Derek E. Wildman, Ph.D.

1 February 2021

Derek E. Wildman

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EDUCATION

Graduate

1994-2000	Department of Anthropology and New York Consortium in Evolutionary Primatology, New York University, New York, NY. M.Phil. 1998, Ph.D. 2000.
1995	Department of Anthropology, University of Arizona, Tucson, AZ. M.A.

Baccalaureate

1990	Department of Anthropology, University of Colorado, Boulder, CO. B.A.

TRAINING

Postgraduate (Postdoctoral)

2000-2005	Center for Molecular Medicine and Genetics Wayne State University, Detroit, MI Advisors: Morris Goodman, Ph.D., Lawrence Grossman, Ph.D. Subjects: Evolutionary neuroscience, phylogenetics, genomics

FACULTY APPOINTMENTS

2018-present	Professor (Tenured) Genomics Program Global and Planetary Health Area College of Public Health University of South Florida
2017-2018	Inaugural Faculty Member Carle Illinois College of Medicine BioMedical and Translational Sciences and Clinical Sciences
2015-2018	Faculty Affiliate Computational Science and Engineering University of Illinois, Urbana-Champaign
2014-2018	Professor (Tenured) Department of Molecular and Integrative Physiology University of Illinois, Urbana-Champaign
2015-2018	Research Theme Leader: Computing Genomes for Reproductive Health Carl R. Woese Institute for Genomic Biology University of Illinois, Urbana-Champaign
2014	Professor (Adjunct) Center for Molecular Medicine & Genetics Wayne State University School of Medicine
2010-2014	Associate Professor (Research-Educator Track, Joint) Center for Molecular Medicine & Genetics Wayne State University School of Medicine
2010-2014	Associate Professor (Tenured, Research-Educator Track) Department of Obstetrics and Gynecology Wayne State University School of Medicine
2005-2010	Assistant Professor (Research-Educator Track, Joint) Center for Molecular Medicine & Genetics Wayne State University School of Medicine
2005-2010	Assistant Professor (Research-Educator Track) Department of Obstetrics and Gynecology Wayne State University School of Medicine
1998	Adjunct Lecturer Department of Anthropology City University of New York, Lehman College New York, NY

HOSPITAL OR OTHER APPOINTMENTS

2005-2014	Section Head, Unit of Molecular Evolution in Reproduction Perinatology Research Branch, Eunice Kennedy Shriver National Institute of Child Health and Human Development/NIH/DHHS

MAJOR PROFESSIONAL SOCIETIES

American Association for the Advancement of Science (AAAS)
Sigma Xi
Royal Society of Medicine (Overseas Fellow)
Society for the Study of Mammalian Evolution (SSME)
Society for the Study of Reproduction (SSR)
Placenta Association of the Americas

HONORS/AWARDS

2015	International Federation of Placenta Associations (IFPA) Senior Award in Placentology
2012	Wayne State University School of Medicine Research Excellence Award
2009	Wayne State University School of Medicine Research Excellence Award
2008-2009	Junior Faculty award from the Wayne State University Academy of Scholars. The award letter states “Each year the Academy selects two junior faculty members, one from the Sciences and one from the Social Sciences and Humanities to receive the Junior Faculty Award. The awardee is selected from those non-tenured faculty members who appear to be building their careers in the classic way – publications in a focused area, providing them with national/international recognition earlier than usual in their careers.”
2007	Admitted to Sigma Xi, The Scientific Research Society
2000	Linnean Society of London Travel Award
1994-2000	New York Consortium in Evolutionary Primatology Graduate Fellowship
1992-1994	University of Arizona Graduate Fellowship

SERVICE

PROFESSIONAL CONSULTATION (OTHER THAN PATIENT CARE)

2005	Perinatology Research Branch, NICHD/NIH, provided consultation services in the evolution of reproduction

JOURNAL/EDITORIAL ACTIVITY (2000-present)

EDITORIAL *Ad Hoc* REVIEWER

American Journal of Immunology
American Journal of Obstetrics and Gynecology
American Journal of Physical Anthropology
American Journal of Primatology
American Naturalist
Biological Journal of the Linnean Society
Biology of Reproduction
BMC Biology
BMC Evolutionary Biology
BMC Genomics
Current Biology
Cytogenetics & Genomic Research
Evolution
F1000Research
FEBS Letters
Gene
Genome Biology
Genome Research
Genomics
Human Biology
International Journal of Primatology
Journal of Biology
Journal of Experimental Zoology Part B: Molecular and Developmental Evolution
Journal of Human Evolution
Journal of Immunology
Journal of Molecular Evolution
Journal of Reproductive Immunology
Mitochondrion
Molecular Phylogenetics & Evolution
Molecular Biology and Evolution
Molecular Ecology
Molecular Medicine
Nature Communications
Nature Genetics
Placenta
PLoS One
Primates
Proceedings of the National Academy of Sciences (USA)
Proceedings of the Royal Society B
Science
Scientific Reports
Trends in Genetics
Zoologica Scripta
Zoology

EDITORSHIPS/EDITORIAL BOARDS

2012-2014	Associate Editor, Journal of Human Evolution
2011-2017	Editorial Board Member, Placenta
2020-present	Editorial Board Member, Genes
2010-2018	Editor in Chief, Molecular Phylogenetics & Evolution
2007-present	Editorial Board Member, Journal of Mammalian Evolution
2007-2010	Deputy Editor in Chief, Molecular Phylogenetics & Evolution
2004-2007, 2019-present	Associate Editor, Molecular Phylogenetics & Evolution
2000-2002	Associate Editor for Biodiversity & the Environment, Yemen Update

OTHER PROFESSIONALLY RELATED SERVICE

Peer Evaluation

Evaluation of promotion and tenure packets for faculty at:
Northwestern University
Duke University
Brown University

Evaluation of the nomination of a Killam Prize candidate, which honors distinguished Canadian research scholars.

UIUC School of Molecular and Cellular Biology, Department of Molecular and Integrative Physiology Promotion and Tenure Committee (2017-2018)

UIUC Campus Research Board Peer Review (2015-2018)

Outreach

World of Genomics, Field Museum, Chicago, IL – May 2017

March of Dimes, March for Babies Urbana, IL - April 29, 2017

Champaign West Rotary Club Champaign, IL – February 22, 2017

Genome Day, Orpheum Theatre, Champaign, IL – November 2016

March of Dimes Signature Chefs Auction, Champaign, IL – October 13, 2016

CI Living, WCIA Broadcast Champaign, IL – September 26, 2016

Individualizing Medicine Conference Patient Symposium, Mayo Clinic (September 20, 2016)

Organizing Committee Chairperson

Individualizing Medicine Conference, Mayo Clinic (2014-2017)

USF Committees

Genomics Working Group

Epidemiology Search Committee
Microbiome Search Committee Chair

UIUC Committees

Carl R. Woese Institute for Genomic Biology Executive Committee (2014-present)

Center for Computational Biotechnology and Genomic Medicine Steering Committee (2014-present)

Computing Genomes for Reproductive Health Theme Faculty (2014-present)

Mayo Clinic & Illinois Alliance For Technology-Based Healthcare Steering Committee (2014-present)

Cluster hire in Big Data Management Committee (2015)

Molecular and Integrative Physiology Executive Committee (2015-present)

Molecular and Integrative Physiology Awards Committee (2016)

World of Genomics Advisory Committee (2016-2017)

Personalized Medicine Committee for the Interdisciplinary Health Sciences Initiative at Illinois (2016-present)

Molecular and Integrative Physiology Department Head Review Committee (2016-2017)

Molecular and Integrative Physiology Review Committee (2016-2017)

Molecular and Integrative Physiology Retreat Committee (2016-2017)

Health Sciences Strategy Task Force (2017-present)

Carl R. Woese Institute for Genomic Biology Retreat Steering Committee (2017-2018)

Developing Responses to Poverty through Education And Meanings (DREAM)/Designing Spaces of Hope (Interior and Exterior) (De.SH(ie)) Faculty Advisory Board (2017)

Roy J. Carver Biotechnology Center Faculty Advisory Committee (2017-2018)

University of Birmingham/University of Illinois at Urbana-Champaign BRIDGE Fellowship Steering Committee (2018)

International service

H3Africa Steering Committee (2017)

H3 Africa Puclications Committee

***Ad hoc* reviewer for research grants**

National Science Foundation, USA (2003-present)

Louis Leakey Foundation (2001-present)

Deutsche Forschungsgemeinschaft (DFG) (2010)

Genome Canada (2007)

Korea Science and Engineering Foundation (2007)

Marsden Foundation, New Zealand (2020)

Study Section Member, National Science Foundation
Senior Biological Anthropology Panel (2012-2014)

Doctoral Dissertation Improvement Grants (2007-2010)

HOMINID panel (2007)

Preproposal panel, IGERT training grants (2004)

Study Section Member, National Institutes of Health
F08 Genomics Panel (2019-present)

Social Epigenomics and Health Disparities review panel (2018-2020)

Global Omics special emphasis panel, NHGRI (Ad Hoc) (2017)

Ad Hoc member, NICHD Pregnancy and Neonatology Study Section (2012)

COBRE Panel (2012)

Treasurer
Iowa Primate Learning Sanctuary (IPLS; 2012)

Judge
Wayne State University Undergraduate Research Conference (2009)

Wayne State University Graduate Student Research Day (2005-2008)

USF One Health Codeathon (2020)

Member
Executive Committee of the Bonobo Hope Board of Directors
(Iowa Primate Learning Sanctuary; 2012-2016).
IPLS/ACCI is a scientific research facility dedicated to understanding endangered great apes through the study of their language, culture and intelligence. They employ noninvasive techniques to study bonobo and orangutan cognitive and communicative capabilities.
http://artforbonobohope.org/iowa-primate-learning-sanctuary/

DRYAD Management Board (2009-2013).
Dryad is a repository of data underlying scientific publications, with an initial focus on evolutionary biology and related fields. Dryad will allow future investigators to validate published findings, explore new analysis methodologies, repurpose the data for research questions unanticipated by the original authors, and perform synthetic studies such as formal meta-analyses.
http://www.datadryad.org/repo/

COPE
(The Committee on Publication Ethics; 2008-2014).
COPE is a forum for publishers and editors of peer-reviewed journals to discuss issues related to the integrity of work submitted to or published in their journals. It supports and encourages editors to report, catalogue and instigate investigations into ethical problems in the publication process. http://publicationethics.org

Wayne State University (WSU) Committees
Office of the Vice President for Research, Special Committee (2012-2016)

Member Research Committee (2010-2014)

Member Professional and Academic Development (PAD) Advisory Board (2009-2014)

Member Academic Senate: Elected to 3-year term (2007-2010; 2010-2013)

Member Facilities, Support Services and Technology Committee (FSST) (2007-2010)

WSU School of Medicine Committees
Member, Research Development Committee 2010-2014

Departmental Committees (WSU: CMMG)
Graduate Admissions Committee (2013-2014)

Promotion and Tenure Committee (elected 2010-2014)

Director: Summer Undergraduate Research Program (SURP) (2009-2014)

Chair: Education/Outreach committee (2008-2014)

Faculty Recruitment Committee (*ad hoc* 2008)

Education/Outreach committee (2007-2008)

Faculty Recruitment Committee (2005-2007)

Graduate and Medical Curriculum Training (2005-2007)

Website development task force (2005-2007)

Graduate Examination Committee (2005-2007)

TEACHING

1. University of South Florida
    a. Courses developed and taught
        i. Instructor, PHC7085, Public Health Laboratory Bioinformatics
2. UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
    a. Courses developed and/or taught
        i. Associate Course Director – Obstetrics (Carle-Illinois College of Medicine) (2017). This course was scheduled to be offered in 2019.

ii. Interim Obstetrics Associate Course Director (Carle-Illinois College of Medicine) (2015-2016)
iii. Human Medical Genomics (MCB493:HMG) (2016-present)
iv. Mayo-Illinois Computational Genomics Summer Course (lecturer, Phylogenomic Medicine, 2015-present)
v. Carl R. Woese Institute for Genomic Biology Genomics Massive Open Online Course (MOOC - https://www.coursera.org/learn/genomics-research - in preparation 2015-2017, live 2017)

3. YEARS AT OTHER COLLEGES/UNIVERSITIES
   a. WAYNE STATE UNIVERSITY
      i. Courses taught
         1. Advanced Human Genetics (MBG 7600-lecturer, 2005-2009; Course Director, 2010-2014)
         2. Scientific Communication II (MBG 7901-lecturer, 2008-2014)
         3. Computer Applications in Molecular Genetics (MBG 8680- Lecturer, 2005, 2006; Course Director, 2007-2014)
         4. Advanced Medical Genetics (MBG 7800-lecturer, 2007-2014
         5. Current Topics in Reproductive Science (Physiology 7775- lecturer, 2006; 2010)
         6. Bioinformatics II (Computer Sciences 7410-lecturer, 2009)
         7. Genetics Counseling Seminar (MBG-7880-lecturer, 2009)
         8. Genomic Medicine Mini-Seminar Course Director, (2009)
         9. Advanced Topics in Computer Sciences (Computer Sciences 7991-lecturer, 2007)
   b. LEHMAN COLLEGE, CITY UNIVERSITY OF NEW YORK (1998).

4. OTHER TEACHING
   a. Molecular Evolution Journal Club at the NIH (2007-2010)
      We have arranged a series of presentations at the PRB that are focused on the latest developments in the field of evolutionary biology. We present an article approximately every two months. The target audience is clinical and research fellows as well as faculty.
   b. Molecular Phylogenetics Course at Javeriana University, Bogota Colombia
      In fall 2009, I had the opportunity to teach an intensive (40 contact hours) week-long graduate course at the Faculty of

Sciences Pontificia Universidad Javeriana. The course was entitled Molecular Phylogenetics, and I was invited to teach this course. I was the only Instructor, and a graduate student in my laboratory (N Jameson) assisted.

c. Lecture Series for Fellows and Faculty (2005-2008) NIH Perinatology Research Branch
   i. Introduction to Molecular Evolution (1.5 contact hours)
   ii. Phylogenetic Analysis (1.5 contact hours)
   iii. Detecting Natural Selection in DNA sequences (1.5 contact hours
   iv. Phylogenetic Footprinting and Shadowing (1.5 contact hours)
   v. Comparative Genomics (1.5 contact hours)

d. NIH Perinatology Research Branch Introductory Course for New Residents and Fellows (2005-2008)
Evolutionary Genetics/Genomics. Designed Course Material

e. Presentation at NIH PRB round
Using Internet Genome Browsers (Aug. 16, 2005)

f. Essays/Theses/Dissertations directed (n=14)

2017-2018	Xiyu Ge, Ph.D. student. Advisor.
2017-2018	Yunshu Song, Ph.D. student. Advisor.
2017-2018	Martin Malik, B.S. Undergraduate conducted honor's thesis in my lab.
2016-2018	Arjun Athreya, Ph.D. student. CompGen Fellowship Co-supervisor.
2016-2018	Jessica Jia-Wen Saw, Ph.D. student. Advisor.
2015-2016	Xavier Ortiz Mangual, M.S. Advisor. Current Position: Biologist with the Puerto Rico Vector Control Unit within the Puerto Rico Science, Technology and Research Trust at the Centers for Disease Control and Prevention.
2015-2018	Ramonasadat Haji-Seyed-Javadi, Ph.D. student. Advisor.
2012-present	William Gundling, Ph.D. student. Advisor.
2012-2014	Gregory Stempfle, Ph.D. student. Advisor. Current Location: Ferndale, Michigan.
2010-2014	Levent Sipahi, M.D./Ph.D. Ph.D Thesis Title, "Proximate and evolutionary insights into the epigenetics of posttraumatic stress disorder." Advisor. Ph.D. 2014. Current Position:

Psychiatric Residency Student, University of North Carolina.

2008-2013 Natalie Jameson, Ph.D. Thesis Title, "Platyrrhine phylogenetics with a focus on callitrichine life history adaptations". Advisor. Ph.D. 2013. Current Position: Scientist 2, Progenity, Ann Arbor, MI.

2009-2013 Amy Boddy, Ph.D. Thesis Title, "Insight into human brain evolution through phylogenetic analysis and comparative genomics". Advisor. Ph.D. 2013. Current Position: Assistant Professor, Anthropology, University of California, Santa Barbara.

2007-2010 Zack Papper, Ph.D. Thesis Title, "Evolution of Lactate Dehydrogenase Genes in Primates, with Special Consideration of Nucleotide Organization in Mammalian Promoters" Advisor. Ph.D. 2010. Current Position: Director of Data Intelligence Group at the NYC Department of Finance, New York, NY.

2005-2007 Caoyi Chen, M.S. Thesis Title, "Evolution of progesterone receptors" Advisor. M.S. 2007. Current position: Faculty, Nantong University, China.

2005-2006 Johanna Scheer, MD, conducted honor's thesis research in my laboratory as a WSU undergraduate student (Mathematics, Biology). Title "Genome dynamics in New World monkeys." Currently practicing medicine, Grand Rapids, MI.

g. <u>Students who have done lab rotations/directed studies/worked or volunteered in lab (n=27)</u>
High School: Mona Fayed (2010), Elena Griffor (2008, 2009), Renjay Liu (2008).

Undergraduates, USF: Aaliyah Bourne (2019-2020)

Undergraduates UIUC: Priya Karkhanis (2017-present), Owen Haupt (2017), Ajoke Iromini (2017-present), Loni Sneed (2016-present), Martin Malik (2016-present), KaSandria Clark (2016-2017), Christina Chan (2016), Christina Liu (Case Western, 2016), Stephanie Hein (2015-2016), Joseph Leasure (2014-2016), Benjamin Lamar (2015-2017).

Graduates UIUC: Chang Hu (2017-present), Daphne Eagleman (2017), Anushna Sen (2017), Adrika Raybarman (2017), Xinyi Li (2017), Xiyu Ge (2017), Yunshu Song (2017)

Undergraduates WSU: Kiara Brooks (2010), Lindsay Townes (2008, 2009), Francina Gonzalez (2008), Alexandra Dickson (2007), Magdalena Oryzlowski (2005).

Graduates WSU: Nicholas Ward (2013), Gregory Moyerbrailean (2012), Munirul Islam (2007-2011), Paul Albosta (2010), Saied Hadarian (2007- 2009), Shazzad Hossein (2007), Keith Mullins (2006, 2007).

Graduates USF: Jessica Rose (2019); Santiago Hernandez (2020-present).

h. Ph.D. committee member (n=15)
Jiajia Yang (University of South Florida, Ph.D. candidate), Mariana Burgos Angelo (University of South Florida, Ph.D. candidate), Laren Riesche (University of Illinois, Chicago, Ph.D. 2017), Oliver Griffith (National University of Australia, Ph.D. 2015), Michael Elliott (Simon Fraser University, British Columbia, Canada, Ph.D. 2014), Steven Horne (WSU CMMG, Ph.D. 2016), Jennifer Baker (The George Washington University, Washington D.C., Ph.D. 2015), Itai Roffman (University of Haifa, Israel, Ph.D. 2016), Thilakam Murali (WSU CMMG, Ph.D. 2013), Rick Smith (WSU CMMG), Dumrong Mariang (WSU CMMG, Ph.D. 2012), Marla Spain (WSU Biology: left program in 2010), Victor Medved (WSU Biology), Lesley Lawrenson (WSU CMMG), Munirul Islam (Computer Science), Tiffani Gibson (Physiology, PhD. 2010), Catherine Dupont (Physiology, Ph.D. 2009).

i. Master's Committee Member (n=2)
Jan Dahrendorff (USF MSPH program), Samira Jahangeri (USF MSPH program)

j. Postdoctoral Scholars Trained (n=10)

2016-2019	Maria Carmen Valero Quiros, Ph.D., Laboratory Supervisor in my laboratory researching the role of extracellular vesicles in epigenetic processes including DNA methylation and miRNA, small RNA, and long-non-coding RNA regulation.
2016-present	Priya Pantham, Ph.D., Carl R. Woese Institute for Genomic Biology Fellow in my laboratory researching high-throughput approaches to test hypotheses and identify genes involved in the pathophysiology of major obstetrical

	syndromes. Now serving as mentor on K99 award held at UCSC.
2015-2017	Don Armstrong, Ph.D., Research Scientist in my laboratory researching the evolutionary basis of placentation and its relationship to adverse pregnancy outcomes using bioinformatics and computational approaches.
2012-2014	Lisa Nevell, Ph.D., Postdoctoral fellow in my laboratory who researched *in vitro* models of brain plasticity. Current Position: Lecturer, Anthropology, Boston University.
2012-2014	Jason Caravas, Ph.D., Postdoctoral fellow in my laboratory who researched high dimensional genomic data sets. Current Position: Bioinformatician with the Centers for Disease Control and Prevention, Atlanta, Georgia.
2010-2013	Michael McGowen, Ph.D., Postdoctoral fellow in my laboratory who conducted research on the evolution of encephalization. Current Position: Royal Society Newton International Fellow, Queen Mary, University of London. Accepted Position: Curator of Marine Mammals, Smithsonian Institution, Washington, D.C.
2009-2011	Kirstin Sterner, Ph.D., Postdoctoral fellow in my laboratory who conducted research on neuroplasticity. Current Position: Assistant Professor, Anthropology, University of Oregon.
2007-2011	Jun Xing, M.D., Research Associate in my laboratory who conducted research in evolutionary biochemistry. Current location: Windsor, Ontario.
2008-2011	Lucie Gregoire, Ph.D., Senior Research Scientist who conducted research on evolutionary genomics. Current Position: retired.
2007-2010	Zhuocheng Hou, Ph.D., Postdoctoral fellow in my laboratory. Current Position: Faculty, Beijing Agriculture University.
2005-2007	Juan C. Opazo, Ph.D., Postdoctoral fellow in my laboratory who conducted research in molecular evolution and comparative

genomics. Current Position: Faculty, Austral University, Valdavia, Chile.

2005-2007 Guozhen Liu, Ph.D. Postdoctoral fellow in my laboratory conducted research in comparative genomics. Positions since leaving my laboratory include: Informatics Chief, SuperArray Inc. Frederick, Maryland, Eli Lilly in Indianapolis, Indiana and Shaghai.

GRANT SUPPORT (Total Cost)

PROPOSALS IN REVIEW

ACTIVE NATIONAL GRANTS AND CONTRACTS FUNDING

04/2018-04/2023 NIH – K99
Extracellular Vesicles as a Link Between Placental and Renal Dysfunction in Preeclampsia
$956,069
The proposed research will examine the transcriptome of urinary extracellular vesicles obtained non-invasively as a source of placenta-derived nucleic acids reflective of the development of preeclampsia (PE), and will conduct *in vitro* experiments to determine the role of placental extracellular vesicles in renal dysfunction in PE.
Role: Mentor (PI, Priya Pantham)

09/2017-06/2022 NIH – 1U01MH115485
Transgenerational Epigenomics of Trauma and PTSD in Rwanda
$1,299,907
The proposed research will characterize the transgenerational epigenetic effects of PTSD and trauma exposure due to the Rwandan genocide, focusing on glucocorticoid regulatory and related HPA axis genes.
Role: MPI of subaward (PI, Leon Mutesa, University of Rwanda)

07/2017-06/2021 NIH – 1R01MD011728-01
Epigenomic Predictors of PTSD and Traumatic Stress in an African American Cohort
$2,916,390
The goal of this proposal is to characterize genome wide patterns of leukocyte DNA methylation in trauma-exposed African Americans and comparing those that developed post-traumatic stress disorder (PTSD) with those who did not.

Role: PI (Contact PI, Monica Uddin, University of Illinois at Urbana-Champaign)

09/2016-08/2021 NSF- BCS1620239
IBSS-L: Epigenomic Effects of European Colonization of Alaskan Natives
$860,000
The purpose of this Alaskan community-based research is to examine the epigenomic effect resulting from the European colonization of indigenous peoples of the Americas and consequential adverse health outcomes.
Role: Co-PI (PI Ripan Malhi, University of Illinois at Urbana-Champaign)

PREVIOUSLY FUNDED GRANTS AND CONTRACTS

09/2016-08/2018 NIH - 1R21ES027878
Placental RNA Expression as a Function of Gestational Age and Environmental Exposures
$436,858
The purpose of this research is to elucidate the patterns of mRNA and ncRNA expression in placenta derived extracellular vesicles in urine obtained from pregnant women with differing levels of exposure to phthalates.
Role: PI

10/2016-09/2020 UIUC - ILLU-538-916
The role of *Clostridium paraputrificum* in antibiotic-induced inactivation of oral contraceptives
$57,600
The purpose of this research is to examine the effect of antibiotic treatment on serum levels of contraceptive hormones in women taking oral contraceptives to prevent pregnancy with a focus on how the composition of the gut microbiota changes during antibiotic treatment using a mouse model.
Role Co-I (PI Jason Ridlon, University of Illinois at Urbana-Champaign)

09/2016-10/2017 Duke Lemur Center's Director's Fund
Evolution of Progesterone Withdrawal in Strepsirrhine Primates
$8,085
This research uses techniques in comparative genomics and evolutionary biology to identify the point in primate evolutionary history at which systemic progesterone withdrawal was no longer required to initiate parturition.
Role: Co-PI (Co-PI Priyadarshini Pantham University of Illinois at Urbana-Champaign)

08/2017-08/2018 Mayo Clinic Grand Challenge
Computational Methods for Insight into Hypoplastic Left Heart Syndrome (HLHS)
$1,412,233
This proposal aims to increase the actionable information obtained from whole genome sequencing of patients with HLHS using computational and algorithmic methods to ultimately build a doctor interface based on variant, pathway and risk analyses.
Role: PI

National Institutes of Health (1R01HL114097-01)
Risky Family Environments and Childhood Asthma
The purpose of this research was to examine the effects of family environment on the symptoms of childhood asthma as measured by cytokine markers, gene expression, salivary cortisol, and DNA methylation.
Role Co-I (PI Richard Slatcher, Wayne State University); 15% effort; $3,015,372
Period: 09/11-06/16

National Institutes of Health (N01-HD-2-3342)
Perinatology Research Branch, NICHD
Molecular Evolution in Reproduction
This research used comparative genetic techniques to enhance understanding of pregnancy in mammals.
Role Section Head; 10% effort; $1,883,914
Period: 02/13-08/14

National Science Foundation (BCS-0827546)
Collaborative Research: Evolutionary Origins of the Brain Energetics and Adaptive Plasticity of Humans
The purpose of this research was to understand the evolution of the human brain, particularly plasticity. Approaches used included PET scans, microarray analysis, next generation sequencing, and evolutionary population genetics.
Role PI; 8% effort; $1,800,000
Period: 09/08-08/14

Lung, LLC
Preventing Coagulopathy in Pulmonary Xenotransplants: a Functional and Comparative Genomics Approach
The purpose of this research was to identify candidate genes inhibiting xenotransplant using a comparative genomics approach.
Role PI; 5% effort; $136,927
Period: 04/12-07/14

NIH (R21 HD68954-01)
Evolved Placental Response to Hypoxia
The purpose of this research was to assess genetic and epigenetic adaptations in placentas of infants born at high altitude in the Bolivian Andes.
Role PI (Multiple-PI Stacy Zamudio UNJDM); 8% effort; $275,000

Period: 08/11-03/14

Ingenuity Systems
Elucidating molecular determinants in PTSD risk and resilience
The goal of this work was to elucidate epigenetic and gene expression variation associated with PTSD.
Role: Co-Mentor with Dr. Monica Uddin (Sipahi PI)
Period: 04/13-04/14

American Association of Anatomy
Adaptive evolution of *cis*-regulatory regions implicated in human neuronal plasticity and *in vitro* over expression in neurons
This project examined genes that are implicated in brain plasticity.
Role: Mentor (Nevell PI)
Period: 02/13-02/14

National Science Foundation (BCS-0751508)
Collaborative Research: Anthropological genomics and phylogeny in New World monkeys (Primates: Platyrrhini)
The purpose of this research was to understand the molecular phylogeny of New World monkeys through the use of comparative genomic methods.
Role: PI; 8% effort; $183,000
Period: 05/08-11/13

NIH (R-01DA022720; Supplement DA022720-S2)
Ecologic Stressors, PTSD, and Drug Use in Detroit
A research study to understand the role of genetic and epigenetic factors in the etiology of Post Traumatic Stress Disorder (PTSD).
Role: PI of sub-award (parent grant PI Allison Aiello; University of Michigan School of Public Health); 10% effort (year 1) 19% effort (years 2-4); $3,181,615 (subcontract to Wildman $516,267)
Period: 09/07-08/13

NIH R03 (1R03HD062715-01)
Influence of placental structure and function on birth weight in the Philippines
The purpose of this research was to assess methylation in placenta samples derived from participants in the Cebu study. The Cebu study is examining the fetal origins of developmental plasticity and adult disease.
Role: PI of sub-award (PI Christopher Kuzawa; Northwestern University); 2% effort; $85,263 (subcontract to Wildman $9,892).
Period: 10/10-07/13

National Institutes of Health (N01-HD-23342), Perinatology Research Branch, NICHD
Molecular Evolution in Reproduction
Role: Section Head; 10% effort; $1,805,594
Period: 05/05-02/13

National Science Foundation (BCS-1061370).

Doctoral Dissertation Improvement: Development of genomic methods to clarify the evolution of life history trade-offs
A research grant that examined the evolution of chimerism in Neotropical Primates and builds upon current understanding of the evolution of life history traits in primates.
Role: PI (Co-PI Natalie Jameson); 0% effort; $19,827
Period:03/11-03/13

NIH (1RCMH088283-01; ARRA Challenge Grant)
Candidate Epigenetic Biomarkers for PTSD: Insights from Detroit
A research study that assessed methylation and gene expression profiles among PTSD-affected and -unaffected individuals.
Role: PI of sub-award (PI Allison Aiello; University of Michigan School of Public Health); 5% effort; $996,421 (subcontract to Wildman $260,103)
Period: 09/09-09/12

National Science Foundation (BCS-0550209)
Genotypic and phenotypic changes associated with encephalization
A research grant that studied the molecular evolution of encephalization.
Role: CO-PI (PI Lawrence Grossman); 4% effort; $500,000
Period: 09/06-08/11

Wayne State University
University Grant
A research grant that investigated protein-protein interactions and human disease. The award is from the University President's Research Excellence Program.
Role: CO-I (PI Russell Finley); $ NA
Period: 04/07-11/08

Thomas E. Starzl Transplantation Institute, UPMC
Evolution of Allo- and Xeno-recognition
This grant was to study evolutionary aspects of the immune and metabolic systems of mammals.
Role: PI; 0% effort (Morris Goodman also was PI); $145,705
Period: 04/06-04/08

Wayne State University
University Grant
I received a "start-up" package from the university that provided personnel, supplies, and equipment.
Role: PI; $260,000
Period: 05/05-04/08

American Institute for Yemeni Studies
Historical biogeography of the mammals of Yemen
This grant was for my Ph.D. thesis work.
Role: PI, 100% effort; $7500
Period: 02/97-02/98

Sigma Xi, Grant in Aid of Research
Historical biogeography of the mammals of the Red Sea region and Yemen: implications for human evolution
This grant was for my Ph.D. thesis work.
Role: PI; $600
Period: 01/97-12/97

PUBLICATIONS

(* Indicates a student/postdoctoral researcher I directly supervised; ‡ Indicates publications in which I was Corresponding Author)

A. ORIGINAL OBSERVATIONS IN REFEREED JOURNALS

1. Pantham P, Armstrong DL, Bodnariuc J, Haupt O, Johnson AW, Underhill L, Iozzo RV, Lechner B, Wildman DE. Transcriptomic Profiling of Fetal Membranes of Mice Deficient in Biglycan and Decorin as a Model of Preterm Birth. Biol Reprod. 2020 Nov 9:ioaa205. doi: 10.1093/biolre/ioaa205. Epub ahead of print. PMID: 33165521.

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B. REVIEW ARTICLES

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117. Armstrong DL*, Wildman DE‡. (2018) Extracellular vesicles and the promise of continuous liquid biopsies. *Journal of Pathology and Translational Medicine* 52(1):1-8. PMID: 29370511. PMCID: PMC5784223.

118. Wildman DE‡. (2016) IFPA award in placentology lecture: Phylogenomic origins and evolution of the mammalian placenta. *Placenta* 48 Suppl 1:S31-S39. PMID: 27105828.

119. Gundling WE Jr*, Wildman DE‡. (2015) A review of inter- and intraspecific variation in the eutherian placenta. *Philosophical Transactions of the Royal Society B* 370(1663). PMID: 25602076; PMCID: PMC4305173. **Listed as a top 20 article in its scientific domain.

120. Grossman LI, Wildman DE. (2014) Morris Goodman 1925-2010. A Biographical Memoir. *National Academy of Sciences*.

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132. Wildman DE‡. (2007) Sources for Comparative Studies of Placentation. II. Genomic Resources. *Placenta* 29(2): 144-147. PMID: 18155141; PMCID: PMC2397549.

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134. Grossman LI, Wildman DE, Schmidt TR, Goodman M. (2004) Accelerated evolution of the electron transport chain in anthropoid primates. *Trends in Genetics* 20(11): 578-585. PMID: 15475118.

135. Wildman DE. (2002) A map of the common chimpanzee genome. *BioEssays* 24(6): 490-493. PMID: 12111730.

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C. BOOKS AND CHAPTERS

137. Wildman DE‡. (2018) Goodman, Morris. In *The International Encyclopedia of Biological Anthropology*. Under review. Wenda Trevathan (ed). John Wiley and Sons, Inc. (In press).

138. McGowen MR*, Agnew D, and Wildman DE‡. (2013) Reproduction and placentation in Neotropical carnivores. In Manuel Ruiz-Garcia Ed. *Molecular Population Genetics, Evolutionary Biology and Biological Conservation of Neotropical Carnivores* pp. 485-508. Nova Publishing. ISBN: 9781624170713.

139. Sterner KN*, Jameson NM*, and Wildman DE‡. (2013) Placental development, evolution, and epigenetics of primate pregnancies. In Hinde K, Clancy K, and Rutherford J Eds. *Building Babies: Primate Development in Proximate and Ultimate Perspective*. New York, NY: Springer. pp.55-82.

140. Bhattacharjee A, Islam A, Jamil H, Wildman DE. (2009) "IDChase: Mitigating Identifier Migration Trap in Biological Databases", In the *Proceedings of the International Conference on Contemporary Computing (IC3)*, Springer CCIS 40, Pages 461-472. Noida, India, August 17-20, 2009.

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145. Wildman DE, Grossman LI, Goodman M. (2002) Functional DNA in humans and chimpanzees shows they are more similar to each other than either is to other apes. In M Goodman and AS Moffat Eds. *Probing Human Origins*. Cambridge, MA: American Academy of Arts and Sciences Press. pp.1-10.

D. OTHER

146. Wildman DE. (2014) Bonobo genome. *McGraw-Hill Yearbook of Science & Technology 2014.* McGraw-Hill, Inc. pp.50-52.

147. Kuzawa CW, Chugani HT, Grossman LI, Lipovich L, Muzik O, Hof PR, Wildman DE, Sherwood CC, Leonard WR, Lange N. (2014) Reply to Skoyles: Decline in growth rate, not muscle mass, predicts the human childhood peak in brain metabolism. *Proceedings of the National Academy of Sciences USA* 111(46):E4910. PMID: 25385651; PMCID: PMC4246347.

PRESENTATIONS

(* Indicates a student/postdoctoral researcher I directly supervised)

A. INVITED AND/OR REFEREED INTERNATIONAL/NATIONAL MEETINGS

1. Wildman DE. **Invited oral presentation.** The basis of evolution is reproduction. Burroughs Wellcome Pregnancy Think Tank. Durham, NC November 2019.

2. Wildman DE. What is an animal model? **Invited oral presentation** at the annual meeting of the International Federation of Placenta Associations. Buenos Aires, Argentina, September 2019.

3. Wildman DE. The Placenta is at the Crossroads of Maternal-Fetal Conflict and Cooperation. **Invited oral presentation** at the Keystone Symposia on Molecular and Cellular Biology in Maternal-Fetal Crosstalk: Harmony vs. Conflict Meeting. Washington, DC, October 5, 2017.

4. Wildman DE. Evolutionary implications of gestational variation. Invited keynote **presentation** at the Preterm Birth International Collaborative (PREBIC) Annual Meeting. Galveston, TX, May 9, 2017.

5. Saw J*, Chia N, Dong Y, Merkel A, Sivaguru M, Fried G, Bruce W, Weber JR, Wildman DE, Krambeck AE, Lieske JC, Fouke BW. Evidence of organic matter, protein catalysis, and stone dissolution within human kidney stones. **Oral presentation** at the R.O.C.K. Society 2017 Annual Meeting. University of Wisconsin, Madison, WI, April 8, 2017.

6. Wildman DE. Placentation as a Lens Focused on the Evolutionary Origins of Preterm Birth and Other Obstetrical Syndromes. **Invited oral presentation** at the March of Dimes/Burroughs Wellcome Fund's 6th Biennial Symposium. Preventing Prematurity: Establishing a Network for Innovation and Discovery. Cary, NC, December 5, 2016.

7. Armstrong DL*, Koenen KC, Smith A, Ressler K, Aiello AE, Galea S, Guffanti G, Ratanatharathorn A, Wildman DE, Uddin M. Differential methylation of imprinted genes in Post-traumatic stress disorder. **Oral presentation** at the International Society for Traumatic Stress Studies. Dallas, TX, November 11, 2016.

8. Bustamante AC, Aiello AE, Koenen KC, Galea S, Ratanatharathorn A, Wildman DE, Uddin M. Epigenetic Profiles Associated with Childhood Maltreatement and Post-Traumatic Stress Disorder. **Oral presentation** at the International Society for Traumatic Stress Studies. Dallas, TX, November 2016.

9. Gundling W*, Rutherford JN, DeMartelly VA, Lee NR, Kuzawa CW, Wildman DE. Trans-generational influence on placental methylation among a population with varying nutritional status in Cebu, Philippines. Poster presentation at the Developmental Origins of Health and Disease (US DOHaD). Detroit, MI, October 17, 2016.

10. Bustamante AC, Aiello AE, Koenen KC, Galea S, Ratanatharathorn A, Wildman DE, Uddin M. Impact of Childhood Maltreatment and Post-Traumatic Stress Disorder on the Leukocyte Transcriptome. **Oral presentation** at the Developmental Origins of Health and Disease (US DOHaD). Detroit, MI, October 17 2016.

11. Athreya AP*, Armstrong D*, Gundling W*, Wildman DE. Prediction of Adenocarcinoma Development using Game Theory. **Oral and poster presentation (awarded Early Career Investigator Scholarship)** at the

Individualizing Medicine Conference, Mayo Clinic School of Continuous Professional Development. Rochester, MN, October 5, 2016.

12. Saw J*, Chia N, Dong Y, Merkel A, Sivaguru M, Fried G, Bruce W, Weber JR, Wildman DE, Krambeck AE, Lieske JC, Fouke BW. Kidney Stones: A Product of Dynamic Interaction Between the Microbiome and Mineral Precipitation. **Oral presentation** at the International Society of Nephrology Forefront Symposium 2016: The Metabolome and Microbiome in Kidney Disease. University of San Diego, San Diego, CA; September 2, 2016.
13. Wildman DE. Placenta transcriptomics and the evolution of obstetrical syndromes. **Invited Lecturer** at the European Evo Devo conference. Uppsala, Sweden, July 26-29, 2016.
14. Armstrong DL*, Koenen KC, Smith AK, Bustamante AC, Ressler KJ, Aiello AE, Galea S, Guffanti G, Ratanatharathorn A, Wildman DE, Uddin M. Differential methylation of imprinted genes in Post-traumatic stress disorder. Poster Presentation at the Society for Biological Psychiatry Annual meeting. Atlanta, GA, May 12, 2016.
15. Bustamante AC, Aiello AE, Koenen KC, Galea S, Wildman DE, Uddin M. Impact of Childhood Maltreatment and Post-Traumatic Stress Disorder on the Leukocyte Transcriptome. Poster presentation at the Society for Biological Psychiatry Annual meeting. Atlanta, GA, May 12, 2016.
16. Bustamante AC, Aiello AE, Koenen KC, Galea S, Wildman DE, Uddin M. Gene Networks Associated with Childhood Maltreatment, Major Depression, and PTSD within the Detroit Neighborhood Health Study. Poster presentation at the International Society for Traumatic Stress Studies. New Orleans, LA, November 2015.
17. Wildman DE. **Invited IFPA Award in Placentology Lecture** at the International Federation of Placenta Associations annual meeting. Brisbane, Australia, September 8-11, 2015.
18. Bustamante AC, Aiello AE, Koenen KC, Galea S, Wildman DE, Uddin M. Genome-Wide Analysis of Gene Expression Profiles Associated with Post-Traumatic Stress Disorder and Major Depressive Disorder. Poster presentation at the Individualizing Medicine Conference, Mayo Clinic School of Continuous Professional Development. Rochester, MN, September, 2015.
19. Armstrong DL*, Uddin M, Wildman DE. Identifying the Tissue of Origin of Extracellular Vesicles Using RNA Expression Signatures. Poster presentation at the Individualizing Medicine Conference, Mayo Clinic School of Continuous Professional Development. Rochester, MN, September, 2015.
20. Wildman DE and Rutherford JN Comparative Placental Ecology at the Maternal-Fetal Interface. **Invited oral presentation** at the American Association of Physical Anthropologists 84th annual meeting. St. Louis, MO, March 25 - 28, 2015.

21. Wildman DE. Comparative Genomics As A Tool For Deciphering The Biology Of Human Parturition. **Invited oral presentation** at the March of Dimes/Burroughs Wellcome Fund's 5th Biennial Symposium. Preventing Prematurity: Establishing a Network for Innovation and Discovery. Newport Beach, CA, December 9, 2014.

22. Bustamante AC, Koenen KC, Aiello AE, Galea S, Wildman DE, Uddin M. *FKBP5* DNA methylation does not mediate the association between childhood maltreatment and depression in the Detroit Neighborhood Health Study. **Oral presentation** at the International Society for Traumatic Stress Studies. Miami, FL, November 2014.

23. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman, DE. Genomic Evidence of Stress Induced Physiological Adaptation in the Placenta. Poster presentation at the 9th Annual Illinois Society for Reproductive Sciences Symposium, Chicago, IL, October, 2014.

24. Wildman DE. Placental Molecular Phylogenetics. **Invited oral presentation** at the International Meeting, *Brain, Birthweight, and the Immune System*. The Royal Society, London, England, June 9,10 2014.

25. Wildman DE, Caravas J*, Agnew D, Benirschke K, Savage-Rumbaugh S, Kim CJ, Romero R, Wagner GP, McGowen MR. Gene Expression and Activity During Primate Pregnancies. **Invited oral presentation** at the 83rd Annual Meeting of the American Association of Physical Anthropologists. Calgary, Alberta, Canada, April 8-12, 2014.

26. Gundling WE*, Rutherford JN, Demartelly VA, Lee NR, Kuzawa CW, Wildman DE. Genome-wide patterns of placental methylation are predicted by the proxies of maternal nutritional history in Cebu, Philippines. **Oral presentation** at the 83rd Annual Meeting of the American Association of Physical Anthropologists. Calgary, Alberta, Canada, April 8-12, 2014.

27. Wildman DE. Your Genome & The Personalization of Medicine. **Invited oral presentation** at The Society for Evolutionary Analysis in Law (SEAL) XV Conference. Champaign-Urbana, IL, April 4-5, 2014.

28. Wildman DE. Human Cerebral Cortical Gene Expression and Glucose Metabolism. **Invited oral presentation** at the International Group on Insulin Secretion (IGIS) Symposium on Neural Orchestration of Metabolism and Islet Function. St.-Jean Cap-Ferrat, France, March 27-30, 2014.

29. Caravas J*, Nevell L*, Bustamante A, Uddin M, Wildman D. Molecular evolution of glucose metabolism genes and gene regulatory sequences. Poster presentation at the International Group on Insulin Secretion Symposium on Neural Orchestration of Metabolism and Islet Function. St.-Jean Cap-Ferrat, France, March 2014.

30. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Gene expression differences reveal ancestry-specific environmental interactions

in placental adaptation to high-altitude hypoxia. Oral presentation at the International Federation of Placenta Associations (IFPA) Conference. Whistler, British Columbia, Canada, September 11-14, 2013.

31. McGowen MR*, Weckle A*, Agnew D, Benirschke K, Savage-Rumbaugh S, Kim CJ, Wagner GP, Romero R, Wildman DE. Gene Expression in the Term Placenta of the opossum *Monodelphis domestica* and the Evolution of the Therian Placenta. Poster presentation at the International Federation of Placenta Associations (IFPA) Conference. Whistler, British Columbia, Canada, September 11-14, 2013.

32. Sipahi L*, Aiello AE, Galea S, Koenen KC, Wildman DE, Uddin M. Longitudinal Epigenetic Variation at DNA Methyltransferase Genes Constitute PTSD Risk/Resiliency Factors. Poster presentation, 68th Annual Scientific Convention and Meeting of the Society of Biological Psychiatry, San Francisco, CA, May 16, 2013.

33. McGowen MR*, Sterner KN*, Baker J*, Sherwood CC, Kuzawa CW, Chugani, HT, Lipovich L, Grossman LI, Wildman DE. Characterization of human cortical gene expression across development in relation to glucose utilization. American Association of Physical Anthropologists, Knoxville, TN, April 7, 2013.

34. Uddin M, Koenen KC, Galea S, Wildman DE, Aiello AE. Molecular profiles of trauma vulnerability and resilience in the Detroit Neighborhood Health Study. **Oral presentation** at the Annual Anxiety Disorders of America Association Meeting, La Jolla, CA, April, 2013.

35. Sipahi L*, Aiello AE, Galea S, Koenen KC, Wildman DE, Uddin M. Longitudinal epigenetic variation at DNA methyltransferase genes is associated with risk for and resilience to PTSD. Poster presentation, American Psychopathological Association Annual Conference, New York, NY, March 7-9, 2013.

36. Bustamante AC, Aiello AE, Koenen KC, Galea S, Noronha C, Wildman DE, Uddin M. Childhood maltreatment is associated with epigenetic differences in hypothalamic-pituitary-adrenal (HPA) axis genes in the Detroit Neighborhood Health Study. Poster presentation, American Psychopathological Association Annual Conference, New York, NY, March 7-9, 2013.

37. Bustamante AC, Aiello AE, Koenen KC, Galea S, Noronha C, Wildman DE, Uddin M. Childhood maltreatment is associated with epigenetic differences in hypothalamic-pituitary-adrenal (HPA) axis genes in the Detroit Neighborhood Health Study. Oral presentation, Wayne State University Department of Psychiatry and Behavioral Neurosciences Annual Research Conference, Detroit, MI, March 2013.

38. McGowen MR*, Weckle A*, Agnew D, Benirschke K, Savage-Rumbaugh, Kim CJ, Wagner GP, Romero R, Wildman DE. The Evolution of Gene Expression in the Term Placenta of Viviparous Mammals. Oral

presentation at SLIMP Latin American Symposium on Maternal-Fetal Interaction and Placenta. Igauazu Falls, Brazil, February 18-20, 2013.

39. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Evolved placental response to hypoxia in Bolivia. Poster presentation at SLIMP Latin American Symposium on Maternal-Fetal Interaction and Placenta. Igauazu Falls, Brazil, February 18-20, 2013.

40. Wildman DE, Placental adaptations to hypoxia in high-altitude. **Invited Presentation** at SLIMP Latin American Society for Maternal Fetal Interaction and Placenta, Iguazu Falls, Parana, Brazil, February 18-20, 2013.

41. Wildman DE. **Invited Poster Presentation** at the Burroughs Wellcome Fund/March of Dimes Symposium Preventing Prematurity: Establishing a Network for Innovation and Discovery Symposium, Newport Beach, California, December 3-5, 2012.

42. Wildman DE, Jameson NM, Xu K, Yi S, Biogeographic Implications of Advances in the Phylogeny and Divergence Dates of Neotropical Primates. **Invited Presentation** at the XXIV Congress of the International Primatological Society Meeting, Cancun, Mexico, August 12-17, 2012.

43. Boddy AM*, Raghanti MA, Sherwood C, Phillips KA, Montgomery SH, Mundy NI, Grossman LI, Wildman DE, Capuchin monkey transcriptome provides insight into primate brain evolution. Poster presentation at the Society for Molecular Biology and Evolution conference, Dublin, Ireland, June 23-26, 2012.

44. McGowen M*, Sterner K*, Baker J*, Sherwood C, Kuzawa C, Chugani H, Lipovich L, Grossman L, Wildman DE, Adaptive *cis*-regulatory evolution of age-related differentially expressed genes in the human brain. Poster presentation at the Society for Molecular Biology and Evolution conference, Dublin, Ireland, June 23-26, 2012.

45. Uddin M, Chang SC, Zhang C, Ressler K, Galea S, Keyes KM, McLaughlin K, Wildman DE, Aiello AE, Koenen KC. *ADCYAP1R1* genotype predicts PTSD but not depression among women exposed to childhood maltreatment. Poster presentation, Society for Biological Psychiatry Annual Meeting, Philadelphia, PA, May 3-5, 2012.

46. Uddin M, Chang SC, Zhang C, Ressler K, Galea S, Keyes KM, McLaughlin K, Wildman DE, Aiello AE, Koenen KC. ADCYAP1R1 genotype predicts PTSD but not depression among women exposed to childhood maltreatment. Poster presentation, American Psychopathological Association Annual Meeting, New York, NY, Mar. 1-3. 2012.

47. Wildman DE, The mammalian placenta: from anatomical to transcriptomic variation. **Invited Presentation** at the annual meeting of the European Society for Evolutionary Biology, Tübingen, Germany, August 21-25, 2011.

48. Wildman DE, Comparative approaches for unraveling the evolution of the placenta. **Invited Presentation** at the annual meeting of the Center for Trophoblast Research. University of Cambridge, England. July 24-26, 2011.

49. Uddin M, Hekman K, Pawelec G, Derhovanessian E, Koenen KC, Wildman DE, Galea S, Aiello AE. Post-traumatic stress disorder is associated with immunosenescent T cell phenotypes in the Detroit Neighborhood Health Study. Abstract accepted as a poster presentation delivered at the 3rd North American Congress of Epidemiology, Montreal, QC, June 2011.

50. Uddin M, Galea S, Chang SC, Koenen KC, Wildman DE, Aiello AE. Socioeconomic position modifies the relation between methylation of nervous-system related loci and risk of PTSD in an urban community-based sample. Abstract accepted as an oral presentation delivered at the 2nd Conference on Integrating Genetics and the Social Sciences, Boulder, CO, May, 2011.

51. Uddin M, Hekman K, Pawelec G, Derhovanessian E, Koenen KC, Wildman DE, Galea S, Aiello AE. Post-traumatic stress disorder is associated with immunosenescent T cell phenotypes in the Detroit Neighborhood Health Study. Abstract accepted as a poster presentation delivered at the 101st Annual Conference of the American Psychopathological Association, New York, NY, March 2011.

52. Sterner KN*, Church SA, Wildman DE, Bernstein RM. “Evolution of adrenarche in Homo and Pan.” Poster presentation at the annual meeting of the American Association of Physical Anthropologists, Minneapolis, MN. April 12-16, 2011.

53. Lipovich L, Tarca AL, Jia H, Grossman LI, Uddin M, Hof P, Sherwood CC, Kuzawa C, Wildman DE, Goodman M. “Human-specific brain energy utilization features are reflected in gene expression during childhood: an RNA-world perspective.” Poster presentation at the annual meeting of the American Association of Physical Anthropologists, Minneapolis, MN. April 12-16, 2011.

54. Jia H, Lipovich L, Grossman, LI, Uddin M, Hof P, Sherwood CC, Kuzawa C, Wildman DE, Gooodman, M. “Structural differences of orthologous brain-expressed genes between *Gorilla* and human revealed by high-throughput RNA sequencing.” Poster presentation at the annual meeting of the American Association of Physical Anthropologists, Minneapolis, MN. April 12-16, 2011.

55. Duka T, Grossman LI, Uddin M, Wildman DE, Goodman M, Baze W, Hof P, Sherwood CC. "Distribution of synaptic markers in chimpanzee neocortical areas across development". Poster presentation at the annual meeting of the American Association of Physical Anthropologists, Minneapolis, MN. April 12-16, 2011.

56. Boddy AM*, Sherwood CC, Goodman M, Wildman DE. “Phylogenetic analysis reveals relaxed constraints in primate encephalization during mammalian descent” Oral presentation at the annual meeting of the American Association of Physical Anthropologists, Minneapolis, MN. April 12-16, 2011.

57. Jameson NM*, Hou Z*, Sterner KN*, Weckle AL*, Goodman M, Steiper M, Wildman DE. Genomic data confirm Tarsius is the sister taxon of Anthropoidea. Oral Presentation given at the annual American Association of Physical Anthropologist meeting in April 12-16, 2011, Minneapolis MN.

58. Wildman DE, Evolutionary genomic insights into pregnancy, placentation, and preterm birth. **Invited Presentation** at the Preterm Birth International Collaborative (PREBIC) Symposium organized by the World Health Organization and the March of Dimes, and held at the annual meeting Society for Gynecologic Investigation, Miami FL. March 16-20, 2011.

59. Uddin M, Galea S, Koenen KC, Wildman DE, Pawelec G, Derhovanessian E, de los Santos R, Hekman K, Aiello AE. Biological signatures of post-traumatic stress disorder in the Detroit Neighborhood Health Study. Oral presentation, 9th International Conference on Urban Health, New York Academy of Medicine, Oct. 27-29, 2010.

60. Aiello AE, Hekman K, Uddin M, Pawelec G, Derhovanessian E, Koenen KC, Wildman DE, Galea S. Cytomegalovirus antibodies as a marker of immunosenescence in the Detroit Neighborhood Health Study. Poster presentation, 9th International Conference on Urban Health, New York Academy of Medicine, Oct. 27-29 2010.

61. Wildman DE. Functional phylogenomic data elucidate conserved and derived aspects of placenta biology. **Invited Plenary Presentation** at the annual meeting of the International Federation of Placenta Associations (IFPA), Santiago, Chile, Oct. 18-22, 2010.

62. Wildman DE. Deciphering the Evolution of Placentation by Integrating Comparative Genomic and Anatomical Approaches. **Invited Presentation** at the Annual meeting of The Society for the Study of Reproduction, Milwaukee WI. July 30-Aug. 02, 2010.

63. Boddy AM*, Wildman DE Phylogenetic analysis explains deviations from Brain: Body Allometric Scaling Laws in Primates and Cetacea. Poster presentation at the annual meeting of the Society for the Study of Evolution, Portland OR, June 25-29 2010.

64. Jameson NM*, Hou Z*, Sterner KN*, Weckle AL*, Goodman M, Steiper ME, Wildman DE. Genomic data reject the hypothesis of a prosimian primate clade. Poster presentation at the annual meeting of the Society for the Study of Evolution, Portland OR, June 25-29 2010.

65. Sterner KN*, Boddy AM*, Kuzawa CW, Sherwood CC, Hof PR, Lipovich

LL, Grossman LI, Uddin M, Wildman DE, Goodman M, Mair-Meijers HE, Weckle AL, Gregoire L, Chugani HT 2010. Functional genomic signatures of human brain growth and development. Poster presentation at the annual meeting of the American Association of Physical Anthropologists, Albuquerque NM, April 14-17, 2010.

66. Uddin M, Aiello AE, Wildman DE, Koenen KC, Pawelec G, de los Santos R, Goldmann E, Galea S. Epigenetic and immune function profiles associated with post-traumatic stress disorder. Poster presentation at the Systems Biology Symposium, University of Michigan, Dec. 1, 2009.

67. Nhan-Chang CL, Romero R, Wildman DE, Erez O, Kusanovic JP, Tarca AL, Hacia JG, Mazaki-Tovi S, Vaisbuch E, Kim CJ, Chaiworapongsa T, Mittal P, Yeo L, Hassan SS. Placenta DNA Methylation in Term and Preterm Labor. Annual Scientific Meeting of the Society for Gynecologic Investigation, Glasgow, Scotland, March 17-21 2009. Journal of the Society for Gynecologic Investigation 2009. Poster presentation abstract 331.

68. Wildman DE. A phylogenomic approach to the evolution of placentation. **Invited Presentation** at Preventing Prematurity: Establishing a Network for Innovation and Discovery. A joint symposium by the Burroughs Wellcome Fund and March of Dimes. December 01-03 2008.

69. Papper Z*, Jameson N*, and Wildman DE. Evolution of placentally expressed growth hormones in Primates. Poster presentation at Evolution 2008, the annual meeting for the Society for the Study of Evolution and the Society of Systematic Biologists, Minneapolis MN, June 20-24 2008.

70. Hou Z*, Uddin M, Than NG, Romero R, Wildman DE. Adaptive evolution of highly expressed gene in the human placenta from Eutherian divergence leading to human. Poster presentation at the 2008 Evolution Meeting, University of Minnesota. Minneapolis, MN. June 2008.

71. Wildman DE, Opazo JC*, Yi SV. Neutrally evolving intergenic, non-coding DNA markers provide a resolved genus level phylogeny of neotropical primates (Platyrrhini). Oral presentation at the annual meeting of the American Association of Physical Anthropologists, Columbus, Ohio. April 08-12 2008.

72. Uddin M. Goodman M, Sherwood CC, Starzl TE, Grossman LI, Romero R, Wildman DE Distinct genomic signatures of adaptation in pre- and post-natal environments during human evolution. Oral presentation at the annual meeting of the American Association of Physical Anthropologists, Columbus, OH. April 08-12 2008.

73. Wildman DE. The evolution of placentas, parturition, and primate pregnancies. Presented as part of “Challenges and Trade-offs in Pregnancy"; an Invited Symposium by the Biological Anthropology Section; Annual Meeting of the American Anthropological Association. November 28-December 02 2007.

74. Wildman DE. Genomic Resources for Placental Evolution. **Invited Presentation** at the International Federation of Placenta Associations meeting. Kinston, Ontario, Canada August 17-21 2007.

75. Than NG, Romero R, Wildman DE, Tarca AL, Erez O, Han YM, Kim SS, Weckle A*, Uddin M, Cushenberry E, Espinoza J, Kim CJ, Draghici S, Santolaya-Forgas J, Papp Z, Grossman LI, Goodman M. Birth And Death Of Galectins Predominantly Expressed In Placenta. Annual Meeting for the Society for Gynecologic Investigation. Reno, NV March 14-17, 2007.

76. Than NG, Erez O, Wildman DE, Edwin, SS, Mazaki-Tovi S, Gotsch F, Cushenberry E, Pineles B, Montegro D, Espinoza J, Kim CJ, Hassan SS, Papp Z, and Romero R. Preterm Labor and Preterm PROM are Characterized by an Increase in Maternal Serum Concentration of Galectin-1. Annual Meeting for the Society for Gynecologic Investigation. Reno, NV March 14-17 2007.

77. Than NG, Wildman DE, Erez O, Edwin SS, Espinoza J, Kim CJ, Han YM, Mazaki-Tovi S, Kusanovic JP, Hassan S, Papp Z, Romero R Trophoblast, Galectin-1 and Preeclampsia. Annual Meeting of the Society for Maternal Fetal Medicine; San Francisco, CA February 5-10 2007.

78. Erez O, Kim SS, Kim JS, Kim YM, Wildman DE, Than NG, Gotsch F, Espinoza J, Hassan SS, Kim CJ, Romero R Over-expression of the Thrombin Receptor in the Placenta of Patients with Preeclampsia: The Intersection between Coagulation and Inflammation. Annual Meeting of the Society for Maternal Fetal Medicine; San Francisco, CA February 5-10 2007.

79. Wildman DE. Genomic and phylogenetic analyses of variation in primate reproductive biology. Annual Meeting of the Society for Molecular Biology and Evolution. Tempe, AZ May 25 2006.

80. Chen C*., Opazo JC*, Uddin M., and Wildman DE. Evolution of the Progesterone Receptor Gene in Primates. Poster Presentation at International conference: Monkeys Old and New, First Annual NYCEP Symposium, http://www.nycep.org/monkey-symposium/ New York, NY. Oct 28-30 2006.

81. Wildman DE. Placentas and parturition: adaptive molecular evolution and primate reproduction. **Invited Presentation** at Molecular Primatology, Progress and Promise. New York University, New York, NY March 2-4 2006.

82. Grossman LI, Uddin M, Goodman M, Liu G*, Wildman DE. Comparison of parsimony and distance methods in evolutionary analyses of oligonucleotide microarray data. Presentation at the AICHE 2004 Annual Meeting, Austin TX, Nov. 7-12 2004.

83. Uddin M, Wildman DE, Liu G, Johnson R, Hof P, Grossman LI, Goodman M, Kapatos G. Phylogenetic and functional gene expression patterns in the anterior cingulate cortex of humans and other primates. **Invited**

Presentation at the XX Congress of the International Primatological Society. Turin, Italy. Aug 22-28 2004.

84. Wildman DE, Uddin M. Distribution limits of genus *Papio* and the evolution of hamadryas baboons. **Invited Presentation** at the XX Congress of the International Primatological Society. Turin, Italy. Aug 22-28 2004.

85. Wildman DE, Uddin M, Opazo JC*, Goodman M, and Grossman LI. Coincident amino acid and gene expression changes in nuclearencoded subunits of primate aerobic energy metabolism genes. Oral presentation at Genomes and Evolution 2004, the annual meeting of the Society for Molecular Biology and Evolution. State College, Pennsylvania. June 17-20, 2004.

86. Wildman DE, Uddin M, Liu G*, Grossman LI, and Goodman M. An Objective View of Humankind's Place in Primate Evolution. **Invited Poster Presentation** at IMA/RECOMB Workshop on Comparative Genomics October 20-24 2003.

87. Singh GB, Song H, Liu D, Wildman DE, Goodman M, Bliton C, Kostov G, and Athey B. High sensitivity data mining from biological databases: non-homology based sequence retrieval. Presentation at the BIO-KDD'03 workshop and Joint Conference on Information Sciences (JCIS'03) September 26-30 2003.

88. Wildman DE, Goodman M, Schmidt TR, Hüttemann M, Uddin M, Goldberg A, and Grossman LI. The molecular evolution of primate energetics from the perspective of cytochrome c. Oral presentation at the annual meeting of the American Association of Physical Anthropologists, Tempe, Arizona. April 23-26 2003. Am. J. Phys. Anthropol. 120 S36: 101 [abstract].

89. Goldberg A, Wildman DE, Schmidt TR, Hüttemann M, Goodman M, Weiss ML, and Grossman LI. Evolution and loss of cytochrome c oxidase subunit VIII in primates. Oral presentation at the annual meeting of the American Association of Physical Anthropologists, Tempe, Arizona. April 23-26 2003. Am. J. Phys. Anthropol. 120 S36:225 [abstract].

90. Wildman DE, Doan JW, Goldberg A, Hüttemann M, Schmidt TR, Yu MH, Goodman M, and Grossman LI. Adaptive evolution of electron transport chain genes in anthropoid primates. Oral presentation at annual meeting of the Society for the Study of Evolution, Urbana, IL. June 24-26, 2002.

91. Wildman DE, Grossman LI, and Goodman M. Functional genetic differences among humans, chimpanzees, and their closest relatives. Poster presentation at the annual meeting of the American Association of Physical Anthropologists, Buffalo, New York. April 10-13, 2002. Am. J. Phys. Anthropol. 117 S34: 165 [abstract].

92. Goldberg A, Wildman DE, Schmidt TR, Hüttemann M, Goodman, M, Weiss M, and Grossman LI. COX8H is expressed in strepsirrhine and platyrrhine primates, but not in humans. Poster presentation at the annual

meeting of the American Association of Physical Anthropologists, Buffalo, New York. April 10-13 2002. Am. J. Phys. Anthropol. 117 S34: 76-77 [abstract].

93. Grossman LI, Goodman M, Schmidt TR, Kapatos G, and Wildman DE. Exploring the link between brain evolution and positively selected gene evolution. Oral presentation at: Development of the Human Species and Its Adaptation to the Environment. Cambridge, MA. Organized by The American Academy of Arts and Sciences. July 7-8 2001.

94. Grossman LI, Goodman M, Schmidt TR, and Wildman DE. The genomic roots of humankind. Oral presentation at: Human Molecular Evolution. Barcelona, Spain. Organized by the Faculty of Biology of the Universitat de Barcelona and the Museo de la Ciència de la Fundació "La Caixa." April 24-25 2001.

95. Schmidt TR, Goldberg A, Wildman DE, Goodman, M, and Grossman LI. Modifications to the COX VIII liver isoform promoter may co-occur with the loss of the heart isoform in higher primates. Poster presentation at the Gordon Research Conference. New Hampshire. July 2000.

96. Wildman DE, Telfer PT, Jolly CJ, Disotell TR, Bergman TJ, Phillips-Conroy J, and Newman TK. Evolution of mitochondrial DNA in baboons from the Horn of Africa and the Arabian Peninsula. Poster presentation at the annual meeting of the American Association of Physical Anthropologists, San Antonio Texas, April 10-15 2000. Am. J. Phys. Anthropol. 111 S30: 320-321 [abstract].

97. Raaum RL, Disotell TR, Jolly CJ, Wildman DE, and Telfer PT. A preliminary molecular phylogeny of the guenons. Poster presentation at the annual meeting of the American Association of Physical Anthropologists, San Antonio Texas, April 10-15 2000. Am. J. Phys. Anthropol. 111 S30: 256-257 [abstract].

98. Newman TK, Wildman DE, Bergman TJ, and Rogers J. An expanded mtDNA phylogeny and its implications for gene flow and biogeography in baboons. Poster presentation at the annual meeting of the American Association of Physical Anthropologists, San Antonio Texas, April 10-15, 2000. Am. J. Phys. Anthropol. 111 S30: 237 [abstract].

99. Wildman DE. The zoogeographic relationship between the mammals of Ethiopia and Arabia and implications for Afro-Asian interchange. **Invited Presentation** at Ethiopia: A Biodiversity Challenge; an international conference at Addis Ababa University, Organized by the Linnean Society of London and the Biological Society of Ethiopia. February 2-4, 2000.

100. Wildman DE, Bergman TJ, and Newman TK. Evolution of mitochondrial DNA in baboons from Ethiopia and the Arabian Peninsula. **Invited Poster Presentation** at Ethiopia: A Biodiversity Challenge; an international conference at Addis Ababa University, Organized by the Linnean Society of London and the Biological Society of Ethiopia. February 2-4, 2000.

B. INVITED AND/OR REFEREED LOCAL MEETINGS

101. Gundling W*, Rutherford JN, DeMartelly VA, Lee NR, Kuzawa CW, Wildman DE. Trans-generational influence on placental methylation among a population with varying nutritional status in Cebu, Philippines. Poster presentation at the Carl R. Woese Institute for Genomic Biology Fellows Symposium. University of Illinois at Urbana-Champaign, Urbana, IL, May 4, 2017.

102. Gundling W*, Rutherford JN, DeMartelly VA, Lee NR, Kuzawa CW, Wildman DE. Trans-generational influence on placental methylation among a population with varying nutritional status in Cebu, Philippines. Poster presentation at the University of Illinois at Urbana-Champaign Department of Molecular and Integrative Physiology Annual Retreat. Allerton Park and Retreat Center, Monticello, IL; April 13, 2017.

103. Saw J*, Chia N, Dong Y, Merkel A, Sivaguru M, Fried G, Bruce W, Weber JR, Wildman DE, Krambeck AE, Lieske JC, Fouke BW. Kidney Stones: A Sensitive High-Resolution Record of Human Kidney Function. **Oral presentation** at the University of Illinois at Urbana-Champaign Department of Molecular and Integrative Physiology Annual Retreat. Allerton Park and Retreat Center, Monticello, IL; April 13, 2017.

104. Saw J*, Chia N, Dong Y, Merkel A, Sivaguru M, Fried G, Bruce W, Weber JR, Wildman DE, Krambeck AE, Lieske JC, Fouke BW. Kidney Stones: A Sensitive High-Resolution Record of Human Kidney Function. **Oral presentation** at the Carl R. Woese Institute for Genomic Biology Spring Seminar Series. University of Illinois at Urbana-Champaign, Urbana, IL; April 5, 2017

105. Saw JJW*. Kidney Stones: A Geological Record of Your Kidney Physiology. **Oral presentation (awarded 3rd place and $200 in travel money)** at the School of Molecular and Cellular Biology Rapid Fire Competition, Urbana, IL, March 10, 2017.

106. Javadi RHS*, Armstrong DL*, Strakovsky RS, Nowak RA, Wildman DE. Minimally invasive assessment of placenta derived RNA in response to environmental exposures and across gestation. Poster presentation at the School of Molecular and Cellular Biology Recruitment Day, Urbana, IL, February 25, 2017.

107. Athreya AP*, Armstrong D*, Gundling W*, Wildman DE. Modeling the Impact of Epigenetics on Lung Cancer: A Game Theoretic Approach. **Oral presentation (awarded best research presentation)** at the Coordinated Science Lab Student Conference, University of Illinois at Urbana-Champaign, IL; February 17, 2016.

108. Saw J*, Chia N, Dong Y, Merkel A, Sivaguru M, Fried G, Bruce W, Weber JR, Wildman DE, Krambeck AE, Lieske JC, Fouke BW. Kidney Stones: Exposing Geology within the Human Body. **Oral presentation** at Research Live! University of Illinois, Urbana-Champaign, Urbana, IL,

November 15, 2016.

109. Bustamante AC, Aiello AE, Koenen KC, Galea S, Wildman DE, Uddin M. Impact of Childhood Maltreatment and Post-Traumatic Stress Disorder on the Leukocyte Transcriptome. Poster presentation at the Synapse: A Collaborative Neuroscience Conference. Champaign, IL, August, 2016.

110. Armstrong, DL*, McGowen MR*, Weckle A*, Caravas J*, Agnew D, Savage-Rumbaugh S, Nevo E, Kim CJ, Wagner GP, Romero R, Wildman DE. The evolution of gene expression in the term placenta of viviparous mammals. Poster presentation at the Carl R. Woese Institute for Genomic Biology Fellows Symposium. University of Illinois at Urbana-Champaign, Urbana, IL, May 5, 2016.

111. Armstrong, DL*, McGowen MR*, Weckle A*, Caravas J*, Agnew D, Savage-Rumbaugh S, Nevo E, Kim CJ, Wagner GP, Romero R, Wildman DE. The evolution of gene expression in the term placenta of viviparous mammals. Poster presentation at the KnowEng Center NIH site visit. University of Illinois at Urbana-Champaign, Urbana IL, May 2, 2016.

112. Javadi RHS*, Armstrong DL*, Strakovsky RS, Nowak RA, Wildman DE. Minimally invasive assessment of placenta derived RNA in response to environmental exposures and across gestation. Poster presentation at the Department of Molecular and Integrative Physiology Annual Retreat, Allerton Park, IL, April 29, 2016.

113. Lamar BP*, Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Placentas of High Altitude Andeans Show Differential MicroRNA Expression as a Possible Adaptive Evolutionary Response to Hypoxia. Poster presentation at the 7th Annual Illinois Society for Reproduction Sciences Symposium, Urbana, IL, October 12, 2015.

114. Armstrong DL*, Uddin M, Wildman DE. Identifying extracellular vesicles originating from the placenta and uterus using RNA expression signatures. **Invited presentation** at the 7th Annual Illinois Society for Reproduction Sciences Symposium, Urbana, IL, October 12, 2015.

115. Armstrong DL*, Uddin M, Wildman DE. Identifying extracellular vesicles originating from the placenta and uterus using RNA expression signatures. Poster presentation at the 7th Annual Illinois Society for Reproduction Sciences Symposium, Urbana, IL, October 12, 2015

116. Wildman D, McGowen M*, Gundling W*, Nevo E. Adaptations to Hypoxia During Pregnancy: The Blind Mole Rat, *Spalax*, Placenta Transcriptome. Poster presentation at the 7th Annual Illinois Society for Reproduction Sciences Symposium, Urbana, IL, October 12, 2015.

117. Wildman DE. The Role of Genomics in the Future of Precision Medicine. **Invited oral presentation** at the Carl R. Woese Institute for Genomic Biology Fellows Symposium. Champaign-Urbana, IL, May 7, 2015.

118. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Genomic

Evidence of Stress Induced Physiological Adaptation in the Placenta. Poster presentation at the Carl R. Woese Institute for Genomic Biology Fellows Symposium. Champaign-Urbana, IL, May 7, 2015.

119. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman, DE. Genomic Evidence of Stress Induced Physiological Adaptation in the Placenta. Oral presentation at the Department of Molecular and Integrative Physiology Annual Retreat, Urbana, IL, September, 2014.

120. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Gene expression differences reveal ancestry-specific environmental interactions in placental adaptation to high-altitude hypoxia. Poster presentation at the 17th Annual Graduate Student Research Day, Detroit, MI, September, 2013.

121. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Evolved placental response to hypoxia in Bolivia. Poster presentation at the 4th Annual MARTs Symposium, Ann Arbor, MI, May, 2013.

122. Gundling WE*, Zamudio S, Illsley N, Echalar L, Wildman DE. Placental Epigenetics at High Altitude. Poster presentation at the16th Annual Graduate Student Research Day. Detroit, Michigan, September, 2012.

123. Bustamante AC, Aiello AE, Koenen KC, Galea S, Wildman DE, Uddin M. Epigenetic effects of the Glucocorticoid receptor, *NR3C1,* related to a history of childhood maltreatment. Poster presentation at Graduate Student Research Day. Detroit, MI, September 2012.

124. Uddin M, Chang SC, Zhang C, Ressler K, Galea S, Keyes KM, McLaughlin K, Wildman DE, Aiello AE, Koenen KC. ADCYAP1R1 genotype predicts PTSD but not depression among women exposed to childhood maltreatment. Poster presentation, Wayne State University Department of Psychiatry and Behavioral Neurosciences Annual Research Conference, Detroit, MI, Apr. 6, 2012.

C. INVITED SEMINARS OR LECTURES PRESENTED

1. University of South Florida, USF Genomics Program Seminar (Tampa, FL 2018)
2. Guangzhou Hospital – Born in Guangzhou Cohort Study Group, Department of Woman's Health, Department of Child Health, Department of Health Information Management of Woman, Child, and Family Planning Program (Guangzhou, China 2017)
3. University of Missouri, Department of Obstetrics and Gynecology Grand Rounds (Columbia, MO 2016)
4. Northwestern School of Medicine (Chicago, IL 2015)
5. University of Illinois at Urbana-Champaign Reproductive Seminar Series (Urbana, IL 2015)
6. University of Illinois at Urbana-Champaign CompGen Meeting (Urbana, IL

2014)

7. March of Dimes/Burroughs Wellcome Fund (San Diego, CA 2014)
8. University of Illinois at Urbana-Champaign Department of Molecular and Integrative Physiology (Urbana, IL 2014)
9. University of Kansas School of Medicine (Kansas City, KS 2013)
10. Duke University Department of Evolutionary Anthropology (Durham, NC 2013)
11. Magee-Women's Research Institute (Pittsburgh, PA 2013)
12. Cornell University (Ithaca, NY 2011)
13. Wayne State University Department of Pharmacology (2011)
14. George Washington University (Washington, DC 2010)
15. University of Illinois (Urbana Champaign, IL 2010)
16. Norwich University Department of Biology (Northfield, VT 2010)
17. Wayne State University Dept. of Biology (2009)
18. March of Dimes/Burroughs Wellcome Fund (Dallas TX, 2008)
19. Yale University Dept. of Ecology & Evolutionary Biology (New Haven CT, 2008)
20. Wayne State University Charles Stuart Mott Center (2008)
21. Ross University School of Veterinary Medicine (St. Kitts & Nevis, 2008)
22. Wenner Gren Foundation for Anthropological Research (New York, NY 2007)
23. University of Michigan Dept. of Ecology and Evolutionary Biology (Ann Arbor, MI 2007)
24. University of Windsor Dept. of Biology (ONT, Canada 2006)
25. University of Pittsburgh, Starzl Transplantation Institute (Pittsburgh, PA 2006)
26. NICHD/National Institutes of Health (Bethesda, MD 2006)
27. Society for Industrial and Applied Mathematics Symposium on Complexity and Business Analytics (Detroit, MI 2006)
28. Society for Molecular Biology and Evolution (Tempe, AZ 2006)
29. New York University/ Center for Studies of Human Origins (2006)
30. Georgia Institute of Technology Dept. of Biology (Atlanta, GA 2005)
31. Wayne State University Center for Molecular Medicine and Genetics (2005)
32. Wayne State University Department of Mathematics (2005)

33. Wayne State University Department of Mathematics (2004)
34. Norwich University Department of Biology (Northfield, VT 2004)
35. Wayne State University Department of Obstetrics and Gynecology (2004)

OTHER CONTRIBUTIONS

A. SOFTWARE DESIGN AND SOURCE CODE
   1. OCPAT - a pipeline to conduct automated codon-preserved alignments for protein coding DNA sequences. (2005-2014).
   2. nsSNP counter http://vortex.cs.wayne.edu/projects.htm. nsSNP counter calculates nonsynonymous and synonymous SNP counts in the NIH polymorphism database (dbSNP). (2006,2007).
   3. GitHub Repositories
      a. https://github.com/orgs/uiuc-cgm/people/dwildman

B. NUCLEOTIDE SEQUENCES
   1. GenBank I am an author on 168,231 publicly available sequences in this database.

C. PROTEIN SEQUENCES
   1. I am an author on 760 publicly available protein sequences in the NCBI databases.

D. POPSETS
   1. I am an author on 26 publicly available population study datasets in the NCBI databases.

E. GEO DATASETS
   1. I am an author on 6 publicly available microarray/NGS datasets.

F. DRYAD DATA PACKAGES
   1. I am an author of 5 publicly available data packages.

G. SRA
   1. I am an author on 25 high-throughput DNA and RNA sequence read archives.