

40th Annual Meeting

HUMAN BIOLOGY ASSOCIATION

**Program
of the
40th Annual Meeting
to be held in
St. Louis, Missouri
HILTON ST. LOUIS at the BALLPARK
March 25–26, 2015**

PROGRAM COMMITTEE:

Christie Rockwell, Chair

Christopher Lynn

Siobhan Mattison

Elizabeth Rowe

Amanda Veile

LOCAL ARRANGEMENTS:

E.A. Quinn

CURRENT OFFICERS AND COMMITTEES

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PAST-PRESIDENT ELECT	Deborah Crooks (2013-14)
SECRETARY	Jason DeCaro (2013-15)
TREASURER	Virginia J. Vitzthum (2012-16)
EXECUTIVE COMMITTEE	International: Ines Varela-Silva (2013-17) Membership: Susan L. Johnston (2014-18) Program: Christie Rockwell (2011-15) Public Relations: Ellen W. Demerath (2012-16)
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PUBLICATIONS COMMITTEE	Barbara Piperata Chair (2011-15) Linda Gerber (2011-15) Babette Zemel (2013-17) David Himmelgreen (2013-17)
AAAS REPRESENTATIVE	Cynthia Beall

GREETINGS!

The 40th Annual Meeting of the Human Biology Association will be held at the **HILTON ST. LOUIS at the BALLPARK** Wednesday and Thursday, March 25 and 26, 2015. Non-members who register for the meeting are welcome to attend. Registration is less costly online (www.humbio.org) before March 21, 2015, but is also available at the meeting.

The opening **Poster Session** with presentations will be held on Wednesday morning, March 25, 2015. The poster session affords a unique opportunity to discuss the presented research one-on-one with individual investigators. This year a subset of posters will also be available for viewing during the plenary session; all other posters will be available for independent viewing throughout the afternoon. Following the morning poster session, two concomitant **Breakout Sessions** are available over the lunchtime break. One targets HBA student members, and the other targets early career scholars.

Wednesday afternoon features the **Plenary Session**, “The milk of human kind(ness): the importance of human milk in human evolution and modern health,” which has been organized by E.A. Quinn. Following the session, and beginning at 5:00 PM, the **Raymond Pearl Memorial** speaker, **Professor Margaret Neville**, will present a lecture titled “**Evolution of an hypothesis: DFYNP is a peptide sequence important in cell-cell and cell-matrix interactions in epithelial cells. Bacteria may utilize this sequence to breach epithelial barriers.**” Margaret Neville is a professor emerita of Obstetrics and Gynecology, and Physiology and Biophysics at the University of Colorado, Denver. She is a specialist in lactocyte biology, human milk composition, and the cellular processes involved in the regulation and production of milk synthesis. Her talk will focus on the relationship between human milk, intestinal barrier function, and the utilization of bacterial genes by mammals for essential functions. The day concludes with our members’ dinner reception from 6:30 to 9:30 PM Please plan to join the festivities!

The Scientific Program on Thursday, March 26, 2015, consists of 24 presentations organized into four **Podium Sessions: Biocultural Studies; Impacts on Immunity; Women’s Reproduction and Infant Nutritional Support; and Life History in Variable Environments.**

The **Annual Awards Luncheon** also takes place on Thursday beginning at noon. We urge you to purchase your luncheon tickets well in advance, they DO sell out! The recipients of the Edward E. Hunt, Jr. and Spielvogel Awards for outstanding graduate and undergraduate student research presentations will be announced, and the HBA Executive Committee will present the Michael A. Little Early Career Award and the Franz Boas Distinguished Achievement Award. I encourage you to participate in the **HBA Annual Business Meeting**, which will follow the final podium session. Finally, calling all students, don’t miss the evening’s **Student Reception**. It is open to all students who are registered for the HBA Annual Meeting.

A detailed schedule of presentations and events, abstracts, and the index follow this summary (also see www.humbio.org).

The HBA meeting overlaps with those of several sister organizations including the American Association of Physical Anthropologists (AAPA, which takes place Wednesday evening, March 25, through Saturday, March 28). The **AAPA/HBA Jointly Sponsored Invited Symposium** will be a poster session titled “**Multi-generational Perspectives on Human Biology and Anthropological Genetics: A Symposium in Honor of Michael H. Crawford.**” It has been organized by William R. Leonard and Dennis H. O’Rourke. The AAPA program offers several other sessions of interest to human biologists. Please see <http://physanth.org/> for the entire AAPA program.

On behalf of the 2014 HBA Program Committee, welcome to the meetings, enjoy your time in St. Louis, and celebrate the 40th Anniversary of the Human Biology Association!

Christie Rockwell
HBA Program Committee Chair

**40th ANNUAL MEETING
HUMAN BIOLOGY ASSOCIATION
PROGRAM SUMMARY
St. Louis, MO**

TUESDAY, MARCH 24, 2015

5:00 p.m. to 8:00 p.m. **REGISTRATION**
Hilton Ballpark Registration Desk

6:00 p.m. to 10:00 p.m. **EXECUTIVE COMMITTEE MEETING**

WEDNESDAY, MARCH 25, 2015

7:30 a.m. to 9:00 a.m. **AJHB EDITORIAL BOARD MEETING AND BREAKFAST**
Market Room

8:00 a.m. to 5:00 p.m. **REGISTRATION**
Hilton Ballpark Registration Desk

8:00 a.m. to 11:00 a.m.
(Setup at 7:00 a.m.) **POSTER SESSION**
Chair: L. Christie Rockwell
ArchView Ballroom

11:30 a.m. to 12:30 p.m. **BREAKOUT SESSION 1**
Early Career Mentoring
Susan Johnston, Organizer
Grand Suite II

11:30 a.m. to 12:30 p.m. **BREAKOUT SESSION 2**
Career Pathways Panel Discussion
Organizers: Kristin Almskaar and Angela Garcia,
HBA Student Representatives
Grand Suite III

11:30 a.m. to 12:45 p.m. **LUNCH BREAK**

1:00 p.m. **OPENING WELCOME TO PLENARY SESSION**
Andrea Wiley, President of the Human Biology Association
Gateway Ballrooms 4 & 5

INTRODUCTION TO THE PLENARY SESSION
EA Quinn, Organizer

1:15 p.m. to 4:45 p.m. **PLENARY SESSION**
**The milk of human kind(ness): the importance of
human milk in human evolution and modern health.**
Gateway Ballrooms 4 & 5

5:00 p.m. to 6:00 p.m. **RAYMOND PEARL MEMORIAL LECTURE**
**Evolution of an hypothesis: DFYNP is a peptide
sequence important in cell-cell and cell-matrix
interactions in epithelial cells. Bacteria may utilize this
sequence to breach epithelial barriers.**
Professor Margaret Neville
University of Colorado at Denver
Gateway Ballrooms 4 & 5

6:30 p.m. to 9:30 p.m. **HBA DINNER RECEPTION AND CASH BAR**
Lindberg Room

THURSDAY, MARCH 26, 2015

- 8:00 a.m. to 10:00 a.m. **REGISTRATION**
Hilton Ballpark Registration Desk
- 8:30 a.m. to 10:00 a.m. **SESSION A**
Biocultural Studies
Chair: Christopher Lynn
Ballpark 1 & 2
- 10:00 a.m. to 10:15 a.m. **COFFEE BREAK**
- 10:15 a.m. to 11:45 a.m. **SESSION B**
Impacts on Immunity
Chair: Siobhan Mattison
Ballpark 1 & 2
- Noon to 1:15 p.m. **HBA ANNUAL AWARDS LUNCHEON**
Ballpark 3
- 1:30 p.m. to 3:00 p.m. **SESSION C**
Woman's Reproduction and Infant Nutritional Support
Chair: Elizabeth Rowe
Ballpark 1 & 2
- 3:00 p.m. to 3:15 p.m. **COFFEE BREAK**
- 3:15 p.m. to 4:30 p.m. **SESSION D**
Life History in Variable Environments
Chair: Amanda Veile
Ballpark 1 & 2
- 5:00 p.m. to 6:30 p.m. **HBA ANNUAL BUSINESS MEETING**
Ballpark 1 & 2
- 7:00 p.m. to 9:30 p.m. **HBA STUDENT RECEPTION** (students only)
Ballpark 2 & 3

FRIDAY, MARCH 27, 2015

- 8:00 a.m. to 12:00 p.m. **Multi-generational Perspectives on Human
Biology and Anthropological Genetics: A Symposium in
Honor of Michael H. Crawford.**
Organizers: William R. Leonard and Dennis H. O'Rourke

**40th Annual Meeting
HUMAN BIOLOGY ASSOCIATION SCIENTIFIC PROGRAM**

WEDNESDAY MORNING, MARCH 25, 2015

POSTERS

7:00 a.m. to 8:00 a.m.	Poster Setup
8:00 a.m. to 11:00 a.m.	POSTER PRESENTATIONS Chair: Christie Rockwell <i>ArchView Ballroom</i>
8:00 a.m. to 9:30 a.m.	Authors of odd-numbered posters present for discussion
9:15 a.m. to 9:45 a.m.	COFFEE BREAK
9:30 a.m. to 11:00 a.m.	Authors of even-numbered posters present for discussion
11:00 a.m. to 4:30 p.m.	Posters available for independent viewing
4:30 p.m. to 5:00 p.m.	Poster Takedown

Poster Presentations

(* indicates second viewing at Plenary Session)

1. **Ethnic comparison of renal sodium handling in normotensive women.** AS Alfarano, GD James
2. **Early life environment, fertility and age of menarche: A test of life history predictions in a human population.** D Amir, MR Jordan, RG Bribiescas
3. **Nutritional status of Cape Verdean children living in Portugal.** AL Andre, MC Padez, VMR Marques, MI Varela-Silva
4. **Here Gorgan (turkmen in Iran) HLA genetics: transplantation, pharmacogenomics and anthropology.** A Arnaiz-Villena, A Amirzargar, C Areces, M Enríquez-de-Salamanca, J Marco, S Abd-El-Fatah-Khalil, M Fernández-Honrado, E Muñiz, J M Martín-Villa, D Rey
5. **Socioeconomic status and the linkage to Chronic Kidney Disease: a group study of hemodialysis patients in Guerrero, Mexico.** A Arroyo-Ramirez, MA Peña-Reyes
6. **Folate (F) and vitamin B complex (VBC) ingestion of teenagers Mérida, Yucatán, México.** ML Avila-Escalante, B Bogin, F Dickinson
7. **A study on birth weight among the Maya from Yucatan, Mexico.** H Azcorra, F Dickinson, S Datta Banik
8. **Study on global AGEing and adult health (SAGE): links among measures of perceived control, happiness, and blood pressure.** TM Barrett, MA Liebert, P Kowal, JJ Snodgrass
9. **Using the Protein Leverage Hypothesis to understand obesity among urban Costa Rican women.** TA Bekelman, C Santamaria-Ulloa, DL Dufour, LI Marin, AL Dengo
10. **Protein intake, energy intake, and BMI among USA adults from 1999–2000 to 2009–2010: little evidence for the protein leverage hypothesis.** RL Bender, DL Dufour
11. **Six-year follow-up of a point-source exposure to CWD contaminated venison, in an upstate New York community: Risk behaviors and health outcomes 2005–2011.** M Bongerman-Rose, KM Olszowy, A Roome, K Peckam, C Murnock, K Caldarelli, J Echard, J Lavelle, K Rachfal, S Hempstead, K Drouin, JM Darcy II, C Reiber, RM Garruto

12. **Maximal voluntary contraction (MVC) and its relationship with muscle and fat composition in Vanuatu.** K Bower, A Pomer, KM Olszowy, C Sun, G Lee, CW Chan, H Silverman, KN Dancause, L Tarivonda, G Taleo, M Abong, R Regenvanu, A Kaneko, C Weitz, JK Lum, RM Garruto
13. ***Illness in breastfeeding infants is related to concentration of lactoferrin and sIgA in mother's milk.** AA Breakey, K Hinde, CR Vallengia, A Sinofsky, and PT Ellison
14. **Ambulatory blood pressure at work is associated with catecholamine excretion but not salivary cortisol in a sample of hotel workers in Hawaii.** DE Brown, LA Morrison, GD James, JR Bindon
15. **Study on global AGEing and adult health (SAGE): The effects of social cohesion and personal relationships on depression diagnosis among older adults in India.** R Brigham, TE Gildner, MA Liebert, P Kowal, JJ Snodgrass
16. **Changes in adult blood pressure associated with modernization in the Republic of Vanuatu: 2007–2011.** G Buffa, KM Olszowy, C Sun, H Silverman, A Pomer, KN Dancause, G Lee, CW Chan, L Tarivonda, G Taleo, M Abong, R Regenvanu, A Kaneko, CA Weitz, JK Lum, RM Garruto
17. **The Indigenous Siberian Health and Adaptation Project: Implications of Epstein-Barr Virus infection for thyroid health and autoimmunity among an indigenous circumpolar population.** TJ Cepon-Robins, WR Leonard, LA Tarskaia, TM Klimova, VI Fedorova, ME Baltakhinova, VG Krivoschapkin, JJ Snodgrass
18. ***Understanding differences between infant feeding knowledge and behaviors among low-income African American mothers.** BG Chamberlain, AL Thompson, and ME Bentley
19. **Emergence of a persistent symptomatology in a cohort of patients reporting previous diagnosis and treatment for Lyme disease.** JM Darcy II, S Davis, Y Hao, and RM Garruto
20. **Application of a social network model to the spread of disease in a Newfoundland community.** JL Dimka
21. **Heart rate variability in the context of a difficult task is significantly stable over one month.** AF Farbman, GH Ice
22. ***Maternal anemia and acute phase reaction during breastfeeding interactively predict milk fat concentration among Ariaal mothers in northern Kenya.** M Fujita, E Brindle, Y Lo
23. **Do endocrine disrupting chemicals affect ovulatory status?** MV Gallo, JC Ravenscroft, LM Schell
24. **Prevalence and associated risk factors for low vitamin D levels among midlife Arab women living in Qatar.** LM Gerber, AE Giambone, H Al Ali, M Verjee
25. **The Shuar Health and Life History Project: Market integration, age, and intestinal helminth intensity among an indigenous lowland Ecuadorian population.** TE Gildner, TJ Cepon-Robins, MA Liebert, SS Urlacher, JJ Snodgrass, FC Madimenos, LS Sugiyama
26. **Dietary diversity among the Makushi of Guyana.** N Hoehn, A Nagel, T Moffat, J Bulkan, Makushi Research Unit, WM Wilson
27. **Acculturation and depression among Hispanic and Asian Americans.** EA Holdsworth
28. **Women whose maximum perceived stress is in the evening have an accentuated nocturnal increase and greater circadian variation in urinary cortisol but not catecholamine excretion.** GD James
29. **Activity space expansion and its association with subjective quality of life in the initial stage of economic development in rural Hainan, China.** Y Inoue, A Yazawa, A Stickley, D Li, C Watanabe
30. **Changing student misconceptions about evolution through an innovative laboratory curriculum in biological anthropology.** SL Johnston, M Knabb, J Auld, L Rieser-Danner

31. ***Variation among populations in the immune protein composition of mother's milk reflects subsistence pattern.** LD Klein, J Huang, EA Quinn, M Martin, AA Breakey, B Scelza, C Valeggia, G Jasienska, H Kaplan, M Gurven, C Lebrilla, K Hinde
32. **The Shuar Health and Life History Project: Lifestyle incongruity and immune function among the indigenous Shuar of Amazonian Ecuador.** MA Liebert, JG Ridgeway-Diaz, JJ Snodgrass, FC Madimenos, AD Blackwell, TJ Cepon-Robins, LS Sugiyama
33. **Comparing diet patterns among student resident subgroups in Aneityum, Vanuatu.** SM Loud, A Pomer, KM Olszowy, C Sun, KN Dancause, CW Chan, H Silverman, G Lee, L Tarivonda, G Taleo, M Abong, R Regenvanu, A Kaneko, CA Weitz, RM Garruto, JK Lum
34. **Evolution Education through Excitement and Anger: "Rap Guide to Evolution" influences on skin conductance.** CD Lynn, W Evans, B Brinkman
35. **Contribution of economic development to central adiposity and elevated C-reactive protein levels in older females from Vanuatu.** H Mann, I LI, R Spathis, KM Olszowy, C Sun, H Silverman, A Pomer, KN Dancause, G Lee, CW Chan, L Tarivonda, G Taleo, M Abong, R Regenvanu, A Kaneko, CA Weitz, RM Garruto, JK Lum
36. ***Is early complementary feeding a strategy to reduce the metabolic cost of lactation?** M Martin, M Gurven
37. **Kinship and sex-biased parental investment among the Mosuo of Southwest China.** SM Mattison, B Chak, HY Mao, PM Buston
38. **Human behaviors increase rodent reservoir host, vector tick spread and risk of contact with the Lyme disease pathogen, *Borrelia burgdorferi*.** M McAuliffe, A Roome, I Li, V Al-Feghali, C Malone, A Hammond, P Barone, J Christophel, J Bermeo, G Blumberg, K Bower, G Buffa, L Chiu, N Kaur, C Koulouris, A Leighton, K Lupo, A Maliga, N Monroe, C Pabafikos, D Rios, U Syed, S Tyurin, S Alam, N Cichetti, K Jones, A Nichter, P Patel, L Hill, A Ong, R Spathis, J Shepherd, RM Garruto
39. **Pathogenic exposures and infectious morbidity in infancy are associated with adult stature and BMI in a Filipino birth cohort.** KA McCabe, CW Kuzawa, and TW McDade
40. **Steroid hormone change in response to competition in juvenile boys.** TS McHale, PB Gray, DT Zava
41. **Integrative genomic approach for identification of functional variants associated with glucuronidation in American Indians: The Strong Heart Family Study.** PE Melton, N Franceschini, K Haack, C Bizon, ET Lee, JG Umans, LG Best, JW MacCluer, SA Cole, LA Almasy
42. **Longitudinal changes in Hemoglobin Levels and Rates of Anemia among the Tsimane' of Lowland Bolivia.** AA Miller, MO Aiello, WR Leonard, V Reyes-Garcia, T Huanca, TW McDade, RA Godoy
43. **A demographic analysis of childhood epidemics in the Åland archipelago.** EL Miller
44. ***Predictors of reported nursing frequency in Ariaal mothers and infants of Kenya.** EM Miller
45. **Feeding the machine: caloric intake and output during strenuous backcountry expeditions.** C Ocobock
46. **Secular changes in adult stature across four Melanesian islands of varying economic development in Vanuatu: Implications for chronic disease risk.** KM Olszowy, A Pomer, KN Dancause, C Sun, H Silverman, G Lee, CW Chan, L Tarivonda, G Taleo, M Abong, R Regenvanu, A Kaneko, CA Weitz, JK Lum, RM Garruto
47. **Association of obesity with sedentary behaviors and play outdoor among children.** C Padez, A Gama, I Mourão, H Nogueira, V Rosado
48. **Third molar development among Mexican urban youth.** ME Peña-Reyes and A Reynoso-Licona

49. **Gender inequality is associated with country-level sex disparities in multiple sclerosis prevalence.** J Perez, KA McCabe
50. **Dietary patterns of Nicaraguan children and their relationship to maternal perceptions of household food security.** BA Piperata, T Nagarajan, KK Schmeer, M Hubbe, H Leeper, A Body, S Sampath, A Herrera, ME Castrillo
51. **Height and reproductive success in Ni-Vanuatu women.** A Pomer, KM Olszowy, C Sun, KN Dancause, CW Chan, H Silverman, G Lee, L Tarivonda, G Taleo, M Abong, R Regenvanu, A Kaneko, CA Weitz, RM Garruto, JK Lum
52. ***The milk microbiome.** ML Power
53. ***Looking for adiponectin in all the wrong places: a case study in human milk and normal biological variation.** EA Quinn
54. **Subadult dietary variation at medieval Trino Vercellese, Italy and its relationship to adult diet and selective mortality.** LJ Reitsema, G Vercellotti, R Boano
55. **Seasonality and risk of infection of Lyme disease.** A Roome, M McAuliffe, L Hill, V Al-Feghali, N Monroe, G Buffa, K Bower, I Li, S Tyurin, C Pabafikos, A Leighton, U Syed, C Koulouris, D Rios, A Maliga, S Alam, P Patel, N Cichetti, A Nichter, K Lupo, C Malone, R Spathis, RM Garruto
56. **What does it mean to be a grandparent caregiver? Analyses from a cohort of the Kenyan Grandparents Study.** AFA Sadruddin, GH Ice, JA Bianco, E Juma
57. **Blood pressure and idioms of distress: A population survey.** A Sancilio, M Eggerman, C Panter-Brick
58. **Timing of the second epidemiological transition in Newfoundland.** DM Schmidt, L Sattenspiel
59. **Food insecurity and underweight/overweight among older adults in India: Results from the Study on global AGEing and adult health (SAGE).** JM Schrock, HH McClure, P Kowal, N Naidoo, JJ Snodgrass
60. **Study on global AGEing and adult health (SAGE): The role of income on depression diagnosis among older adults in six middle income countries.** JJ Snodgrass, MA Liebert, TE Gildner, P Kowal
61. **Diagnosis of pathological wheat reactions and the influence of the biomedical paradigm.** JC Stevenson, K Rankin-Sunter, CM Soper, CE Barrett, MJ Mosher
62. **The health effects of community gardening in Chicago.** SR Taylor, WR Leonard, G Jaworski, E Kaplan, N Torosin
63. **Early life psychosocial stress and blood telomere length among young adults in the Philippines.** RL Tennyson, LT Gettler, CW Kuzawa, MG Hayes, DTA Eisenberg
64. **Early life stress, PTSD and allostatic load in a sample of American Indian adults.** ZM Thayer, C Barbosa-Leiker, M McDonell, L Nelson
65. **Trajectories of pathogenic and obesogenic exposures and current inflammation in Chinese children and adults.** AL Thompson, K Houck
66. **The Shuar Health and Life History Project: Height, weight and body mass index references for the indigenous Shuar of Ecuador.** SS Urlacher, AD Blackwell, MA Liebert, FC Madimenos, JJ Snodgrass, LS Sugiyama
67. **Nutritional status of Portuguese children in the five administrative regions of mainland Portugal.** I Varela-Silva, B Medeiros de Abreu, A Gama, V Marques, H Nogueira, C Padez
68. **Variation in growth outcomes in relation to socioeconomic status and diet among subadult and adult individuals from medieval Trino Vercellese, Italy.** G Vercellotti, LJ Reitsema, R Boano

WEDNESDAY MORNING, MARCH 25, 2015 (CONTINUED)

- 11:30 a.m. to 12:45 p.m. **LUNCH BREAK**
- 11:30 a.m. to 12:30 p.m. **BREAKOUT SESSION 1: Early Career Mentoring**
Organizer: Susan Johnston
Grand Suites II
- 11:30 a.m. to 12:30 p.m. **BREAKOUT SESSION 2: Career Pathways Panel Discussion**
Organizers: Kristin Almskaar and Angela Garcia,
HBA Student Representatives
Grand Suites III

WEDNESDAY AFTERNOON, MARCH 25, 2015

- 1:00 p.m. **OPENING WELCOME TO PLENARY SESSION**
Andrea Wiley, President
- INTRODUCTION TO THE PLENARY SESSION**
EA Quinn, Organizer
Gateway 4 & 5
- 1:15 p.m. to 4:45 p.m. **PLENARY SESSION**
**The milk of human kind(ness): the importance
of human milk in human evolution and modern health.**
EA Quinn, Organizer
Gateway 4 & 5

Human milk is the first food an infant receives, but it would be a gross oversimplification to think of milk as only a food. Milk contains not only the nutrients necessary to support infant growth and development but is also a potent programming signal during postnatal development. Human milk has been under considerable evolutionary selection during human evolution, and yet little research has considered this importance, or the many ways in which milk may have supported early phenotypic plasticity facilitating the global expansion of modern humans. This plenary session will serve to integrate the long history of studying human milk in nutrition and link this tradition with the emerging focus on milk within human biology.

- 1:15 p.m. **Milk and the (maternal) environment: insights from decades
of research in rural Gambia**
RM Bernstein, SE Moore, A Prentice, AM Prentice
- 1:45 p.m. **Assemblage of a Milk-oriented Microbiota (MOM) in infants:
Lessons from your other MOM**
D Mills
- 2:15 p.m. **Maternal Obesity, Breast Milk Composition, and Infant Growth**
E Demerath
- 2:45 to 3:00 p.m. **COFFEE BREAK**
- 3:00 p.m. **Programming of intestinal gene expression by mother's milk:
Evidence from monkeys and humans**
SM Donovan, MH Monaco, JM Drnevich, LA Davidson, I Ivanov,
B Lönnerdal and RS Chapkin
- 3:30 p.m. **The Behavioral Biology of Lactation in Evolutionary Context:
Insights from Rhesus Monkeys**
K Hinde
- 4:00 p.m. **Adaptation of human milk components to the maternal-infant
environment**
AL Morrow

- 4:30 p.m. **Closing Remarks**
EA Quinn
- 5:00 p.m. **RAYMOND PEARL MEMORIAL LECTURE**
Evolution of an hypothesis: DFYNP is a peptide sequence important in cell-cell and cell-matrix interactions in epithelial cells. Bacteria may utilize this sequence to breach epithelial barriers.
Professor Margaret Neville
University of Colorado at Denver
Gateway 4 & 5
- 6:30 to 9:30 p.m. **HBA Dinner Reception**
Lindberg

THURSDAY, March 26, 2015

- 8:30 a.m. to 10:00 a.m. **SESSION A: Biocultural Studies**
Chair: Christopher Lynn
Ballpark 1 & 2
- 8:30 a.m. **Snoring and cardiovascular health in indigenous Siberian adults**
HJ Wilson, TM Klimova, ML Germanovna, VI Fedorova, A Fedorov, WR Leonard
- 8:45 a.m. **Time and transition: actual and ideal body size of high and low socioeconomic women in Cali, Columbia over a 13 year period**
M Howells, DL Dufour, HS Williams and JC Reina
- 9:00 a.m. **Body size and nutritional status of Maya children between 12.0 and 23.2 months of age in Yaxcaba, Yucatan: In relation to gestational age and socioeconomic status**
S Datta Banik, and RM Mendez Gonzalez
- 9:15 a.m. **Tattooing as protection against enemy Arrows: Enhanced immune response among the heavily tattooed as an allostatic stress response**
JT Dominguez, J DeCaro, CD Lynn
- 9:30 a.m. **“Internet addiction (IA)” is not an addiction: Genetic markers linking to IA conform to models based on ADHD and harm-avoidance studies**
C Sun, R Spathis, K Sankaranarayanan, CW Chan, JK Lum
- 9:45 a.m. **The “Index of Vulnerability” (IoV): A quantitative measure of stressor exposure that predicts a range of perceived health outcomes**
PS Tallman
- 10:00 a.m. to 10:15 a.m. COFFEE BREAK
- 10:15 a.m. to 11:45 a.m. **SESSION B: Impacts on Immunity**
Chair: Siobhan Mattison
Ballpark 1 & 2
- 10:15 a.m. **The interaction of season of birth on the association between QOL and inflammation in China: A Cohort effect?**
A Yazawa, Y Inoue, A Stickley, D Li, C Watanabe
- 10:30 a.m. **Pregnancy, age and IgE: unexpected levels of immune defenses in U.S. women (National Health and Nutrition Examination Survey, 2006-2007)**
AC Rivara and EM Miller

- 10:45 a.m. **Proliferation Response to Ethanol: *Porphyromonas gingivalis***
NA Short, PW Ewald
- 11:00 a.m. **Testosterone is associated with lower cell-mediated immune responses in a forager-horticultural population**
BC Trumble, AD Blackwell, M Emery Thompson, J Stieglitz, I Maldonado Suarez, H Kaplan, M Gurven
- 11:15 a.m. **Implications of oral microbiome diversity among the Cheyenne & Arapaho of Oklahoma**
A Ozga, K Sankaranarayanan, P Spicer, C Warinner and CM Lewis, Jr.
- 11:30 a.m. **Steroid hormones and mucosal immunity in Bolivian male adolescents**
CR Hodges-Simeon, M Gurven, A Blackwell, and SJC Gaulin
- 11:45 p.m. BREAK
- Noon to 1:15 p.m. **HUMAN BIOLOGY ASSOCIATION ANNUAL AWARDS LUNCHEON**
Ballpark 3
- 1:15 p.m. BREAK
- 1:30 p.m. to 3:00 p.m. **SESSION C: Woman's Reproduction and Infant Nutritional Support**
Chair: Elizabeth Rowe
Ballpark 1 & 2
- 1:30 p.m. **Associations of infant feeding behavior and appetite with infant weight status in American Samoans**
NL Hawley, R Nadkarni, J Sternberg Lamb, M Faiai, BT Muasau-Howard, ST McGarvey
- 1:45 p.m. **Changing birth dynamics and breastfeeding trends in a Maya agriculturalist community**
A Veile, K Kramer
- 2:00 p.m. **Maternal metabolic adaptations to pregnancy in the Philippines**
RL Fried, CW Kuzawa
- 2:15 p.m. **Estrogen receptor alpha (ESR1) variation and menstrual fluid loss: implications for fecundity and endometriosis risk**
EJ Rowe and LC Rockwell
- 2:30 p.m. **Genome-wide association study of Samoan women's reproductive biomarkers**
ST McGarvey, G Lambert-Messerlian, RL Minster, O Buhle, J Lin, H Maredia, S Viali, NL Hawley, G Sun, H Cheng, R Deka, DE Weeks
- 2:45 p.m. **Does individual natural (non-pathological) variation in ovarian steroid concentrations predict intrapopulation variation in completed (lifetime) fertility? An empirical test using longitudinal data from a natural fertility population.**
VJ Vitzthum, D Bellido, H Spielvogel, J Burch, and J Thornburg
- 3:00 p.m. to 3:15 p.m. COFFEE BREAK
- 3:15 p.m. to 4:30 p.m. **SESSION D: Life History in variable Environments**
Chair: Amanda Veile
Ballpark 1 & 2

- 3:15 p.m. **Heat and hydration status: predictors of repeated measures of urine specific gravity among Tsimane' adults in the Amazon**
AY Rosinger
- 3:30 p.m. **Morningness/eveningness as a human life history trait**
D. Maestriperi, D. Ponzi, A. Henry, K. Kubicki, N. Nickels, M.C. Wilson
- 3:45 p.m. **Quantile regression estimates of birth weight responses to maternal and pregnancy characteristics in Japan**
MK Melby, R Xie, TW Ilvento
- 4:00 p.m. **Exploring the effects of energy reserves in modifying tradeoffs between immunostimulation and growth in children from Galapagos, Ecuador**
KM Houck, AL Thompson, MV Sorensen
- 4:15 p.m. **Strategic affiliation with out-groups in lowland Bolivian horticulturalists: life history, recent resource shortfalls, and social support**
AC Pisor
- 4:30 p.m. **Gut microbiome diversity among the Cheyenne & Arapaho Tribes of Oklahoma** K Sankaranarayanan, A Ozga, P Spicer, C Warinner, and CM Lewis, Jr
- 4:45 p.m. BREAK
- 5:00 to 6:30 p.m. **HBA ANNUAL BUSINESS MEETING**
Ballpark 1 & 2
- 7:00 to 9:30 p.m. **HBA STUDENT RECEPTION** (students only)
Ballpark 2 & 3

FRIDAY, MARCH 27, 2015

- 8:00 a.m. to 12:00 p.m. **JOINT AAPA/HBA SYMPOSIUM**
Gateway 2

Title: Multi-generational Perspectives on Human Biology and Anthropological Genetics: A Symposium in Honor of Michael H. Crawford.

Organizers: William R. Leonard (w-leonard1@northwestern.edu; Northwestern University) and Dennis H. O'Rourke (dennis.orourke@anthro.utah.edu; University of Utah)

Abstract: Over the past 40 years, genetic approaches have infused nearly every aspect of research in our discipline; from nonhuman primate biology and behavior, to human adaptability and disease ecology, forensic analysis, and human evolutionary genetics. Such research approaches utilize genetic data from both contemporary and past populations to elucidate the origin and nature of human biological diversity. The unquestioned leader in the growth and influence of anthropological genetics is Michael H. Crawford, of the University of Kansas. From his early graduate research in primate genetics, to the early and seminal co-edited volume on *Methods and Theories in Anthropological Genetics*, through a series of additional volumes on Current Developments in Anthropological Genetics, to contemporary textbooks in the field, Michael Crawford has defined the anthropological genetics landscape for three generations of colleagues, collaborators, and students. Through his numerous field projects among indigenous and migrant populations around the world, Mike Crawford has charted the development and growth of genetic and population analyses of human variation in a myriad of social and ecological settings. He has also remained current on emerging trends in both laboratory and statistical analyses, adopting these new methods to refine the testing of anthropological hypothesis in his own research, and in his training of students and post-doctoral fellows. The presentations in this symposium reflect both the tremendous influence that Mike Crawford has had in developing and shaping anthropological genetics, and the breadth of his contributions to human population biology and biological anthropology.

Posters

1. *Y chromosome diversity in the Garifuna of Caribbean Central America*. Baldi N (Universidad de Costa Rica), Beaty K (University of Kansas), Paz EH (Universidad de Costa Rica), Crawford MH (University of Kansas).
2. *Migration and expansion: Maternal markers of the Garifuna*. Beaty KG (University of Kansas), Baldi NF (Universidad de Costa Rica), Herrera Paz EF (Universidad Católica de Honduras) Phillips-Krawczak C (Mayo Clinic), Carpenter MG (University of Kansas), Crawford MH (University of Kansas).
3. *Maternal lineage of pre-Hispanic Mayans from the archeological sites "El Rey" and "Palenque"*. Muñoz MDL (Instituto Politécnico Nacional, Mexico), Ochoa-Lugo MII (Instituto Politécnico Nacional, Mexico), Perez-Ramirez G (Instituto Politécnico Nacional, Mexico), Romano-Pacheco A (Universidad del Claustro de Sor Juana, Mexico), Ramos E (Instituto Nacional de Antropología e Historia, Mexico), Martinez-Meza A (Instituto Nacional de Antropología e Historia, Mexico).
4. *Current Developments in Anthropological Genetics of the North American Arctic*. Hayes MG (Northwestern University), Tackney J (University of Utah), Raff J (University of Texas), Rzhetskaya M (Columbia University), O'Rourke D (University of Utah).
5. *Paternal genetic structure in contemporary Mennonite communities from the American Midwest*. Melton PE (University of Western Australia), Beatty KG (University of Kansas), Mosher MJ (Western Washington University), Crawford MH (University of Kansas).
6. *Examining epigenetic effects on evolution through a migration model*. Mosher MJ (Western Washington University).
7. *Evidence for selection in human populations for Black/Dark Brown hair color using Phenotype Informative Markers*. Schanfield MS (George Washington University), Gettings K (George Washington University), Podini D (George Washington University).
8. *Placenta-specific protein 1 (PLAC1): An ancient and crucial element in placental development*. Devor E (University of Iowa).
9. *Inconsistent inheritance of telomere length (TL): is offspring TL more strongly correlated with maternal or paternal TL?* Eisenberg D (University of Washington).
10. *From Anthropological Genetics to Discovery of Genes for Complex Diseases in Human Populations: The Transdisciplinary Impact of Professor Michael H. Crawford*. Duggirala R (Texas Biomedical Research Institute), Arya R (University of Texas Health Sciences Center), Puppala S (Texas Biomedical Research Institute), Williams JT (Texas Biomedical Research Institute), Farook VS (Texas Biomedical Research Institute), Curran JE (Texas Biomedical Research Institute), Jenkison CP (University of Texas Health Science Center), Almasy L (Texas Biomedical Research Institute), Mahaney MC (Texas Biomedical Research Institute), Comuzzie AG (Texas Biomedical Research Institute), Williams-Blangero S (Texas Biomedical Research Institute), Lehman DM (University of Texas Health Science Center), Blangero J (Texas Biomedical Research Institute).
11. *Women who deliver twins are more likely to smoke and have high frequencies of specific SNPs*. Madrigal L (University of South Florida).
12. *Genetic variation in central obesity measures and serum uric acid in American Indians*. Chittoor G (University of North Carolina), Haack K (Texas Biomedical Research Institute), Laston S (Texas Biomedical Research Institute), Best LG (Missouri Breaks Industries), Lee ET (University of Oklahoma), Howard BV (Medstar Health Research Institute), Maccluer JW (Texas Biomedical Research Institute), Umans JG (Medstar Health Research Institute), Cole SA (Texas Biomedical Research Institute), Voruganti VS (University of North Carolina).
13. *The genetic contribution to obesity and its associated co-morbidities: Insights from both human and non-human primate cohorts*. Comuzzie AG (Texas Biomedical Research Institute).
14. *Identifying genetic associations with central adiposity in Hispanic subgroups: the HCHS/SOL Study*. Justice AE (University of North Carolina), Young K (University of North Carolina), Gogarten SM (University of Washington), Graff M (University of North Carolina), North KE (University of North Carolina), Laurie C (University of Washington), Isassi C (Albert Einstein College of Medicine), Laurie C (University of Washington).

15. *The Importance of Multi-Ethnic Genetic Studies: the Population Architecture using Genomics and Epidemiology (PAGE) Study.* North K (University of North Carolina).
16. *Health disparities in prostate cancer: Tumor epigenome profiling in African American vs European American men.* Rubicz R (Fred Hutchinson Cancer Research Center), Shui IM (Fred Hutchinson Cancer Research Center), Zhao S (Fred Hutchinson Cancer Research Center), Wright JL (Fred Hutchinson Cancer Research Center), Kolb S (Fred Hutchinson Cancer Research Center), Ostrander EA (National Human Genome Research Institute), Feng Z (University of Texas), Fan J-B (Illumina), Stanford JL (Fred Hutchinson Cancer Research Center).
17. *Meta-analysis of exome chip variants identifies novel low-frequency loci contributing to body fat distribution.* Young K (University of North Carolina).
18. *Body size and proportions among four indigenous Siberian populations: Climatic and social influences.* Snodgrass JJ (University of Oregon), Leonard WR (Northwestern University), Tarskaia LA (University of Kansas), Klimova TM (Northeastern Federal University), Fedorova VI (Northeastern Federal University), Baltakhinova ME (Northeastern Federal University), Kri-voshapkin VG (Northeastern Federal University).
19. *Applications of Medicinal Plants in the Treatment of Psychological Disorders.* Halberstein R (University of Miami).
20. *Spirited Away: Coevolution with HepB/HepC to explain the alcoholic flusher paradox.* Ortega Rebecca (Western Washington University); Stevenson Joan (Western Washington University).

Discussant: Relethford J (SUNY-Oneonta)

Please consult the AAPA program for abstracts from the Joint AAPA/HBA session.