagascar. STACEY R. TECOT, DEBORAH J. OVERDORFF.


10. Conservation biology of Verreaux’s sifaka (*Propithecus verreauxi verreauxi*): Prospective and retrospective perturbation analyses. RICHARD R. LAWLER, HAL CASWELL.

11. Sex differences in the activity budget and foraging patterns of the mantled howler monkey (*Alouatta palliata*). JENNIFER R. MILLER.

12. Sentry male behavior of the Mesoamerican black howler monkey (*Alouatta pigra*) at the Calakmul Biosphere Reserve, Mexico. KATHLEEN RIZZO.

13. A preliminary study of troop leadership during travel in black and gold howler monkeys. MARTIN KOWALEWSKI, VANINA FERNANDEZ, GABRIEL ZUNINO.

14. Behavioral plasticity among black-handed spider monkey (*Ateles geoffroyi*) communities in a mosaic habitat at El Zota Biological Field Station, Costa Rica. STACY M. LINDSHIELD.

15. Spatial variation in the activity and positional behavior of *Ateles geoffroyi ornatus* and its relationship to forest disturbance at Estación Biológica La Suerte, Costa Rica. TEAGUE O’MARA.

16. A preliminary survey of the primates in the Upper Essequibo Conservation Concession, Guyana. CHRISTOPHER A. SHAFFER.

17. Age/sex class differences in foraging on Acacia-dwelling ants by white-faced capuchins (*Cebus capucinus*). ROBERT C. O’MALLEY, LINDA M. FEDIGAN.

18. Comparative analysis of two techniques to measure dietary preference in *P. ursinus*: ethological observation and dental microwear. GRETCHEN A. CLYMER, FRANK L. WILLIAMS.

19. Locomotor behavior of *Cercopithecus nictitans stampflii* in the Tai National Park, Ivory Coast. ANDERSON E. BITTY, WILLIAM S. MCGRAW.

20. Initial investigation into the puncture and crushing resistance of food and nonfood items of the Tana River mangabey (*Cercocebus galeritus*). BRIDGET D. MOORE, JULIE WIECZKOWSKI.


22. Patterns and variation in long-distance communication of simakobu monkeys (*Simias concolor*) on Siberut Island, Indonesia - a pilot study. WENDY M. ERB.

23. A preliminary assessment of human perceptions of tarsiers and macaques in the Philippines. LORI L. FIELDS.

25. Group composition and reproduction of Toque macaques (Macaca sinica) inhabiting the Udayawakelle sanctuary, Sri Lanka. RAJNISH P. VANDERCONE, CHARLES SANTIAPILLAI, DAVID T. RASMUSSEN.


27. The toughness of foods selected by of four closely related Colobine species. LARRY R. ULIBARRI, JONATHAN A. O'BRIEN, HERBERT H. COVERT, BARTH W. WRIGHT, KRISTEN A. WRIGHT, TILO NADLER.

28. The Delacour's langur in northern Vietnam: adaptations to a harsh environment. CATHERINE C. WORKMAN.

29. Tail posture during arboreal quadrupedalism in four species of leaf monkeys at the Endangered Primate Research Center, Cuc Phuong National Park, Vietnam. NANCY J. STEVENS, KRISTIN A. WRIGHT, HERBERT H. COVERT, TILO NADLER.

30. Hand manipulation skills of gibbons. JACQUELINE M. PRIME, SUSAN M. FORD.

31. Play behavior among wild, maturing male chimpanzees at Ngogo, Kibale National Park, Uganda. HOGAN M. SHERROW.

32. Infant socialization in bonobos (Pan paniscus): the influence of age, gender and maternal rank. OMAR S. ULVI, MONIQUE FORTUNATO, WILLIAM S. MCGRAW.

33. Functional aspects of the ankle and foot during the locomotor and postural behaviors of bonobos, chimpanzees and gorillas: a focus on captive animals. MATTHEW G. NOWAK, SUSAN M. FORD.


Chair: MARK COLLARD, University of British Columbia.

1:00 – 1:30 pm Poster set-up.
1:30 – 3:00 pm Authors of even-numbered posters present for questions.
3:30 – 5:00 pm Authors of odd-numbered posters present for questions.
5:00 – 5:30 pm Poster take-down.

35. Patterns of morphological homoplasy in extant and extinct Malagasy strepsirrhines. KAREN E. SAMONDS, CHRISTOPHER P. HEESY, MARIE GRGAS.

36. Morphological and molecular measures of papionine diversity as standards for the interpretation of hominin diversity. RACHEL M. NORRIS, ADAM J. KUPERAVGE, ROBERT B. ECKHARDT, H. JOSEPH SOMMER, MACIEJ HENNEBERG.

37. Comparison of coordinate digitizers for cranial surfaces. H. JOSEPH SOMMER, ADAM J. KUPERAVGE, ROBERT B. ECKHARDT, RACHEL M. NORRIS, MACIEJ HENNEBERG.

38. Polymorphism, character fixation, and soft homoplasy: Interpretations of intraspecific variability in omomyoid phylogeny. MATTHEW A. TORNOW.

39. The discovery and early interpretation of Ramapithecus. TOM GUNDLING.

40. The phylogenetic position of the Victoriapithecidae. SIOBHAN COOKE.

41. Paranasal pneumatization in the early Miocene platyrrhine Homunculus patagonicus. RICHARD F. KAY, TODD C. RAE, T. KOPPE, MATTHEW W. COLBERT.

42. A new look at the early-middle Miocene mammal fauna of Jabal Zaltan (Marada Formation, Libya), with special attention to the biochronology and zoogeographic relationships of Prohylobates. MONTE L. MCCROSSIN.
Thursday Afternoon – March 9, 2006

43. What does the A.L. 333 sample tell us about sexual dimorphism in *Australopithecus afarensis*? JEREMIAH E. SCOTT, LAURA K. STROIK.

44. Skeletal dimorphism in *Australopithecus afarensis*: a reply to Reno et al. (2003). LAUREN M. TAYLOR.

45. Phylogenetic analysis using geometric morphometric data: the infraorbital region of early African fossil hominins. BRIAN A. VILLMOARE.

46. An assessment of the taxonomic status of the hominid femora KNM-ER 1481A and KNM-ER 1472. MARK COLLARD, VICTORIA HERRIDGE.

47. Do SK 15 and SK 45 from Swartkrans, South Africa, belong to the same species? DAVID FERNANDEZ.

48. Comparison of Dmanisi hominid pectoral girdle and upper limb morphology. TEA JASHASHVILI, ABESALOM VEKUA, DAVID LORDKIPANIDZE.

49. A biological distance analysis of the Dmanisi molars. RICHARD A. GONZALEZ, EMILY E. HAMMERL.

50. Lateral excursion of the pelvis and the effect of leg-length. CARA M. WALL-SCHEFFLER.

51. A summed segment analysis of bipedality: Implications for hominin dispersals out of Africa. ALAN CROSS.


53. Extracting three-dimensional information from the hominid mandibular dentition. LUCAS K. DELEZENE.

54. Quadric-based metrics for shape analysis of three-dimensional osteological surfaces. MATTHEW W. TOCHERI, CALEY M. ORR, JOHN C. FEMIANI, MARY W. MARZKE.

55. 3-D morphometrics of the human femur: Taxonomic and functional information from late Pleistocene Eurasia. VANCE T. HUTCHINSON.

56. Long bone curvature in Neanderthals and modern humans: A new method for measuring long bone curvature using 3D landmarks and semi-landmarks. ISABELLE DE GROOTE, CHARLES A. LOCKWOOD, LESLIE C. AIELLO.

57. An assessment of the taxonomic validity of *Homo ergaster*. CLARA J. SCARRY.

58. Taphonomy and site formation of the 20m Solo River Terrace, Java Indonesi: implications for Late Pleistocene *H. erectus*. ETTY INDRIATI, BRIANA POBINER, SUSAN C. ANTON.

59. *Homo floresiensis*: New species, new questions, still no answers. ANA N. PEIXOTO, HILTON P. SILVA, EUGÊNIA CUNHA.

60. Cave versus open-air sites: comparisons, differences, and biases. CATHERINE M. HARADON, ROBIN L. TEAGUE.

**Session 8. Pre-Contact Forager Adaptations to Northwest Coastal Alaska: The Bioarchaeology of Point Hope. Symposium.** Space 1.

Organizers and Chairs: CHARLES HILTON, Western Michigan University, DEBBIE GUATELLI-STEINBERG, The Ohio State University, and KEN MOWBRAY, American Museum of Natural History.

Archaeological excavations of the Ipiutak and Tigara cultures conducted between 1939-41 at Point Hope, Alaska by Helge Larsen and Froelich Rainey are considered some of the most important investigations within the field of Arctic archaeology. Those excavations produced a large number of artifacts highlighting the complexity of Arctic sea and land mammal based foraging cultures and indicated that humans had established significant communities at Point Hope through a series of long-term occupations spanning nearly 2100 years BP. While the cultural artifacts have received considerable attention, far less work has been conducted on the human remains excavated from the Ipiutak and Tigara cultural horizons. Recent research on these human remains have produced a great deal of new information for those interested in the biological adaptations of Arctic foraging peoples. This symposium on the Point Hope human skeletal remains focuses on human physiological and skeletal responses to a foraging existence in an Arctic environment. In addition, the success of Arctic pre-contact foraging systems will be evaluated from a
bioarchaeological perspective in light of demands on skeletal systems, evidence of health and disease, as well as the intensity of work effort related to subsistence.

1:00 pm  Anterior dental microwear of the prehistoric Point Hope communities. KRISTIN L. KRUEGER.
1:15 pm  Dietary habits of the Ipiutak and Tigara populations from Point Hope: an occlusal molar microwear analysis. SIREEN EL ZAATARI.
1:30 pm  Imbricational enamel growth in the Point Hope Inuit: Comparisons and contrasts with other modern human populations (Southern Africa and Newcastle, England). DEBBIE GUATELLI-STEINBERG, DONALD J. REID.
1:45 pm  Postcranial growth and development of immature skeletons from Point Hope, Alaska. LIBBY W. COWGILL.
2:00 pm  Long bone robusticity and behavioral variability in the Inuit sample from Point Hope, Alaska. LAURA L. SHACKELFORD.
2:15 pm  Lower-limb joint morphology and adaptation in the Point Hope collection: new evidence using geometric morphometric techniques. WILLIAM E.H. HARCOURT-SMITH, ROXANNE RIVERA, RANDY RAMPERSAUD.
2:30 pm  Does osteopenia play a role in the morphology of the Eskimo femur? LYNN COPES, MARTIN GOMBERG, KEN MOWBRAY.
2:45 pm  An evaluation of variation in the biology and lifeways of two pre-contact Point Hope, Alaskan Inupiat cultures as evidenced by their thoracic morphology. K. LINDSAY EAVES-JOHNSON.
3:00 pm  Break
3:15 pm  Body proportions of the Point Hope sample. TRENTON W. HOLLIDAY, CHARLES E. HILTON.
3:30 pm  One of these is not like the other? Skeletal variation in western Alaska Native Americans, climate, and population history. BENJAMIN M. AUERBACH.
3:45 pm  Vertebral border shifts in two pre-Inupiat groups from Pt. Hope, Alaska. MARSHA D. OGILVIE.
4:00 pm  Health and disease in the Ipiutak and Tigara of Point Hope, Alaska. MEGAN LATCHAW, CHARLES E. HILTON.
4:15 pm  Contradictions in the archaeological construction of the Ipiutak culture: Sedentary, stratified walrus hunters and or nomadic caribou hunters. OWEN K. MASON.
4:45 pm  Discussion: CLARK SPENCER LARSEN.
5:00 pm  Discussion: CHARLES F. MERBS.

Chair: THEODORE M. COLE III, University of Missouri – Kansas City.

1:00 pm  Geometric morphometry, missing values, and multiple imputations. HANS CHR. PETERSEN.
1:15 pm  Static allometry, species discrimination and sexual dimorphism of guenons (Primates, Cercopithecinae); a three-dimensional morphometric analysis of the skull. ANDREA CARDINI, PAUL O’HIGGINS, SARAH ELTON.
1:30 pm  Morphometric distinctions in the cranial bases of Pan troglodytes and Pan paniscus. TIMOTHY R. PETERSEN.
1:45 pm  Identifying sexually dimorphic patterns in orangutan and gorilla crania. SAMANTHA M. HENS.
2:00 pm  Model-based estimation of variance-covariance structure in landmark data, with a consideration of morphological integration in the Macaca fascicularis cranium. THEODORE M. COLE III, SUBHASH R. LELE, JOAN T. RICHTSMEIER.
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<th>Time</th>
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<tr>
<td>2:15 pm</td>
<td>Image-based measure of torsional stiffness of skeletal elements: incorporating tissue inhomogeneity with cross-sectional geometry and its implication for comparative biomechanics.</td>
<td>ANDREW J. RAPOFF, BENJAMIN BROWN, DAVID J. DAEGLING.</td>
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<tr>
<td>2:30 pm</td>
<td>A comparative study of the growth and morphology of the Singapore macaques (<em>Macaca fascicularis</em>).</td>
<td>MICHAEL A. SCHILLACI, LISA JONES-ENGEL, AGUSTIN FUENTES, GREGORY ENGEL, NANTIYA AGGIMARANGSEE.</td>
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<tr>
<td>2:45 pm</td>
<td>Somatic variation in a wild population of ring-tailed lemurs.</td>
<td>MICHELLE L. SAUTHER, FRANK P. CUOZZO.</td>
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Chair: P. THOMAS SCHOENEMAN, University of Michigan – Dearborn.

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<tr>
<td>3:15 pm</td>
<td>Rightward volumetric asymmetry in the motor hand region of the brain in right- and left-handers.</td>
<td>JOHN S. ALLEN, JOEL BRUSS, HANNA DAMASIO.</td>
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<td>3:30 pm</td>
<td>Minicolumns in Broca’s area in apes and humans.</td>
<td>NATALIE M. SCHENKER, DANIEL P. BUXHOEVEDEN, KATERINA SEMENDEFERI.</td>
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<td>3:45 pm</td>
<td>Scaling of human brain components.</td>
<td>KERRIE P. LEWIS, RICHARD J. SMITH.</td>
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<td>4:00 pm</td>
<td>Scaling of brain and body weight within modern and fossil hominids: implications for the Flores specimen.</td>
<td>P. THOMAS SCHOENEMANN, JOHN S. ALLEN.</td>
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<td>4:15 pm</td>
<td>The brain endocast of <em>Homo floresiensis</em>: microcephaly and other issues...</td>
<td>RALPH L. HOLLOWAY, PETER BROWN, P. THOMAS SCHOENEMANN, JANET MONGE.</td>
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<td>4:30 pm</td>
<td>The endocast of KNM-ER 42700 a new <em>Homo erectus</em> from Ilert, Kenya.</td>
<td>DOUG C. BROADFIELD, RALPH L. HOLLOWAY, FRED SPOOR, MEAVE G. LEAKEY, LOUISE N. LEAKEY.</td>
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<td>4:45 pm</td>
<td>Quantity comparison and number conservation in <em>Pan troglodytes</em> and its relation to the structure of the human mind.</td>
<td>ANDREW R. HALLORAN, DOUGLAS BROADFIELD, DAVID BJORKLUND.</td>
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Chairs: CONNIE J. MULLIGAN, University of Florida.

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<tr>
<td>1:00 pm</td>
<td>Mitochondrial DNA variation within and among regional populations of the fascicularis group of macaque species.</td>
<td>DAVID G. SMITH, JOHN W. MCDONOUGH, DEBRA A. GEORGE.</td>
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<tr>
<td>1:15 pm</td>
<td>Multiple, novel polymorphisms in the rhesus macaque (<em>Macaca mulatta</em>) DRD4 promoter are associated with impulsive behavior.</td>
<td>TIMOTHY K. NEWMAN, CHRISTINA S. BARR, RACHEL E. HOLSTON, NICOLE Y. DAVIS, DAVID GOLDMAN, J. DEE HIGLEY.</td>
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<tr>
<td>1:30 pm</td>
<td>Population genetics of the catechol-O-methyltransferase (COMT) gene: insight into the evolution of human neurological and behavior-related disorders.</td>
<td>BRIAN C. VERRELLI, RAUL Y. TITO, ANNE C. STONE.</td>
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<td>1:45 pm</td>
<td>Significance of amylase gene duplications in human and non-human primate evolution.</td>
<td>GEORGE H. PERRY, NATHANIEL J. DOMINY, KATRINA G. CLAW, FERNANDO A. VILLANEA, ANTHONY J. IAFRATE, CHARLES LEE, ANNE C. STONE.</td>
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<td>2:00 pm</td>
<td>The complex genetic landscape of Africa: a Y chromosome perspective.</td>
<td>ELIZABETH T. WOOD, DARYN A. STOVER, VERONICA CHAMBERLAIN, CHRISTOPHER EHRET, GIOVANNI DESTRO-BISOL, MICHAEL F. HAMMER.</td>
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<tr>
<td>2:15 pm</td>
<td>Whole mtDNA genome analysis of ancient African lineages.</td>
<td>MARY K. GONDER, HOLLY M. MORTENSEN, FLOYD A. REED, ALEXANDRA DE SOUSA, SARAH A. TISHKOFF.</td>
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<td>2:30 pm</td>
<td>A mitochondrial DNA study of population origins and interactions in East Sepik Province, Papua New Guinea.</td>
<td>MIGUEL G. VILAR.</td>
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2:45 pm  Mitochondrial DNA variation in Old Believer and ethnic Russian populations of northern Siberia. SAMARA RUBINSTEIN, NISHI MEHTA, MAGGIE COCCA, SERGEY ZHADANOV, L. OSIPOVA, THEODORE G. SCHURR.

3:00 pm  Break

3:15 pm  MtDNA story of Turkic-speaking Altai populations: implication for the prehistory of Siberia. SERGEY I. ZHADANOV, LUDMILA P. OSIPOVA, MATT C. DULIK, MARINA GUBINA, THEODORE G. SCHURR.

3:30 pm  Timing of the peopling of the Americas: genetic analysis early Holocene skeletal remains. BRIAN M. KEMP.

3:45 pm  The distribution of a Native American-specific allele. KARI B. SCHROEDER, DAVID G. SMITH.

4:00 pm  Screening candidate genes for evidence of natural selection in Andean populations. ABIGAIL W. BIGHAM, XIANYUN MAO, LORNA G. MOORE, MARK D. SHRIVER.

4:15 pm  Mycobacterium tuberculosis strains from the contact period in North America: Implications for the evolutionary history of TB. MARY E. LEONARD, JANE E. BUIKSTRA, ANNE C. STONE.

4:30 pm  Phylogenetic analysis of the tprC, D, I, K, G, and J genes in the genus Treponema. REBECCA GRAY, CONNIE J. MULLIGAN, BARBARA J. MOLINI, EILEEN S. SUN, LORENZO GIACANI, ANDREW KITCHEN, SHEILA A. LUKEHART, ARTURO CENTURION-LARA.

4:45 pm  Use of JC virus sequence data to provide independent estimates of population genetic parameters. ANDREW KITCHEN, CONNIE J. MULLIGAN.


1:00 pm  A new reconstruction of Pelvis 1 (Homo heidelbergensis) from the Sima de los Huesos (Atapuerca). JUAN LUIS ARSUAGA, ALEJANDRO BONMATÍ, JOSÉ MIGUEL CARRETERO.

1:15 pm  New temporal bones from the Middle Pleistocene site of the Sima de los Huesos (Atapuerca, Spain). IGNACIO MARTÍNEZ, ROLF M. QUAM, JUAN LUIS ARSUAGA.

1:30 pm  Middle Pleistocene auditory ossicles from the Sierra de Atapuerca (Spain). ROLF M. QUAM, IGNACIO MARTÍNEZ, JUAN LUIS ARSUAGA.

1:45 pm  Paleopathology of the 1856 Neanderthal: new data, new insights. MARIA O. SMITH, FRED H. SMITH, RALF W. SCHMITZ.

2:00 pm  Teeth as part of the hominid tool kit: tooth wear patterns in Neanderthals and early modern humans. ANNA F. CLEMENT.

2:15 pm  A new approach to dental sexual dimorphism in the Krapina Neandertals. SANG-HEE LEE.

2:30 pm  Who made the early Aurignacian? Evidence from isolated teeth. SHARA E. BAILEY.

2:45 pm  Break

3:00 pm  A reassessment of the “ gracile” vs “ robust” dichotomy in the Pleistocene of Australia. DANIEL R.T. RAYNER, ARTHUR C. DURBAND, MICHAEL WESTAWAY.

3:15 pm  The sex of the Lake Mungo 3 skeleton. ARTHUR C. DURBAND, DANIEL R.T. RAYNER, MICHAEL WESTAWAY.

3:30 pm  WLH 50 and variation amongst early Australian populations: implications for modern human origins. MICHAEL WESTAWAY, ARTHUR C. DURBAND.

3:45 pm  Mandibular size dimorphism in Middle and Late Pleistocene archaic human populations. DANIELLE F. ROYER, CHARLES A. LOCKWOOD, FREDERICK E. GRINE.

4:00 pm  A 3D morphometric analysis of Upper Palaeolithic hominin frontal bones from Russia and the North Caucasus. EKATERINA BULYGINA, LESLIE AIELLO.
Thursday Afternoon – March 9, 2006

4:15 pm  High resolution microtomography of Middle Stone Age human molars from South Africa.  TANYA M. SMITH, ANTHONY J. OLEJNICZAK, PAUL TAFFOREAU, FREDRICK E. GRINE, JEAN-JACQUES HUBLIN.

4:30 pm  The lumbar lordosis of Homo neanderthalensis.  ELLA BEEN, HAYUKA PESSAH.

4:45 pm  The sexual division of foraging labor among Hadza hunter-gatherers.  FRANK W. MARLOWE.

Friday Morning – March 10, 2006

Chair: GRACIELA S. CABANA, Arizona State University.

8:00 – 8:30 am  Poster set-up.
8:30 – 10:00 am  Authors of even-numbered posters present for questions.
10:30 am – 12:00 pm  Authors of odd-numbered posters present for questions.
12:00 – 12:30 pm  Poster take-down.

1.  A radiographic study of the impact of race and sex on 1st and 2nd molar development.  SUZANNE T. PRICE.

2.  Sexual dimorphism in root formation of modern human third molars: A preliminary investigation.  KIERSTIN K. CATLETT.

3.  Information loss in the reduction of multi-state scores to presence/absence proportions using Carabelli’s cusp.  VALERIE A. SOLOMON, KIMBERLY E. CRAWFORD, ROBERT S. CORRUCINI.

4.  Measuring tooth diameters at the cervical margin to minimize the effects of wear: A test.  STANLEY SERAFIN.

5.  Microwear of the canine and the incisor of Neolithic Japanese.  TERUYUKI HOJO.

6.  Microwear and morphology: correlation between human molar microwear patterns and the mandibular corpus.  PATRICK MAHONEY.

7.  Neolithic human remains from Dakhleh Oasis, Egypt: an analysis of the dentition.  JENNIFER THOMPSON.

8.  Diet at predynastic Hierakonpolis: an examination of macrowear, microwear and caries.  TAMMY R. GREENE.

9.  A historical skull collection and its use in forensic odontology and anthropology.  BIRGITTE SEJRSEN, NIELS LYNNERUP, MICHAEL HEJMADI.

10.  Sex-based differences in dental health and diet: the Toqua Site, eastern Tennessee.  TRACY K. BETSINGER, MARIA O. SMITH.

11.  Sub-arctic Hokkaido: trends in oral and physiological health from the Jomon through Okhotsk periods.  MARC F. OXENHAM, HIROFUMI MATSUMURA.

12.  Evaluation of estimated dental age versus real age of “unknown” bodies - a 20-year survey.  KIRSA REIPPIEN, BIRGITTE SEJRSEN, NIELS LYNNERUP.

13.  Telling time with teeth: Determination of season at death using dental cementum increment analysis.  VICKI L. WEDEL, SHANNON BOWMAN.

14.  Sex identification in the pelvis: A re-examination of base-wing measurements, sacral anterior curvature, and os pubis ventral arc.  MICHAELA M. HUFFMAN, DAVID R. HUNT.

15.  The utility of carpal bones for sex determination.  CATHERINE E. SULZMANN, JO L. BUCKBERRY, ROBERT F. PASTOR.

16.  Subadult sex estimation from the auricular surface of the ilia.  AUTUMN K. CAHOON.

17.  The National Missing Persons DNA Database (NMPDD): A resource for the identification of unidentified human remains.  RICHARD M. THOMAS.
18. Who was buried in the Old Frankfort Cemetery? Using ancient DNA to leverage anthropometrics. CHRISTOPHER R.
   TILLQUIST, PETER KILLORAN, FABIAN CRESPO, MINDI KING, BRANDY SCHWALLIE, CHANDLER GATENBEE, A.
   HOWARD, A. HELM, DAVID POLLACK.

19. An assessment of compact bone microstructure and its use in differentiating between mammalian species, including
   Homo sapiens. MARIA L. HILLIER,LYNNE S. BELL.

20. Juvenile stature estimation using long bone lengths. SHELLEY L. SMITH.

21. Variation in the upper-midface of modern ‘Hispanic’ samples compared to Caucasoid and Amerindian samples. ELIGIO
   J. RAMIREZ.

22. PIMA (portable infrared mineral analyzer) as a quick and non-destructive tool for forensic anthropology. LINDA
   KLEPINGER.

23. Fordisc 2.0 the ultimate test: What is the truth? NICOLE A. NAAR, DANA HILGENBERG, GEORGE J. ARMELAGOS.

24. Who’s behind the mask? Records and reality of a “Trophy” skull. MONICA FARALDO, LINDA L. TAYLOR.

25. Investigations of a thermally affected burial from a historic cemetery in central California. PATRICK B. STANTON,
   MITCHELL A. KEUR.

26. Stone tool marks on precontact human remains from Mangaia, Cook Islands: anthropophagy or bone tool production?
   BRIANA L. POBINER,ARIANA P. RIDGELY, SUSAN C. ANTON.

27. Left and right side symbolism in trophy taking among the Postclassic Maya. WILLIAM N. DUNCAN.

28. Femoral shape in populations of differing subsistence economies. MICHELE M. BLEUZE, JENNIFER L. THOMPSON.

29. Experimental analysis of human footprint generation. KRISTIAAN D’AOÛT, LIV MEERT, FRISO HAGMAN, BART
   VAN GHELUWE, DIRK DE CLERCQ, PETER AERTS.

30. Estradiol, strain, and periosteal bone growth. MAUREEN J. DEVLIN, DANIEL E. LIEBERMAN, NICOLE LEDOUX.

31. Frequency and patterns of trauma in the medieval cemetery of St. Helen-on-the-Walls, York, England. ANNE L.
   GRAUER, CLAIRE STIGLER, SARAH TINCHER.

32. Osteological remains from Salango, Ecuador with comparisons to other Ecuadorian coastal sites. NICOLE A.
   JASTREMSKI, DOUGLAS C. BROADFIELD, VALENTINA L. MARTINEZ.

33. Self sacrifice or slaughter? The mass burials of Kerma. MARGARET A. JUDD, JOEL D. IRISH, ALAIN FROMENT.

34. A reanalysis of the clinical literature and skeletal alterations associated with iron deficiency anemia: Is the postcranial
   skeleton affected? REBECCA E. CUDDAAHEE.

35. A comparison of anthroposcopic and serological approaches to South Asian human population genetics. JANET L.
   MAYHER, ROBERT S. CORRUCCINI, V. RAMI REDDY.

36. The benefits of using faunal DNA for optimizing ancient DNA techniques. DONGYA Y. YANG, CAMILLA F. SPELLER,
   KATHY WATT.

37. Mitochondrial DNA variation of Yuman speaking populations. CARA R. MONROE, BRIAN M. KEMP, DAVID GLENN
   SMITH.

38. Mitochondrial DNA Variation in Northern Altaian Ethnic Groups. MATTHEW C. DULIK, SERGEY I. ZHADANOV, L.P.
   OSIPOVA, THEODORE G. SCHURR.

39. Mitochondrial DNA analysis of the Jomon and Epi-Jomon individuals in Hokkaido, Japan. NOBORU ADACHI, KEN-
   ICHI SHINODA, KAZUO UMETSU, YUKIO DODO.
42. A study of the L1c haplogroup of the mitochondrial DNA. CHIARA BATINI, VALENTINA COIA, MAYA METNI PILKINGTON, CINZIA BATTAGGIA, JORGE ROCHA, GABRIELLA SPEDINI, GIOVANNI DESTRO-BISOL, DAVID COMAS, FRANCESC CALAFELL.

43. Identifying the most informative regions of the mitochondrial genome using phylogenetic analysis. AMY L. NON, ANDREW KITCHEN, CONNIE J. MULLIGAN.

44. South American population genetic structure and history: the Y perspective. GRACIELA S. CABANA, PAUL W. LÓPEZ, ANGELA CÁCERES, BEATRIZ LIZÁRRAGA, ANNE C. STONE.

45. Distributions of newly defined Y-chromosome haplogroups K6 and K7 in Island Melanesia. KRISTA E. LATHAM, JONATHAN S. FRIEDLAENDER, FRANCOISE R. FRIEDLAENDER, MICHAEL F. HAMMER, TANYA M. KARAFET, GEORGE KOKI, JOSEPH G. LORENZ.

46. Genetic variation of Alu insertions in Easter Island supports “Slow Boats” hypothesis for the peopling of Polynesia. EMILI GONZALEZ-PEREZ, ESTHER ESTEBAN, MARC VIA, CLARA GARCIA-MORO, MIQUEL HERNANDEZ, PEDRO MORAL.

47. Linkage disequilibrium and haplotype structure of the obesity-associated gene perilipin (PLIN). M. GEOFFREY HAYES, TOSHI KAWAI, MAGGIE NG, KAZU MIYAKE, DAVID EHRMANN, GRAEME BELL, NANCY COX.


49. Towards a solution to the syphilis enigma: trend in the arp gene suggests evolutionary relationships of the treponemes. PAOLO S. OCAMPO, HSI LIU, KRISTIN N. HARPER, ROBERT W. GEORGE, GEORGE J. ARMELAGOS, BRET M. STEINER.


Life history and epigenetic models assume that changes in growth trajectory (de-canalization or centile crossing) can reflect successful adaptation to adverse environments. However, growing in synchrony with one’s peers need not indicate either good health or adaptation. Clinicians and auxologists assume that loss of growth percentiles or not reaching growth “potential” is not an adaptation, but typically indicates poor health. Can adverse environments result in adaptation only if growth trajectories are reduced but peer-appropriate? This symposium will present findings that suggest both points of view can be accommodated through re-theorizing familiar concepts such as adaptation, normal growth, and genetic potential.

8:00 am  Growth patterns in adverse environments. NOËL CAMERON.

8:15 am  Child growth as a measure of livelihood security: the case of the Gwembe Tonga. DEBORAH L. CROOKS, LISA CLIGGETT.

8:30 am  Genetic factors in physical growth and development. STEFAN A. CZERWINSKI, AUDREY C. CHOH, ELLEN W. DEMERATH, MIRYOUNG LEE, BRADFORD TOWNE, ROGER M. SIERVOGEL.

8:45 am  Adverse environments: investigating local variation in child growth and health. TINA MOFFAT, TRACEY GALLOWAY.

9:00 am  Genetic influences on growth rate during infancy: Data from the Fels Longitudinal Study. ELLEN W. DEMERATH, AUDREY CHOH, STEFAN A. CZERWINSKI, BRADFORD TOWNE, ROGER M. SIERVOGEL.

9:15 am  Calories or oxygen? Skeletal growth tradeoffs at high altitude. STEPHEN M. BAILEY, JUIPING XU, JU H. FENG, XUI HU, C. ZHANG, S. QUI.

9:30 am  Chronic under-nutrition and obesity. A. ROBERTO FRISANCHO.
9:45 am  Break

10:00 am  The interface of Human Biology and Medicine: applying concepts from human biology to growth interpretation in the clinical setting. BABETTE S. ZEMEL, JOAN I. SCHALL.

10:15 am  What does growth mean? Biomedical and adaptationist interpretations. LAWRENCE M. SCHELL.

10:30 am  Pathology, constraint, and adaptation: how can we tell them apart? PETER T. ELLISON.

10:45 am  Life history trade-offs in human growth. BARRY BOGIN, MARIA INES O. VARELA-SILVA.

11:00 am  Saltatory growth biology, dynamic systems and selection. MICHELLE LAMPL.

11:15 am  Life history perspectives on growth, productivity and adult physiology and function. CHRISTOPHER KUZAWA.

11:30 am  Discussion: LESLIE SUE LIEBERMAN.


8:00 am  Phayre's leaf monkeys (Trachypithecus phayrei) as seed predators in the Phu Khieo Wildlife Sanctuary, Thailand. SCOTT A. SUAREZ.

8:15 am  First evidence for ecological risks among juvenile Phayre's leaf monkeys. KERRY OSSI, CAROLA BORRIES, ANDREAS KOENIG.

8:30 am  Resource defense and pair-bonding in red-bellied lemurs (Eulemur rubriventer) in southeastern Madagascar. DEBORAH J. OVERDORFF, STACEY TECOT.

8:45 am  Functions of male care of infants in siamangs (Symphalangus syndactylus). SUSAN LAPPAN.

9:00 am  Multiple mating and female mate choice in Lemur catta: does it pay to be a dominant male? JOYCE A. PARGA.

9:15 am  The socio-ecology of the silvery gibbon (Hylobates moloch) in the Cagar Alam Leuweung Sancang (CALS), West Java, Indonesia. NICHOLAS MALONE, HERI OKTAVINALIS.

9:30 am  Effects of moonlight levels on behavior of Lepilemur leucopus at Beza Mahafaly Special Reserve, Madagascar – do alternative analyses give the same answer? LEANNE T. NASH.

9:45 am  Break

10:00 am  Sleeping tree choice in Bwindi chimpanzees. CRAIG B. STANFORD, ROBERT C. O'MALLEY.

10:15 am  Habitat use and ranging behavior of Callimico goeldii. LEILA M. PORTER, SARAH M. STERR, PAUL A. GARBER.

10:30 am  Spatial structure of Japanese macaque habitats: GIS analysis of core areas and habitat expansion in mixed agro-forest landscapes. DAVID S. SPRAGUE, NOBUSUKE IWASAKI.

10:45 am  Leaner diet, less energy: Diademed sifakas (Propithecus diadema) in forest fragments show reduced ranging and altered activity patterns. MITCHELL T. IRWIN.

11:00 am  A survey of Alouatta pigra in damaged forests on Monkey River, Belize. KERIANN C. MCGOOGAN.

11:15 am  Intrinsic and extrinsic factors predicting extinction risk at a fine taxonomic scale: The case of the colobine monkeys. LISA M. PACIULLI, JASON M. KAMILAR.

11:30 am  Increased human-chimpanzee sympatry in southeastern Senegal; implications for pathogen transmission and health. MICHAELA E. HOWELLS, JILL D. PRUETZ, TOM R. GILLESPIE.

11:45 am  Impacts of human activity on apes and other mammals at the Dzanga-Sangha Reserve, Central African Republic. MELISSA J. REMIS.
Friday Morning – March 10, 2006

Chair: CHRISTOPHER B. RUFF, Johns Hopkins University School of Medicine.

8:00 am  The correlation of joint shapes to the movement patterns of the human fibula.  THOMAS M. GREINER, KEVIN A. BALL.

8:15 am  Investigating the internal structure and function of the Shanidar 3 second pedal phalanx.  NICOLE L. GRIFFIN.

8:30 am  Morphological variation among early hominin proximal femora.  ELIZABETH H. HARMON.

8:45 am  Life in a Neolithic community: body size and activity levels at Çatalhöyük, Turkey.  CHRISTOPHER B. RUFF, CLARK, S. LARSEN, LIBBY W. COWGILL, LORI D. HAGER.

9:00 am  Differences in hand and foot morphology of eastern gorilla subspecies.  REBECCA S. JABBOUR.

9:15 am  Hand postures reflect bone apparent density patterns in the primate distal radius.  BIREN A. PATEL, KRISTIAN J. CARLSON.

9:30 am  Validation of the relationship between subchondral bone density and posture during locomotion.  JOHN D. POLK, JODI BLUMENFELD, KAMLA AHLUWALIA.

9:45 am  Hindlimb adaptations in Ourayia and Chipetaia, relatively large-bodied omomyine primates from the Middle Eocene of Utah.  RACHEL H. DUNN, JULIA M. SYBALSKY, GLENN C. CONROY, D. TAB RASMUSSEN.

10:00 am  Break

10:15 am  Comparative growth plate kinetics in rodents: insights into the evolution and development of limb length allometry.  CAMPBELL ROLIAN.

10:30 am  Evolution of mammalian limb covariation structure: implications for primate evolution.  NATHAN M. YOUNG, BENEDIKT HALLGRIMSSON.

10:45 am  To grasp or not to grasp? Structure and function of platyrrhine caudal vertebrae.  JASON M. ORGAN.

11:00 am  Climbing energetics in primates: body size considerations.  JANDY B. HANNA.

11:15 am  Arboreal locomotion from a different angle: external forces during quadrupedalism with abducted limb postures.  KRISTIAN J. CARLSON.

11:30 am  Proportions of fiber types in intrinsic shoulder muscles of small primates and non-primate mammals related to forelimb protraction and loading.  MANUELA SCHMIDT, NADJA SCHILLING, MARTIN S. FISCHER.

11:45 am  The role of binocular vision in primate locomotion.  TERENCE R.T. MITCHELL, DANIEL SCHMITT, RICHARD F. KAY.

Chair: RICHARD G. DELISLE, McGill University.

8:00 am  Debating human phylogeny since 1860: stasis or progress?  RICHARD G. DELISLE.

8:15 am  The significance of derived characters that Australopithecus afarensis shares with the robust clade.  YOEL RAK.

8:30 am  The paleobiology of the robust australopithecines (Paranthropus): a preliminary test of the durophage model using carbon isotope analysis.  ALAN B. SHABEL.

8:45 am  Accumulating agent and paleoenvironment of the hominin-bearing site of Plovers Lake, South Africa.  JULIET K BROPHY, DARRYL J. DERUITTER, STEVEN E. CHURCHILL, LEE R. BERGER.

9:00 am  Taphonomy of the GD 2 in situ deposits at Gondolin, North West Province, South Africa.  JUSTIN W. ADAMS.
**Friday Morning – March 10, 2006**

9:15 am  Isotopic approaches to paleoecological reconstruction at Olduvai Bed I (Tanzania) and Kanjera (Kenya).  JOHN D. KINGSTON, PETER W. DITCHFIELD, TOM PLUMMER, LAURA C. BISHOP, JOE FERRARO.

9:30 am  An atmospheric re-enactment: Implications for oxygen isotope use in paleoenvironmental reconstruction.  ANNA T. WILLIAMS.

9:45 am  Break

10:00 am  Habitat score: inferring hominin paleoenvironments based on equid and bovid metapodial morphology.  ROBERT S. SCOTT.

10:15 am  Species resilience in *Homo*: An analogy to the wolf-like canids.  ADAM CLARK ARCA. D

10:30 am  Environmental dynamics on an evolutionary time scale can shape the genetic basis of an organism's adaptability: Insights from the mighty worm (*C. elegans*).  CHI-HUA CHIU.

10:45 am  Variation and diversity in *Homo erectus*: A 3D geometric morphometric analysis of the temporal bone.  CLAIRE E. TERHUNE, WILLIAM H. KIMBEL, CHARLES A. LOCKWOOD.

11:00 am  Three-dimensional analysis of temporal bone pneumatization.  CHERYL A. HILL.

11:15 am  The taxonomic status of the fragmentary mandible, Sangiran 5 ("*Pithecanthropus dubius*"), Java, Indonesia.  DONALD E. TYLER.

11:30 am  A reinterpretation of the paleoenvironments associated with Indonesian *Homo erectus* based on Bovid functional morphology.  DANIEL C. WEINAND.

11:45 am  Characteristics of Pleistocene megafauna extinctions in Southeast Asia.  JULIEN LOUYS, DARREN CURNOE.

**Friday Afternoon – March 10, 2006**

**Session 18. Human Biology II: Skeletal Biology, Growth, and Variation. Contributed Posters.**

**Explorer’s Hall.**

Chair: LYNNETTE LEIDY SIEVERT, University of Massachusetts – Amherst.

2:00 – 2:30 pm  Poster set-up.

2:30 – 4:00 pm  Authors of even-numbered posters present for questions.

4:30 – 6:00 pm  Authors of odd-numbered posters present for questions.

6:00 – 6:30 pm  Poster take-down.

1.  Histomorphological variation in human auditory ossicles.  ROBERT A. WALKER, THOMAS M. GREINER, RICK CORDES.

2.  Intra-skeletal variability in osteon size.  EMILY R. MIDDLETON.

3.  Age estimation method for the subadult rib cortex.  MARGARET STREETER, SAM D. STOUT.

4.  Creating a statistical atlas of femora from three-dimensional CT data.  MEGAN K. MOORE, BRANDON C. MERKL, MICHAEL J. KUHN, MOHAMED R. MAHFOUZ.

5.  Three-dimensional digital quantification of joint surface area and its contribution to osteological research.  DENISE TO.

6.  Upper- and lower-limb skeletal muscle site variability in modern humans.  MICHELLE S. M. DRAPEAU.

7.  Skeletal response to total hip arthroplasty in skeletally mature individuals: the effects of stress shielding on bone mass and biomechanical integrity of the mid-shaft femur.  JOSHUA PECK, SAM STOUT.

8.  Patterns of clavicular asymmetry in relation to humeral asymmetry in humans and great apes.  MICHELLE H. RAXTER, BENJAMIN M. AUERBACH, KATHARINE BARKER.
9. Attention–Deficit Hyperactivity Disorder (AD/HD) and fluctuating asymmetry (FA) in another college sample: male/female difference. JOAN C. STEVENSON, PHILLIP M. EVerson, DON C. WILLIAMS, GREG HIPSKIND, E.R. (BILL) MAHONEY, MICHELLE MEHLER, MEGAN CAWLEY, W. CHAMBERLIN, LISA WATTS.

10. Fluctuating asymmetry in the human cranium: differential diagnoses of taphonomical, pathological and ‘normal’ population asymmetry. REBECCA A. STORM.

11. An investigation of the association between facial asymmetry and hand bone asymmetry in skeletal material. ALISON L. PEAPEr.

12. The effect of substance abuse on skeletal development: how the study of teratology can benefit physical anthropology. DANIEL J. LIVY, WEI-JUNG CHEN.

13. The reliability of the atd angle in dermatoglyphic analysis. EMILY K. BRUNSON, DARRYL J. HOLMAN, LAURA L. NEWELL-MORRIS, CHRISTINA M. GIOVAS, ANN STREISSGUTH.


15. Beyond the letter of the law: fleshing out identity as a collaborative process. SARAH J. BINKLEY, KATHLEEN T. BLUE.

16. Preservation of the La Jolla skeletal population’s cranial morphology. TRAVIS H. ROSE, TORI D. HEFLIN.

17. A cautionary tale: Alleged Asian palm burial remains prove not so Asian. SARAH R. BLAYLOCK, LINDA BAKER, BRIAN E. HEMPHILL.


20. Heading to Jerusalem? Assessing migration and pilgrimage to a Byzantine monastery using cranial non-metric traits. ANNE M. GUAPPONE, JENNIE CRATE, JAIME ULLINGER, DENNIS P. VAN GERVEN, SUSAN G. SHERIDAN.

21. Pilgrimage to Byzantine St. Stephen’s monastery: a dental metric perspective. ERICA J. WILLIAMS, JAIME ULLINGER, DENNIS P. VAN GERVEN, SUSAN G. SHERIDAN.

22. The sore price of piety: osteological evidence of kneeling in a monastic community. ROBERT F. PASTOR, CAROLINE BENNETT, JO L. BUCKBERRY.

23. Isotopic evidence for variation in diet and health in the Kulubnarti Christian period of Sudanese Nubia. PAUL A. SANDBERG, MATT SPONHEIMER, DENNIS P. VAN GERVEN.

24. Auditory exostoses found in Meroitic Nubians at Semna South: implications for subsistence strategies and/or social practices. KANYA M. GODDE.

25. The utility of skeletal nonmetric analyses: a case study from the Eastern Mediterranean. SHERRY C. FOX.

26. Cranial non-metric variation within a medieval cemetery in Giecz, Poland. GAIL M. HUGHES, HEDY M. JUSTUS, AMANDA M. AGNEW.

27. Quantitative genetics and morphological integration in the human skull: a functional and developmental approach to heritability. NEUS MARTÍNEZ-ABADÍAS, ROLANDO GONZALEZ-JOSE, TORSTEIN SJØVOLD, CHRISTIAN PETER KLINGENBERG, MAURO SANTOS, MIREIA ESPARZA, MIQUEL HERNANDEZ.

28. Two cases of metastatic cancer in a skeletal population from early medieval France: a bioarchaeological perspective. ERICA A. TYLER, JOËL BLONDIAUX.

29. Reassessing Osteitis deformans (Paget’s disease) in a pre-contact population at the Briarwoods site, Gulf Coast Florida. DEBORRAH C. PINTO, SAMUEL D. STOUT, MEGHAN-TOMASITA J.-R. COSGRIFF-HERNANDEZ, LARA E. MCCORMICK.
30. A bioarchaeological perspective on health, violence, and identity at Tchecar (AD 700-900), northern Chile. JESSICA D. BURNS, KRISTA M. ECKHOFF, CHRISTINA TORRES-ROUFF.

31. Midfacial and femoral variation in a 9th century Croatian population. ADAM D. FOSTER, CRYSTAL R. MEYER, MARIO SLAUS, JAMES CM AHERN, GEORGE W. GILL.

32. Infant health: assessing adaptation and stability of transitional Early Neolithic subsistence economies in the Zagros Mountains. DEBORAH C. MERRETT.

33. Isotopic reconstruction of paleo diet and immigration at Machu Picchu, Peru: early results. BETHANY L. TURNER, JOHN D. KINGSTON, RICHARD L. BURGER, LUCY C. SALAZAR.

34. An elusive paleodemography? Age distribution of deaths at Copan. REBECCA STOREY.

35. Age estimation and paleohistopathology of a late pre-Hispanic elite: demography and health among the Sicán leadership, Lambayeque Valley, Peru. SAMUEL D. STOUT, HAAGEN D. KLAUS, JUAN MARTINEZ, CARLOS WESTER.

36. Investigating dietary change using the hair of ancient Inca mummies from Puruchuco-Huaquerones, Peru. JOCELYN S. WILLIAMS, M. ANNE KATZENBERG.

37. An analysis of health indicators in subadults from select Mimbres populations: Why is there no correlation? HEIDI J. BAUER-CLAPP, KATHLEEN T. BLUE.

38. An evaluation of possible associations between skeletal remains and Mimbres ceramic typology: The Galaz Ruin. LISA L. BECKER, MICHELLE BIRNBAUM, KATHLEEN BLUE.

39. Postcranial metric variation in three Archaic period sites in western Tennessee. KATHRYN A. KING.

40. Metric and non-metric variation in the clavicle of the Monongahela. MARY E. KOVACIK, JEFFREY H. SCHWARTZ.

41. Skeletal trauma analysis of the Mexican War dead from the battle of Resaca de la Palma. LORI E. BAKER, DANIEL WESCOTT, D. CLARK WERNECKE, MICHAEL B. COLLINS.

42. An investigation of secular change in the craniofacial morphology of White and Black males and females in the United States. SANDRA CRIDLIN.

43. Analysis of the human skeletal remains from the Fate Bell Shelter (41VV74). CHRISTINE E. ALVAREZ.

44. Developmental influences on upper limb asymmetry in a skeletal population from central California. ELIZABETH WEISS, ROBERT D. JURMAIN.

45. Discriminant function for sex determination in talus and calcaneal for Mexican population. MARTHA PIMIENTA, ALFONSO GALLARDO, HÉCTOR CISNEROS.


47. Variation in postcranial robusticity in the Albany County Almshouse. MARTIN C. SOLANO.

48. Intralimb length proportions in ancient North and South Americans. KAREN J. WEINSTEIN, GABRIELLE M. RUSSO.

49. Adaptive diversity, growth, and development in Chalcolithic India. GWEN M. ROBBINS, JOHN R. LUKACS.

50. Biomechanical stress markers in a historic population from the central coast of California: An analysis of Dove Cemetery, Atascadero, California. WENDY M. JONES, WILLA R. TRASK, MARINA ADAME.

51. Selective processes in human reproductive success: heritability of life-history traits. MIREIA ESPARZA, NEUS MARTÍNEZ-ABAD, TORSTEN SJÖVOLD, ROLANDO GONZALEZ-JOSE, MIQUEL HERNANDEZ.

52. Measurement of testosterone from infant fecal samples. AMANDA L. THOMPSON, MICHELLE LAMPL, PATRICIA L. WHITTEN.

53. Child anthropometric comparison of two rural Costa Rican communities. HALLIE M. BUKAUSKAS, DAVID HIMMELGREEN, NANCY ROMERA DAZA, MARIBEL VEGA, HUMBERTO BRENES CAMBRONERO.
Friday Afternoon – March 10, 2006

54. High inbreeding coefficient in an Indo-Costa Rican group. KATRINA BUETER, LORENA MADRIGAL.

55. A genetic analysis of an Indo-Costa Rican population. LORENA MADRIGAL, RAMIRO BARRANTES, MWENZA BLELL, LOREDANA CASTRÌ, DONATA LUISELLI, DAVIDE PETTENER, ERNESTO RUIZ.

56. A health assessment of the Curripaco people in Amazonas State, Venezuela. MYLA C. OLIVER, JONATHAN HILL.

57. The 1849 and 1854 cholera epidemics in Buffalo, New York. GLENICE J. GUTHRIE.

58. Epidemic impacts of a changing cultural practice: role segregation among Peruvian men who have sex with men. STEVEN M. GOODREAU.

59. Visual ontogeny and essential lipid levels in a small-scale society. JOHN D. WAGNER.

60. Determinants of tubal ligation in Puebla, Mexico. LYNNETTE LEIDY SIEVERT, ALANNA E.F. RUDZIK.


Organizers and Chairs: MATT CARTMILL, Duke University, TRENTON W. HOLLIDAY, Tulane University, and FRED H. SMITH, Loyola University, Chicago.

Pre-Darwinian biologists conceived of species as natural classes defined by essential properties. Nowadays, species are often thought of as logical individuals that are born and die in swift, transforming speciation events, in which reproductive isolation is achieved by the restructuring of a peripheral population’s genome. Events of this sort are well-documented in plant evolution but are rare among animals. Darwinian theory leads us to expect that reproductive isolation should as a rule come into existence gradually. Zoogeographic and molecular evidence suggests that geographically separated sister populations of mammals usually retain some ability to exchange genes for more than a million years. This implies that the process of speciation is neither abrupt nor transforming, and that Darwin was right to insist that “there is no fundamental distinction between species and varieties.” Darwin’s insights have been borne out by later studies, which show that reproductive isolation is not necessarily an all-or-nothing proposition and that interspecies gene flow is widespread and significant. The papers in this symposium will review the evidence for these findings, and lay out their implications for our concepts of species and our understanding of human evolution.

2:00 pm  Darwin, Darwinism, and the speciation process. KAYE BROWN, MATT CARTMILL.

2:15 pm  Species taxa, characters, and symplesiomorphies. MATT CARTMILL, TRENTON W. HOLLIDAY.

2:30 pm  Mitochondrial capture in the evolution of baboon and human allotaxa. CLIFF J. JOLLY.

2:45 pm  Studies of genetic variation and their relevance to questions of the origin and evolution of human species. JOHN H. RELETHFORD.

3:00 pm  Swinging pendulum crops hominin bush. KEVIN D. HUNT.

3:15 pm  Species and varieties of early Homo. SUSAN C. ANTÓN.

3:30 pm  Problems with species identification in the human fossil record with special emphasis on the Neandertal question. FRED H. SMITH, JAMES C. M. AHERN.

3:45 pm  The Early Modern Human Mosaic. ERIK TRINKAUS.

4:00 pm  What the stone tools can (and can’t) tell us about hominin evolutionary relationships. JOHN J. SHEA.

4:15 pm  Discussion
Organizer and Chair: CONRAD B. QUINTYN, Bloomsburg University of Pennsylvania.

After an extended hiatus, anthropology has again reached a moment in its history when it cannot evade the pervasive power of creationism. Today, more than ever, creationism has strong support from the political power in this country so that faith-based “science” is being promoted over science and evolution continues to sustain much of the attack. The danger of faith-based “science” is that it undermines common sense research based on the scientific method, i.e., human origins, global warming, or stem cell research. Traditionally, anthropology has been the nemesis of creationism, but we cannot win this fight alone. Consequently, this symposium brings together an interdisciplinary group to discuss the persistent problem of creationism.

4:45 pm  Anthropology meets creationism: taking primatology to schoolkids.  BENJAMIN Z. FREED.
5:00 pm  A critical analysis of the “wedge strategy” in Ohio.  JEFFREY K. MCKEE, STEVE RISSING.
5:15 pm  Biological anthropology, evolution, and science: A new perspective on why the theory of evolution is not resonating with the general public.  CONRAD B. QUINTYN.
5:30 pm  Linnaean binomials and the Christian trinity: Faith-based barriers to scientific understanding.  ROBERT B. ECKHARDT.
5:45 pm  Changing the definition of science: the new focus of anti-evolutionary advocates.  KEITH B. MILLER.
6:00 pm  A decade of controversy over the teaching of evolution in the United States: a print media analysis.  PAMELA C. ASHMORE.
6:15 pm  Is there a scientific “theory” of Intelligent Design?  RICHARD J. CAMERON.
6:30 pm Discussion: EUGENIE SCOTT.

Chair: BENJAMIN C. CAMPBELL, Boston University.

2:00 pm  Ecogeographic variation in human nasal passages.  TODD R. YOKLEY.
2:15 pm  Can Khoi San cranial morphology be explained by paedomorphism?  KATRIN SCHAEFER, PHILIPP GUNZ, CAROLINE FENES, PHILIPP MITTEROECKER, FRED L. BOOKSTEIN.
2:30 pm  Are there two human ontogenies? an investigation of growth trajectories among tropical foragers and farmers.  ROBERT S. WALKER.
2:45 pm  The biological standard of living: An analysis of anthropometric data from the Swiss Army, 1865-1950.  ULRICH WOITEK, FRANK J. RÜHLI.
3:00 pm  Mixed longitudinal growth of agropastoral children in northern Uganda.  SANDRA J. GRAY.
3:15 pm  Allometry and classification in Fetal Alcohol Spectrum Disorders, or, What happens when an allometric null hypothesis is true.  FRED L. BOOKSTEIN.
3:30 pm  Evidence that birth weight is on the causal pathway to infant mortality.  TIMOTHY B. GAGE, FU FANG, ERIN K. O’NEILL, HOWARD STRATTON.
3:45 pm  Break
4:00 pm  Age-related change in urinary gonadotropins among Turkana men of northern Kenya.  BENJAMIN C. CAMPBELL, PAUL W. LESLIE, KENNETH L. CAMPBELL.
4:15 pm  Marriage and testosterone among Ariaal men of northern Kenya.  PETER GRAY, BENJAMIN C. CAMPBELL.
4:30 pm  Unexpected declines in luteal uterine endometrial thickness in healthy rural Polish women aged 20-40 years: implications for population variation.  KATHRYN B.H. CLANCY.
Organizer and Chair: DENNIS H. O’ROURKE, University of Utah.

Increasingly, genetic methods and approaches are used to address questions that in the past have been the province of skeletal biology and paleoanthropology, including studies of population history, paleopathology, and human origins. The contributions in this symposium are meant to highlight the diverse genetic approaches to such problems. The papers exemplify a variety of genetic models, analytical methods, and presentations of empirical data. Blending statistical rigor with aspects of phylogeography, the contributions are examples of a variety of genetic approaches to the study of modern human origins, prehistoric population structure, the origin and dispersal of the original colonists to the Western Hemisphere, as well as the use of molecular methods to study the evolution and distribution of disease in antiquity.

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<tr>
<th>Time</th>
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<tr>
<td>2:00 pm</td>
<td>Population structure analysis from prehistoric skeletal material.</td>
<td>LYLE W. KONIGSBERG, JANE E. BUIKSTRA.</td>
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<td>2:15 pm</td>
<td>Quantitative and developmental genetic approaches to morphological evolution.</td>
<td>LESLEA J. HLUSKO.</td>
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<td>2:30 pm</td>
<td>Serial coalescent simulations suggest weak genealogical relationships between Etruscans and modern Tuscans.</td>
<td>ELISE M. S. BELLE, UMA RAMAKRISHNAN, JOANNA MOUNTAIN, GUIDO BARBUJANI.</td>
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<td>2:45 pm</td>
<td>Migrations across the Red Sea: Mitochondrial DNA analysis of populations from the Horn of Africa and Arabia.</td>
<td>CONNIE J. MULLIGAN, AMY NON, ANDREW KITCHEN.</td>
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<td>3:00 pm</td>
<td>Out of Africa with admixture.</td>
<td>ALAN R. ROGERS.</td>
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<td>3:15 pm</td>
<td>Revisiting Neanderthal mitochondrial DNA sequence variation.</td>
<td>DAVID ILTIS.</td>
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<td>3:30 pm</td>
<td>mtDNA analysis of human remains from the Danish Iron and Viking ages.</td>
<td>LINEA C. MELCHIOR, JØRGEN DISSING, NIELS LYNNERUP.</td>
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<td>3:45 pm</td>
<td>Prehistoric peoples and ancient migrations: Exploring population affinities in East Eurasia.</td>
<td>KAREN P. MOODER, TIA THOMSON, FIONA J. BAMFORTH.</td>
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<td>4:00 pm</td>
<td>Break</td>
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<td>4:15 pm</td>
<td>The genetic structure of the Aleuts and circumarctic populations and its implications for the peopling of North America.</td>
<td>MARK ZLOJUTRO, ROHINA RUBICZ, MICHAEL H. CRAWFORD.</td>
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<td>4:30 pm</td>
<td>A method for rejecting population histories using coalescent simulation.</td>
<td>ELIZABETH E. MARCHANI.</td>
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<td>4:45 pm</td>
<td>Historical peopling of the New World: Y chromosome roots.</td>
<td>TATIANA M. KARAFET, STEPHEN L. ZEGURA, MICHAEL F. HAMMER.</td>
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<td>5:00 pm</td>
<td>Linguistic and genetic correspondence in native Central and South America.</td>
<td>KEITH HUNLEY, D.A. MERRIWETHER, G.S. CABANA, J.C. LONG.</td>
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<td>5:15 pm</td>
<td>Inferring population continuity versus replacement with aDNA: a cautionary tale in the Aleutians.</td>
<td>SILVIA E. SMITH, M.GEOFFREY HAYES, JOAN BRENNER COLTRAIN, DENNIS H. O’ROURKE.</td>
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5:30 pm  TB in pre-contact North America: Who had it and what was it. FREDERIKA A. KAESTLE, JENNIFER A. RAFF, KATE GIESTING, DELLA C. COOK.

5:45 pm  Discussion: CLARK SPENCER LARSEN.

Chair: BRIAN G. RICHMOND, George Washington University.

2:00 pm  A reassessment of the age at death of Sts 14 (Australopithecus africanus) and the sequence of epiphyseal union of early hominids. ALEJANDRO BONMATÍ, CARLOS LORENZO, JUAN LUIS ARSUAGA.

2:15 pm  So early hominids grew up like apes - now what? KEVIN L. KUYKENDALL.

2:30 pm  Comparative morphology and allometry of the Orrorin tugenensis femora. BRIAN G. RICHMOND, WILLIAM L. JUNGERS.

2:45 pm  Functional relationship of lumbar lordosis and center of mass in the positional biomechanics of bipeds. KATHERINE K. WHITCOME.

3:00 pm  3D-computer assisted reconstruction of the Stw 431 (Australopithecus africanus) pelvis. MARTIN HAEUSLER.

3:15 pm  Limb joint size proportions in Australopithecus afarensis and Australopithecus africanus. DAVID J. GREEN, ADAM D. GORDON, BRIAN G. RICHMOND.

3:30 pm  Size dimorphism in Australopithecus afarensis, modern humans, and the great apes: a non-template multivariate comparison. ADAM D. GORDON, DAVID J. GREEN, BRIAN G. RICHMOND.

3:45 pm  Break

4:00 pm  Origin of hominid bipedalism: the energetics of chimpanzee locomotion. MICHAEL D. SOCKOL.

4:15 pm  Energetics of chimpanzee locomotion: Force production during bipedal and quadrupedal walking. DAVID A. RAICHLEN, HERMAN PONTZER, MICHAEL D. SOCKOL.

4:30 pm  Daily energy expenditure in fossil hominins: the contribution from locomotor costs reevaluated. KAREN L. STEUDEL-NUMBERS.

4:45 pm  Locomotor energetics and ranging ecology of fossil hominids. HERMAN PONTZER.

5:00 pm  Lower limb proportions and locomotor biomechanics in the genus Homo. LAURA T. GRUSS.

5:15 pm  The effects of body proportions on thermoregulation: an experimental approach. MICHAEL J. TILKENS, CARA WALL, TIMOTHY D. WEAVER, KAREN STEUDEL-NUMBERS.

5:30 pm  How pathological is the Nariokotome boy KNM-WT 15'000 (Homo erectus)? REGULA SCHIESS, MARTIN HAEUSLER, ELISABETH LANGENEGGER.

5:45 pm  Evidence for the anatomical capacity for spoken language in Homo erectus. MARC R. MEYER, DAVID LORDKIPANIDZE, ABESALOM VEKUA.
Chair: KIERAN P. MCNULTY, Baylor University.

8:00 am  Craniofacial strain patterns during premolar loading: implications for australopith feeding.  DAVID S. STRAIT, BARTH W. WRIGHT, BRIAN G. RICHMOND, CALLUM F. ROSS, PAUL C. DECHOW, MARK A. SPENCER, QIAN WANG.

8:15 am  The evolutionary significance of canine reduction in hominins: Functional links between jaw mechanics and canine size.  WILLIAM L. HYLANDER, CHRISTOPHER J. VINYARD.

8:30 am  The genetic architecture of 2-D molar cusp areas in baboons: implications for hominid evolution.  NICHOLAS DO, MICHAEL C. MAHANEY, LESLEA J. HLUSKO.

8:45 am  Virtual reconstruction of hominid crania: possibilities and limitations.  PHILIPP GUNZ, PHILIPP MITTEROECKER, FRED L. BOOKSTEIN, GEHARD W. WEBER.

9:00 am  Qualitative and quantitative assessment of infraorbital surface topography in recent and fossil Homo.  SCOTT D. MADDUX, ROBERT G. FRANCISCUS.

9:15 am  Sexual dimorphism in hominine supraorbital morphology.  KIERAN P. MCNULTY, KAREN L. BAAB.

9:30 am  Morphological integration during ontogeny of the mandible in living humans.  JOSHUA M. POLANSKI.

9:45 am  Predicting auditory sensitivity from ear morphology in primates.  MARK N. COLEMAN.

**Session 25. Dental Anthropology.** Contributed Papers. *Space 1.*
Chair: JOHN R. LUKACS, University of Oregon.

10:00 am  Assessing the relative contribution of the EDJ and enamel cap to the occlusal morphology of molar tooth crowns using microCT and GIS.  MATTHEW M. SKINNER, ALISTAIR EVANS, JUKKA JERNVALL.

10:15 am  Variation in dental eruption in wild ring-tailed lemurs (*Lemur catta*) at Beza Mahafaly Special Reserve, Madagascar: Implications for understanding lemur life history.  FRANK P. CUOZZO, MICHELLE L. SAUTHER.

10:30 am  Microtomographic investigations of enamel thickness patterning and mandibular morphology in primates.  ALICE A. ELDER, ANTHONY J. OLEJNIczAK.

10:45 am  Timing of formation of localized hypoplasia of the primary canine in humans.  CHARLES M. FITZGERALD, SHELLEY SAUNDERS, LUCA BONDIOLI, ROBERTO MACCHIARELLI.

11:00 am  Anomalies of dental development in modern humans and *Homo floresiensis*.  JOHN R. LUKACS, GREG C. NELSON, CAM WALKER.

11:15 am  The place of Jebel Moya in northeast African prehistory: A dental perspective.  JOEL D. IRISH.

11:30 am  Wealth, status and gender at Bronze Age Tepe Hissar: An investigation of intracemetery variation in dental pathology prevalence in prehistoric Iran.  BRIAN E. HEMPHILL.

11:45 am  A test of dental morphological traits used in forensic identification of ancestry.  HEATHER J.H. EDGAR.

Chair: LORENA M. HAVILL, Southwest Foundation for Biomedical Research.

8:00 am  How standard are our standards? Inter-observer consistency in the construction of age intervals and the implications for broader anthropology.  GREGORY E. BERG, ERIN H. KIMMERLE.

8:15 am  A test of the transition analysis method for estimation of age-at-death.  JONATHAN D. BETHARD.
8:30 am  Computerized shape analysis of the Japanese mandible: Sexual dimorphism. PETE E. LESTREL, ROBERTO M. CESAR, JR., FUMIO OHTSUKI, CHARLES A. WOLFE.

8:45 am  The possible causes of porotic hyperostosis in Mesolithic Denmark. PIA BENNIKE.

9:00 am  Nutritional deficiencies in the 14th century Northern Rio Grande. ANN M. PALKOVICH.

9:15 am  Bioarchaeological evidence for nutritional variation among prehistoric Jomon foragers. DANIEL H. TEMPLE.

9:30 am  Do early South Americans show biological similarity to Australians?: Lagoa Santa in odontometric and craniometric perspective. NORIKO SEGUCHI, HIDEYUKI UMEDA, A. RUSSELL NELSON, C. LORING BRACE.

9:45 am  Break

10:00 am  Intracemetery biological patterning at Windover Pond. CHRISTOPHER M. STOJANOWSKI, MICHAEL A. SCHILLACI, GLEN H. DORAN.

10:15 am  Are minor morphological variants indicative of developmental instability? SCOTT E. BURNETT.

10:30 am  Preliminary strontium isotope ratio and non-metric trait analysis from a Islamic Spanish Medieval assemblage. SONIA R. ZAKRZEWSKI, KRISTI A. GRINDE.

10:45 am  Biological indicators of hunter-gatherer adaptation and cultural change in the mid-Holocene Cis-Baikal. ANGELA R. LIEVERSE.

11:00 am  Early human skeletal remains from Sabana de Bogotá, Colombia, South America: Implications for the settlement of the New World. WALTER NEVES, MARK HUBBE, GONZALEZ CORREAL, DANUSA MUNFORD.

11:15 am  Back to Medieval Évora (Portugal): confrontation of the human skeletal remains with the historical/archaeological records. CLÁUDIA UMBELINO, ANA LUÍSA SANTOS, ANA GONÇALVES.

11:30 am  “Meta-analysis” of Pubmed®-listed scientific studies performed on Ancient Egyptian mummies. LORENZ ZWEIFEI, THOMAS BÔNI, FRANK J. RÜHLI.

11:45 am  Athletes: How different are they from the rest of us? SHAMSI R. DANESHVARI, OSBJORN M. PEARSON, ROBERT M. MALINA.

**Session 27. Human Biological Variation II. Contributed Papers. Space 3.**

Chair: GARY D. JAMES, Binghamton University.

8:00 am  Overnight sodium excretion differentiates awake-sleep blood pressure variation between African-American and European-American women. GARY D. JAMES.

8:15 am  Stress among Chinese university women: Preliminary findings among rural and urban populations. JENNIFER M. RANDALL.

8:30 am  Calcium consumption and bone density in factory and farm workers in central Mexico. DEBRA L. MARTIN, MARGARET CERULLO, JENNIFER N. BIDO, JESUS A. COLMENARES.

8:45 am  Dietary correlates of anemia in a young, urban, tribal population in Northeastern India. SHARON R. WILLIAMS.

9:00 am  The Excess Iron Hypothesis: High levels of iron in infant formula may influence infant health via lactoferrin saturation. ELIZABETH A. QUINN.

9:15 am  Food insecurity is associated with increasing body mass index in rural Costa Rican women. DAVID A. HIMMELGREEN, EDGAR AMADOR, MARIBEL VEGA, HUMBERTO BREÑES CAMBRONERO.

9:30 am  On using zinc in teeth to interpret maternal and infant diet and health: insights from analyses of a contemporary Mexican sample. ALEXIS E. DOLPHIN, ALAN H. GOODMAN, DULASIRI AMARASIRIWARDENA.

9:45 am  Break
Saturday Morning – March 11, 2006

10:00 am  Paleodemography and health in Predynastic Upper Egypt: a perspective from the working-class cemetery at Hierakonpolis. ERNEST K. BATEY.

10:15 am An assessment of health from Florida’s Archaic: application of the Western Hemisphere Health Index to the remains from Windover (8BR246). RACHEL K. WENTZ.

10:30 am The medieval climatic anomaly and its impact on health in the Pacific Rim: a case study from Canyon Oaks, California. MARIN A. PILLOUD.

10:45 am Mortality considered as a proxy measure of morbidity. JANET PADIAK.

11:00 am Recognizing contrasting lifestyles in medieval England. MARIANNE SCHWEICH, CHRISTOPHER J. KNÜSEL.

11:15 am Reconstruction of stature from head circumference. MANISHA RAMANLAL DAYAL, FRANCESCA DE CONTI, MACIEJ HENNEBERG, MARYNA STEYN, DAISY VEITCH.

11:30 am Assessing the reliability of analysis of partial and fragmentary cranial remains. DIANA L. NEUWEGE.

11:45 am Assessing the nature of cranial robusticity: an examination of morphological integration between cranial superstructures and implications for the study of pre-modern hominins. STEVEN F. MILLER.


Organizers and Co-Chairs: CHRISTINE HANSON, University of Alaska Anchorage, and MICHAEL H. CRAWFORD, University of Kansas.

Recent developments in molecular genetics, together with traditional approaches to chronic disease and skeletal variation, now permit a re-examination of human adaptation to the unique environments of the circumpolar regions of the world. The papers in this symposium are organized into following: (1) The chronology of human habitation in the Americas; (2) The nature of the metabolic adaptation to the severe cold; (3) Chronic diseases in Native people of the Americas and Siberia; (4) Skeletal variation resulting from adaptation to diverse environments of the arctic and sub-arctic. This interdisciplinary symposium provides an opportunity for a new synthesis of the biological anthropology of the North by archaeologists, biological anthropologists, geneticists and physicians.

8:00 am  Introduction: MICHAEL H. CRAWFORD.

8:15 am  Out of Siberia: archaeological evidence. TED GOEBEL.

8:30 am  Sequence variation in mtDNA hypervariable segment I indicates within haplogroup continuity between contemporary and prehistoric Aleut populations. JACQUEL L. ARISMENDI, DENNIS H. O’ROURKE.

8:45 am  Origins of Aleut populations: Molecular perspectives. MICHAEL H. CRAWFORD, ROHINA C. RUBICZ, MARK ZLOJUTRO.

9:00 am  Relatedness of Eurasian and American far North populations with Amerindians according to HLA genes and linguistics. ANTONIO ARNAIZ-VILLENA, MICHAEL H. CRAWFORD.

9:15 am  Adaptive mutation in the mitochondrial DNA permitted humans to colonize the temperate zone and the Arctic, paving the way to the Americas. DOUGLAS C. WALLACE.

9:30 am  Metabolic variation and adaptation to cold stress among indigenous circumpolar populations. WILLIAM R. LEONARD, J. JOSH SNODGRASS, MARK V. SORENSEN.

9:45 am  Mid-facial climatic adaptations of indigenous Alaskans (Aleut, Inuit and Northern Athapaskan) and people of the Northwest coast. ROBERTA L. HALL.

10:00 am  Break

10:15 am  Nutrition and lipids in a population exhibiting very low levels of serum cholesterol: The Western Buryat of Ust Orda, Siberia. M.J. MOSHER, MARK V. SORENSEN, WILLIAM R. LEONARD.
AAPA Poster and Podium Schedule

Saturday Morning – March 11, 2006

10:30 am The genetics of cardiovascular disease risk factors in American Indians and Alaska Natives: The Strong Heart and GOCADAN Studies. KARI E. NORTH, SHELLEY A. COLE, HARALD H.H. GÖRING, LAURA ALMASY, VINCE P. DIEGO, SANDRA LASTON, ANTHONY G. COMUZZIE, BARBARA V. HOWARD, ELISA T. LEE, LYLE G. BEST.

10:45 am Leprosy in the medieval North. JESPER L. BOLDSEN.

11:00 am Dental variation in circumpolar populations. TSUNEHIKO HANIHARA, HAJIME ISHIDA.

11:15 am Northern Arctic population structure, history, and migrations in light of new data and methods. STEPHEN D. OUSLEY, R. ERIC HOLLINGER, CHARLES J. UTERMOHLE.

11:30 am The fate of the Greenland Norse: the undramatic version. NIELS LYNNERUP.

11:45 am Discussion: G.R. SCOTT.

Saturday Afternoon – March 11, 2006

Organizers and Chairs: RIPAN MALHI, Trace Genetics, Inc., and DEBORAH BOLNICK, University of Texas – Austin.

The past decade has seen the development of a new and rapidly growing industry known as genetic ancestry testing. This industry draws upon recent studies in anthropology and human population genetics, and makes genetic analysis services available to the general public to help individuals reconstruct their personal genealogical histories and determine the geographic origins of their ancestors. In the past three years alone, over 50,000 people have taken genetic ancestry tests. These tests both reflect and cater to widespread fascination in American society with DNA and genealogies, and they are influencing individual identity construction, medical treatment, admixture mapping, forensic investigations, and the assessment of ancestry for sociopolitical purposes. In addition, since the companies offering these tests play an important role in explaining anthropological genetics research and the pattern of human variation to the general public, they are rapidly becoming the public face of molecular anthropology. In this symposium, we will examine both the lineage-based and whole genome tests that are currently available, and will explore the anthropological, biomedical, and societal applications of genetic ancestry testing. We will also discuss the ethical and sociopolitical issues that surround these tests, and consider what these tests convey to the general public about race, ethnicity, human genetic variation, and the evolutionary history of our species.

1:00 pm Public interest in genetic ancestry testing. RIPAN S. MALHI, ANN TURNER.

1:15 pm The Sorenson Molecular Genealogy Foundation (SMGF) and the construction of a publicly accessible genetic genealogical database. SCOTT R. WOODWARD, UGO A. PEREGO, NATALIE M. MYRES.

1:30 pm The uses and limitations of DNA-based tests for identifying Native American ancestry. JASON A. ESHLEMAN.

1:45 pm Maternal and paternal lineages of African Americans. RICK A. KITTLES.

2:00 pm The use of biogeographical ancestry for forensic, biomedical, and recreational genomics. MARC BAUCHET, MARK DAVID SHRIVER.

2:15 pm Ethical implications of ancestry testing and genetic identity. CHARMAINE D.M. ROYAL.

2:30 pm The impact of genetic ancestry testing on public understanding of race and human genetic structure. DEBORAH A. BOLNICK.

2:45 pm Native-American-DNA.com: genetics and race online. KIM M. TALLBEAR.

3:00 pm Ethics, ethnicity and genetic structure in southeastern Kenya: implications for the assignment of African-Americans to African ethnic groups. KARA B. BABROWSKI, SLOAN R. WILLIAMS.

3:15 pm A consumer’s perspective of genetic ancestry testing. GINA M. PAIGE.

3:30 pm Discussion: JOANNA MOUNTAIN.
Saturday Afternoon – March 11, 2006

3:45 pm  Discussion: JENNIFER REARDON.

Organizers and Chairs: BARBARA PIPERATA, University of Colorado, and RUI SERGIO MURRIETA, Universidade de São Paulo.

The purpose of this symposium is to improve our understanding of the impact of increased market integration on the health and nutritional status of rural peoples in the Neotropics. Processes of globalization are drawing rural peoples into the world economy at an increasingly rapid rate and resulting in profound changes in activity levels, food availability and health. While this “nutritional transition” has been a topic of much interest in the recent academic literature, most studies are broad in scope and focused on urban, or urbanizing populations. This symposium includes new data from a number of rural, Neotropical populations currently experiencing lifestyle transitions and demonstrates the value a bio-cultural approach provides for understanding how both internal and external forces impact human health.

1:00 pm  Food resources and survival among the Cofan of Ecuador.  LORI J. FITTON.

1:15 pm  Culture change and helminthiasis among the Tsimane’ of lowland Bolivia.  SUSAN TANNER, VICTORIA REYES-GARCIA, VINCENT VADEZ, WILLIAM LEONARD, THOMAS MCDADE, THOMAS HUANCA.

1:30 pm  Ethnecological knowledge and child health in lowland Bolivia.  THOMAS W. MCDADE, VIKI REYES-GARCIA, WILLIAM LEONARD, SUSAN TANNER, COLLEEN NYBERG, VINCENT VADEZ, RICARDO GODOY, TOMAS HUANCA.

1:45 pm  Association studies of obesity and high blood pressure to variants of the genes LEPR, ADRB2 and ACE in afro-derived Brazilian populations.  REGINA CÉLIA MINGRONI NETTO, LILIAN KIMURA, NELSON HENDERSON COTRIM, ALEXANDRE PEREIRA, JARROD PEDRO VICENTE, MARIA TEREZA BALLESTER DE MELO AURICCHIO, CLAUDIA BLANES ANGELI.

2:00 pm  Caboclo household food consumption in two Amazonian ecosystems: a comparative analysis.  RUI SERGIO SERENI MURRIETA, CRISTINA ADAMS, ROBERTO STRUMPF, MAISSA BAKRI, PERPETUO SOCORRO SOUSA.

2:15 pm  Nutritional status of tropical horticulturists involved in the market economy in the lower Amazon, Brazil.  BARBARA A. PIPERATA.

2:30 pm  Duration of exclusive breastfeeding and its relationship to childhood mortality among the Makushi Amerindians of Guyana.  WARREN M. WILSON, JILLIAN MILNER, JANETTE BULKAN.

2:45 pm  Disease patterns and nutritional status of populations from protected areas in the Brazilian Atlantic Forest: Are human health and environmental preservation linked?  HILTON P. SILVA.

3:00 pm  Foraging peoples and State players in the Brazilian Amazon: implications of contact, settlement and diet among the Guajá Indians of Maranhão State.  LOUIS C. FORLINE.

3:15 pm  Discussion: DARNA L. DUFOUR.

Chair: J. MICHAEL PLAVCAN, University of Arkansas.

1:00 pm  Digesta Passage Time in Southern Muriquis (Brachyteles arachnoides, Atelidae, PRIMATES).  MAURICIO G. TALEBI, PHYLLIS C. LEE.

1:15 pm  Bonobos really do eat more THV: Using incisal curvature to interpret dietary behaviour for Pan paniscus.  ANDREW S. DEANE.

1:30 pm  Dental microwear texture analysis of primate molar wear facets.  PETER S. UNGAR, ROBERT S. SCOTT, CHRISTOPHER A. BROWN, BENJAMIN A. CHILDS, TORBJORN S. BERGSTROM, MARK F. TEAFORD, ALAN WALKER.
**Saturday Afternoon – March 11, 2006**

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<tr>
<th>Time</th>
<th>Session</th>
<th>Authors</th>
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<tr>
<td>1:45 pm</td>
<td>Do the number of daily jaw loading cycles help explain food resource partitioning among three sympatric species of <em>Hapalemur</em> in Ranomafana National Park, Madagascar? NAYUTA YAMASHITA, MICHAEL COOLEY, CHIA L. TAN, CHRISTOPHER J. VINYARD.</td>
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<td>2:00 pm</td>
<td>The effects of developmental and functional interactions on mouse cranial variability at different ages. KATHERINE E. WILLMORE, BENEDIKT HALLGRIMSSON.</td>
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<td>2:15 pm</td>
<td>Bone stiffness variation in the mandibular symphysis of colobine monkeys. DAVID J. DAEGLING, JENNIFER L. HOTZMAN, WILLIAM S. MCGRAW, ANDREW J. RAPOFF.</td>
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<td>2:30 pm</td>
<td>Joint plasticity, degradation and aging in the masticatory complex. MATTHEW J. RAVOSA, ELISABETH K. NICHOLSON, EMILY KLOPP, JESSIE PINCHOFF, RAVI KUNWAR, STUART R. STOCK, M. SHARON STACK, MARK W. HAMRICK, LIDIANY GONZALEZ.</td>
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<td>2:45 pm</td>
<td>Break</td>
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<td>3:00 pm</td>
<td>Fusion of craniofacial sutures in monkey skulls with special reference to the Finite Element Analysis. QIAN WANG, PAUL C. DECHOW, BRIAN G. RICHMOND, CALLUM C. ROSS, MARK A. SPENCER, DAVID S. STRAIT, B.W. WRIGHT.</td>
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<td>3:15 pm</td>
<td>Biomechanics of the mandible: Results from experimental impact testing. ANNE M. KROMAN, TYLER A. KRESS, STEVEN A. SYMES.</td>
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<td>3:30 pm</td>
<td>Oh monkey, what a strong jaw you have: A preliminary comparison of symphyseal strength across monkeys, galagos and non-primate mammals. CHRISTOPHER J. VINYARD, MATTHEW J. RAVOSA, WILLIAM L. HYLANDER.</td>
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<td>3:45 pm</td>
<td>Canine size and bending strength in primates and carnivores. J. MICHAEL PLAIVCAN, CHRISTOPHER B. RUFF.</td>
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<td>4:00 pm</td>
<td>Morphology of the last lumbar vertebra in four orthograde primates: defining facet and pedicle orientation using three-dimensional vectors. DORION A. KEIFER, PAVLINA I. RUMCHEVA.</td>
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<td>4:15 pm</td>
<td>Craniofacial growth trajectories and dental development in humans. MARINA L. SARDI, FERNANDO V. RAMIREZ ROZZI.</td>
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<td>4:30 pm</td>
<td>The modular cranial development of humans, chimpanzees, and gorillas. PHILIPP MITTEROECKER, PHILIPP GUNZ, FRED L. BOOKSTEIN.</td>
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<td>4:45 pm</td>
<td>Taxonomic variation in facial mobility among anthropoid primates. SETH D. DOBSON.</td>
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**Session 32. Genetics. Contributed Papers. Space 4 & 5.**

Chair: LORI E. BAKER, Baylor University.

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<th>Time</th>
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<tr>
<td>1:15 pm</td>
<td>Quantitative genetics of modern baboon (<em>Papio hamadryas</em>) craniofacial variation. RICHARD J. SHERWOOD, DANA L. DUREN, BRADFORD TOWNE, MICHAEL C. MAHANEY.</td>
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<td>1:30 pm</td>
<td>Quantitative genetics of female rhesus macaque age-specific reproductive output: Evidence for trade-offs and their implications. GREGORY E. BLOMQUIST.</td>
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<td>1:45 pm</td>
<td>Genetic differentiation among social groups of savannah baboons at Gombe National Park and Mikumi National Park, Tanzania: significance and relative contribution by age-class and sex. AMANDA VINSON, CRAIG PACKER, JEFF ROGERS.</td>
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<td>2:00 pm</td>
<td>Evolutionary genetics of primate hair pigmentation. BRENDA J. BRADLEY, JENNIFER PASTORINI, NICHOLAS I. MUNDY.</td>
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<td>2:15 pm</td>
<td>Orangutan evolutionary history based on an analysis of 7 loci. MICHAEL E. STEIPER.</td>
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<td>2:30 pm</td>
<td>An analysis of human / chimpanzee / macaque orthologs. WEBB MILLER, HEATHER A. LAWSON, ANTON NEKRUTENKO, CHARLES ADDO-QUAYE, ANNE BUCHANAN, JOAN T. RICHTSMEIER, KENNETH M. WEISS, THE RHESUS MACAQUE GENOME SEQUENCING CONSORTIUM.</td>
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<td>2:45 pm</td>
<td>Break</td>
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<td>3:00 pm</td>
<td>DLX and Oro-Facial Clefts</td>
<td>EVELYN J. BOWERS</td>
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<td>3:15 pm</td>
<td>Genetic structure and admixture among U.S. ethnic groups based on Y-chromosome SNPs</td>
<td>ALAN J. REDD, VERONICA F. CHAMBERLAIN, VERONICA F. KEARNEY, DARYN STOVER, GINA ZHANG, TATIANA KARAFET, MICHAEL F. HAMMER</td>
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<tr>
<td>3:30 pm</td>
<td>Genetic admixture, phenotype, and perception of admixture in Hispanics and Native Americans in New Mexico.</td>
<td>YANN C. KLIMENTIDIS</td>
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<td>3:45 pm</td>
<td>Native South American history examined by generalized hierarchical modeling.</td>
<td>CECIL M. LEWIS, JR., JEFFREY C. LONG</td>
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<td>4:00 pm</td>
<td>Genetic diversity in the Himalayas: Gm and Inv markers in some Nepali and Tibetan populations.</td>
<td>PHILIPPE LEFÈVRE-WITIER, MOSES S. SCHANFIELD</td>
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<td>4:15 pm</td>
<td>GM and KM phenotype and haplotypes in Southwest Asia: Populations at the crossroads.</td>
<td>MOSES S. SCHANFIELD, ROBERT E. FERRELL, A.P. GELPI, ALI A. HOSSAINI, N. MIZAN, SARA NEVO, GERALD SANDLER, JOAN C. STEVENSON</td>
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<tr>
<td>4:30 pm</td>
<td>HLA-DQB1 allele diversity, reproduction and health in consanguineous and non-consanguineous families in Bangladesh.</td>
<td>SHORMILA ROY CHOUDHURY, LESLIE A. KNAPP</td>
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<td>4:45 pm</td>
<td>The phylogeography of mtDNA variation in Altaian Kazakh populations.</td>
<td>OMER GOKCUMEN, LUDMILLA OSIPOVA, SERGEY I. ZHADANOV, O. ANDREENKO, L. TABIKHANOVA, M. GUBINA, THEODORE G. SCHURR</td>
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