

CURRICULUM VITAE

PERSONAL INFORMATION:

Name: Folami Y. Ideraabdullah, Ph.D.

Work Address: University of North Carolina at Chapel Hill
120 Mason Farm Rd,
Chapel Hill, NC 27599-7264
Phone: (919)445-9047
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Website: <https://www.med.unc.edu/genetics/faculty/folami-ideraabdullah>

EDUCATION:

2007 – 2012 Postdoctoral training, University of Pennsylvania, Philadelphia, PA
2002 – 2007 Ph.D., Genetics and Molecular Biology, University of North Carolina at Chapel Hill, Chapel Hill, NC
1997 – 2001 B.S. in Biology (Genetics option), Pennsylvania State University, University Park, PA

PROFESSIONAL EXPERIENCE:

2016-present **Honorary Researcher**, MRC/Wits Developmental Pathways for health Research Unit (DPHRU), University of Witwatersrand, Johannesburg, South Africa

- Placental epigenetic profile of gestational diabetes

2013-present **Assistant Professor**, Department of Nutrition (secondary), Gillings School of Global Public Health, University of North Carolina at Chapel Hill, NC

- Environmental epigenetics & epigenetic inheritance
- Genetic sensitivity to epigenetic perturbation

2013-present **Assistant Professor**, Department of Genetics (primary), School of Medicine, University of North Carolina at Chapel Hill, NC

- Environmental epigenetics & epigenetic inheritance
- Genetic sensitivity to epigenetic perturbation

2013-present **Affiliate Member**, UNC Nutrition Research Institute, Kannapolis, NC

- Environmental epigenetics & epigenetic inheritance
- Genetic sensitivity to epigenetic perturbation

2007-2012 **Postdoctoral Researcher**, Dr. Marisa Bartolomei's laboratory, University of Pennsylvania, Philadelphia, PA

- Targeted mouse models of human imprinting disorders
- Identifying genetic sequences that regulate genomic imprinting

2003-2007 **Graduate Research Assistant**, Dr. Fernando Pardo-Manuel de Villena's laboratory, University of North Carolina at Chapel Hill, Chapel Hill, NC

- Genetic diversity among inbred mouse strains
- Mapping and characterizing loci responsible for parent of origin dependent phenotypes

2001-2002 **Undergraduate Research Assistant**, Dr. Andrew Clark's laboratory, Pennsylvania State University, University Park, PA

- Genetic interactions in the *Drosophila* innate immune response pathway

1999 & 2000 **Summer Undergraduate Research Intern**, Dr. Mary Galinski's & Dr. John Barnwell's laboratories, Center for Disease Control (CDC) & Emory University, Atlanta, GA

- Genetic diversity among species of the malaria parasite, *Plasmodium*

HONORS & AWARDS:

- 2015 University Research Council Award, University of North Carolina, Chapel Hill, NC
- 2014 IBM Junior Faculty Development Award, University of North Carolina, Chapel Hill, NC
- 2011 FASEB-MARC Travel Award - GSA Mouse Genetics Meeting, Washington, DC
- 2010 – 2011 Mentored Scientist Transition Award, Center of Excellence in Environmental Toxicology (P30 NIH-NIEHS), University of Pennsylvania, Philadelphia, PA
- 2008 - 2010 Ruth L. Kirschstein National Research Service Award (F32), NIGMS, NIH
- 2009 Carl Storm Underrepresented Minority Fellowship - Gordon Research Conference Award
- 2006 Sarah Graham Kenan/ Edwards-Hobgood Dissertation Fellowship, UNC, Chapel Hill, NC
- 2002 - 2003 University Merit Assistantship, University of North Carolina, Chapel Hill, NC

BIBLIOGRAPHY:

BOOKS & CHAPTERS

Dissertation: **Ideraabdullah FY**. The genetic architecture of the DDK syndrome: an early embryonic lethal phenotype in the mouse. University of North Carolina at Chapel Hill, 2007, 150 pages, 3257597.

PAPERS/ARTICLES (*first/co-first author, †corresponding author)

1. Edward Pietryk, Kiristin Clement, Marwa Elnagheeb, Kuster R, Kilpatrick K, Love MI, **Ideraabdullah FY**†. Intergenerational response to the endocrine disruptor vinclozolin is influenced by maternal genotype and crossing scheme. *Reprod Toxicol*. 2018 Mar 10;78:9-19 PMID: 29535025
2. Freschi A, Hur SK, Valente FM, **Ideraabdullah FY**, Sparago A, GenUle MT, Oneglia A, Di Nucci D, Albanese S, AuleYa L, Greco A, Thorvaldsen JL, Bartolomei MS, Riccio A, and Cerrato A. Tissue specific and mosaic imprinting defects underlie opposite congenital growth disorders in mice. *PLoS Genet*. 2018 Feb 22;14(2) PMID: PMC5839592.
3. **Ideraabdullah FY***, Zeisel SH. [Dietary Modulation of the Epigenome](#). *Physiol Rev*. 2018 Apr 1;98(2):667-695. PubMed PMID: 29442595
4. Xue J, Schoenrock SA, Valdar W, Tarantino L, and **Ideraabdullah FY**†. Maternal Vitamin D depletion alters DNA methylation at imprinted loci in multiple generations. *J Clin Epig*. 2016. 8:107 PMID: 27777636; PMID: PMC5062906
5. Hur SK, Freschi A, **Ideraabdullah FY**, Thorvaldsen JL, Luense L, Hines A, Berger S, Cerrato F, Riccio A, Bartolomei MS. Humanized *H19/Igf2* locus reveals diverged imprinting mechanism between mouse and human and reflects Silver-Russell Syndrome phenotypes. *Proc Nat Acad Science*. 2016 Sep 27;113(39):10938-43. PMID:27621468
6. Ferguson JF, Bennett BJ, Allayee H, Gerszten RE, Hazen SL, **Ideraabdullah FY**, Kris-Etherton PM, Ordovas JM, Rimm EB, Wang TJ. Nutrigenomics, the microbiome, and gene-environment interactions: new directions in cardiovascular disease research, prevention, and treatment. A Scientific Statement from the American Heart Association. *Circ Cardiovasc Genet*. 2016 Jun;9(3):291-313. PMID:27095829
7. Xue J, and **Ideraabdullah FY**†. An assessment of molecular pathways of obesity susceptible to nutrient, toxicant and genetically induced epigenetic perturbation. *Jour of Nutr Biochem*. 2016 Apr;30: 1-13 PMID:27012616
8. **Ideraabdullah FY***, Thorvaldsen JL, Myers JA, Bartolomei MS. Tissue specific insulator function at *H19/Igf2* revealed by deletions at the imprinting control region. *Hum Mol Genet*. 2014 Dec 1;23(23):6246-59. PMID:24990148
9. Oakes JL, **Ideraabdullah FY**†. Maternal nutrition and epigenetic perturbation: modeling trends to translation. *Curr Pediatr Rep* 2013 Dec; 1:257 (Journal is not indexed in pubmed)
10. **Ideraabdullah FY***, Bartolomei MS. ZFP57: KAPturing DNA methylation at imprinted loci. *Molecular Cell*, 2011 Nov; 4:44(3):341-2. PMID: 22055179

11. **Ideraabdullah FY***, Abramowitz LK*, Thorvaldsen JL, Krapp C, Wen SC, Engel N, Bartolomei MS. Novel *cis*-regulatory function in ICR-mediated imprinted repression of *H19*. *Developmental Biology*, 2011 Jul 15;355(2):349-57. PMID:21600199
12. **Ideraabdullah FY***, Vigneau S, Bartolomei MS. Genomic imprinting mechanisms in mammals. *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 2008 Dec; 647(1-2):77-85. PMID: 18778719
13. **Ideraabdullah FY***, Kim K, Pomp D, Moran JL, Beier D, Pardo-Manuel de Villena F. Rescue of the mouse DDK syndrome by parent-of-origin dependent modifiers. *Biology of Reproduction*, 2007 Oct;76:286-293. PMID:17050856
14. Bell TA*, de la Casa-Esperon E*, Doherty HE*, **Ideraabdullah FY***, Kim K, Wang Y, Lange L, Wilhelmsem K, Lange E, Sapienza C, Pardo-Manuel de Villena F. The paternal gene of the DDK syndrome maps to the *Schlafen* gene cluster on mouse chromosome 11. *Genetics*, 2006 Jan;172:411-423. PMID:16172501
15. Kim K, Thomas S, Howard I, Bell TA, Doherty HE, **Ideraabdullah FY***, Detwiler DA, Pardo-Manuel de Villena F. Meiotic drive at the *Om* locus in wild derived mouse inbred strains. *The Biol. J. of the Linnean Society*, 2005 84: 487-492. (Journal is not indexed in pubmed)
16. **Ideraabdullah FY***, De la Casa-Esperon E*, Bell TA*, Detwiler DA, Magnuson T, Sapienza C, Pardo-Manuel de Villena F. Genetic and haplotype diversity among wild-derived mouse inbred strains. *Genome Research*, 2004 Oct;14:1880-1887. PMID: 15466288
17. Rayner JC, Corredor V, Feldman D, Ingravallo P, **Ideraabdullah F**, Galinski MR, Barnwell JW. Extensive polymorphism in the *Plasmodium vivax* merozoite surface coat protein MSP-3alpha is limited to specific domains. *Parasitology*, 2002 Nov;125:393-405. PMID:15466288 (Name misspelled in pubmed “Iderabdullah”)

PRESENTATIONS

INVITED SCIENTIFIC PRESENTATIONS

- “Role of developmental vitamin D status in establishing the adult epigenome?”, University of Missouri Nutrition & Exercise Physiology seminar series, Columbia, MO (2018)
- “Developmental programming of the epigenome: A role for vitamin D?”, UNC Chapel Hill Biology Department monthly seminar series, Chapel Hill, NC (2018)
- “Characterizing the impact of maternal vitamin D deficiency on epigenetic programming in the male germline”, Environmental mutagenesis and genomics society (EMGS), The unique vulnerability of the germline epigenome: Towards evidence of transgenerational inheritance, Raleigh, NC (2017)
- “Impact of maternal vitamin D status on the male germline epigenome, implications for transmission”, Gordon Research Conference (GRC) on Epigenetics, Epigenetics in Action, Holderness, NH (2017)
- “Epigenetic consequences of maternal environment”, Yale University, Department of Environmental Health Sciences, New Haven, CT (2017)
- “Offspring epigenetic consequences of maternal vitamin D depletion”, University of Pennsylvania, Center for Research on Reproduction and Women’s Health, Philadelphia, PA (2017)
- “Characterizing the impact of maternal environment on offspring epigenetic outcomes”, NIEHS, Epigenetics and Stem Cell Biology Laboratory, Research Triangle Park, NC (2016)
- “Defining the role of maternal vitamin D status in offspring epigenetic outcomes”, Genetics Epidemiology Seminar, UNC, Chapel Hill, NC (2016)
- “Characterizing cell-type dependent methylation changes caused by maternal vitamin D deficiency”, US DOHaD Society Inaugural meeting, Detroit, MI (2016)
- “Offspring epigenetic consequences of maternal environment” NIH Future Research Leaders Conference, Bethesda, MD (2016)
- “Defining epigenetic consequences of maternal environment”. Society for the Study of Reproduction. Annual Conference, San Diego, CA (2016)
- “Use of mouse models to identify and characterize epigenetic stability and heritability”. Gordon Research Conference on Environmental Endocrine Disruptors. Sunday River, ME (2016)

- “Characterizing offspring epigenetic consequences of maternal environment”. Annual NCRC Catalyst Symposium, Kannapolis, NC (2016)
- “Characterizing the role of epigenetic mechanisms in developmental origins of health and disease”. North Carolina State University, Toxicology seminar series, Raleigh, NC (2016)
- “Characterizing the role of gene-nutrient interactions required for normal epigenetic reprogramming”. Gene-Reg Seminar series, DHMRI, Kannapolis, NC (2015)
- “Dissecting mechanisms of epigenetic inheritance using mouse models”. Genetics and Environmental Mutagenesis (GEMS) Fall symposium, RTP, NC (2015)
- “Epigenetic heritability – role of environment and genetics”. UNC-Charlotte Center for Biomedical Engineering and Science Annual Retreat, Charlotte, NC (2015)
- “Identifying genetic determinants of epigenetic disease susceptibility”. UNC-CH Curriculum in Toxicology, Chapel Hill, NC (2014)
- “Searching for Genetic Determinants of Epigenetic Dysregulation.” Keynote lecture – UNC-CH REU in Molecular Biosciences, SPIRE, SOLAR, and Partners NC, Chapel Hill, NC (2014)
- “Underrepresented Minority postdoc challenges and successes.” University of Pennsylvania Diversity Symposium, Promoting diversity in academics, Philadelphia, PA (2013)
- “Identifying heritable mechanisms of epigenetic response to environment.” NIEHS Laboratory of Reproductive and developmental toxicology, Research Triangle Park, NC (2013)
- “Epigenetic response to endocrine disrupting compounds, a genetic approach.” Gordon Research Conference on Cellular & Molecular mechanisms of Toxicology, Proctor Academy, Andover, NH (2013)
- “Epigenetic effects of early nutrition.” University of North Carolina at Chapel Hill Nutrition Research Institute, Kannapolis Scholars annual symposium, UNC-CH NRI, Kannapolis, NC (2013)
- “The role of genetic mutation in susceptibility to environmental insult.” Environmental Endocrine Disruptors, Gordon Research Seminar (GRS), West Dover, VT (2012)
- “The role of the endocrine disrupting compound vinclozolin in genomic imprinting.” Center of Excellence in Environmental Toxicology Annual Symposium, Radnor, PA (2011)
- “Parent-of-origin dependent rescue of the DDK Syndrome: An early embryonic lethal phenotype in the mouse”. International Mammalian Genome Conference. Charleston, SC (2006)
- “Determining expression levels of genes involved in the *Drosophila* innate immune response”. Summer Research Opportunities Program Symposium. Pennsylvania State University, University Park, PA (2002)

INVITED PUBLIC PRESENTATIONS

- “Vitamin D and human health: 10 things your mother never told you”. University of North Carolina at Chapel Hill Nutrition Research Institute, Appetite for Life seminar, UNC-CH NRI, Kannapolis, NC (2017)
- “Eating for two: epigenetic consequences of maternal environments”. UNC Program in the Humanities, Genetics, the Environment, and Identity Seminar, Chapel Hill, NC (2016)
- “For Better or For Worse Consequences of Living with Chemicals”. Catawba College Center for the Environment, Catawba, NC. (2014)
- “Heritable effects of diet: Becoming what our parents eat.” University of North Carolina at Chapel Hill Nutrition Research Institute, Appetite for Life seminar, UNC-CH NRI, Kannapolis, NC (2013)

OTHER INTERNAL/DEPARTMENTAL PRESENTATIONS

- “Defining epigenetic consequences of maternal environment”. Carolina Chromatin Consortium. Seminar series, Chapel Hill, NC (2016)
- “Understanding environmental perturbation of developmentally relevant epigenetic mechanisms”. Carolina Chromatin Consortium, Chapel Hill, NC (2015)
- “Using mouse models to determine genetic influences on epigenetic states.” UNC-CH Genetics Department Seminar Series, Chapel Hill, NC (2013)
- “Mouse models of epigenetic stability.” UNC-CH Genetics and Molecular Biology Program Retreat, Myrtle Beach, SC (2013)

- “Characterizing the genetic basis of epigenetic response to environment.” Center of Excellence in Environmental Toxicology, University of Pennsylvania, Philadelphia, PA (2012)
- “Resolving the epigenetic regulatory mechanism of ICR-mediated imprinting at *H19/Igf2*.” Epigenetic Meeting, University of Pennsylvania, Philadelphia, PA (2011)
- “The mechanism of *H19/Igf2* imprinting: Resolving a new degree of complexity.” Developmental Biology Training Grant Annual Retreat, University of Pennsylvania, Philadelphia, PA (2011)
- “Dissecting the regulatory mechanism of the *H19/Igf2* imprinting control region (ICR).” Department of Genetics Seminar Series. University of Pennsylvania, Philadelphia, PA (2010)
- “Dissecting the regulatory mechanism of the *H19/Igf2* imprinting control region (ICR).” Epigenetics Collaborative Retreat. University of Pennsylvania, Philadelphia, PA (2010)
- “Timing and Mode of Rescue of the DDK Syndrome Early Embryonic Lethal Phenotype”. Department of Genetics Seminar Series. University of North Carolina, Chapel Hill, NC (2006)
- “A Modifier Locus on Chromosome 13 Rescues a Complex Embryonic Lethal Phenotype in the Mouse.” Curriculum in Genetics and Molecular Biology Seminar Series. University of North Carolina, Chapel Hill, NC (2006)
- “The genetic architecture of the DDK syndrome: A parent-of-origin early embryonic lethal phenotype in the mouse”. Developmental Biology Symposium, University of North Carolina. Chapel Hill, NC (2006)
- “The *Imod1* locus on Chromosome 13 rescues a complex embryonic lethal phenotype in mouse.” Department of Genetics and Curriculum in Genetics Annual Retreat. Wilmington, NC (2005)
- “A Search for Dominant Modifiers of the DDK Syndrome.” Department of Genetics Seminar Series. University of North Carolina, Chapel Hill, NC (2005)
- “A Search for Dominant Modifiers of the DDK Syndrome.” Curriculum in Genetics and Molecular Biology Series. University of North Carolina, Chapel Hill (2005)
- “GO WILD: Demonstrating extraordinary levels of genetic diversity in inbred mouse strains.” Department of Genetics Seminar Series, University of North Carolina. Chapel Hill, NC (2004)
- “Exploring Genetic Diversity in Wild Derived Inbred Mouse Strains”. Curriculum in Genetics and Molecular Biology Symposium, University of North Carolina. Chapel Hill, NC (2003)
- “Determining Expression Levels of Genes involved in the Drosophila Innate Immune Response”. Summer Research Opportunities Program Symposium. Pennsylvania State University, University Park, PA (2001)

POSTER PRESENTATIONS

- “Intergenerational response to the endocrine disruptor vinclozolin is influenced by maternal genotype & crossing scheme”, Society of Toxicology (SOT) annual meeting, San Antonio, TX (3/2018)
- “Defining the role of genetic differences and antiandrogenic activity in variability of epigenetic response to vinclozolin” 25 years of Endocrine Disruptors Meeting, Bethesda, MD (2016)
- “Offspring epigenetic consequences of maternal environment” NIH Future Research Leaders Conference, Bethesda, MD (2016)
- “Role of vitamin D in epigenetic reprogramming.” Epigenetics, Gordon Research Conference, Waltham, MA (2015)
- “The role of genetic mutation in susceptibility to environmental insult.” Environmental Endocrine Disruptors, Gordon Research Seminar & Conference (GRS & GRC), West Dover, VT (2012)
- “The role of genetic mutation in susceptibility to environmental insult.” Center of Excellence in Environmental Toxicology Annual Symposium, Radnor, PA (2012)
- “Tissue specific enhancer activity mediated by the *H19/Igf2* imprinting control region, Center for Research on Reproduction and Women’s Health (CRRWH), Philadelphia, PA (2012)
- “Characterizing *cis*-regulatory elements at the imprinted *H19/Igf2* locus.” IMGC. Washington, DC (2011)
- “Identifying *cis*-regulatory elements at the imprinted *H19/Igf2* locus.” Epigenetics and Inst. for Regenerative Medicine. University of Pennsylvania, Philadelphia, PA (2010)
- “Role of CTCF spacing in imprinting regulation at the *H19/Igf2* locus.” Biomedical Postdoctoral Symposium. University of Pennsylvania, Philadelphia, PA (2009)
- “Role of CTCF spacing in imprinting regulation at the *H19/Igf2* locus.” Gordon Conference – Mammalian Gametogenesis and Embryogenesis. Waterville, NH (2009)

- “The DDK syndrome is rescued by a parent-of-origin dependent maternal effect.” Developmental Biology Spring Symposium. University of North Carolina at Chapel Hill, NC (2007)
- “Parent-of-origin dependent rescue of the DDK Syndrome: An early embryonic lethal phenotype in the mouse”. International Mammalian Genome Conference (IMGC), Charleston, SC (2006)
- “Parent-of-origin dependent rescue of the DDK Syndrome: An early embryonic lethal phenotype in the mouse”. NIH Graduate Student Research Festival. National Institutes of Health (NIH), Bethesda, MD (2006)
- “Parent-of-origin dependent rescue of the DDK Syndrome: An early embryonic lethal phenotype in the mouse”. Department of Genetics & Curric. in Genetics and Molecular Biology annual retreat. Wilmington, NC (2006)
- “The Genetic Architecture of the DDK Syndrome: A parent-of-origin early embryonic lethal phenotype in the mouse”. Complex Trait Consortium. University of North Carolina, Chapel Hill, NC (2006)
- “Imod1: An Imprinted Locus on Chromosome 13 Rescues a Complex Embryonic Lethal Phenotype in the Mouse”. International Mouse Genome Conference. Strasbourg, France (2005)
- “Modifiers of the DDK Syndrome Skew Allelic Exclusion Choice”. Developmental Biology Spring Symposium. University of North Carolina, Chapel Hill, NC (2005)
- “Modifiers of the DDK Syndrome Skew Allelic Exclusion Choice”. International Mouse Genome Conference. Seattle, WA (2004)
- “Modifiers of the DDK Syndrome Skew Allelic Exclusion Choice”. UNC Department of Genetics and Duke University Cell and Molecular Biology Annual Retreat. Wilmington, NC (2004)
- “Exploring Genetic Diversity in Wild Derived Inbred Mouse Strains”. Curriculum in Genetics and Molecular Biology Annual Symposium. University of North Carolina, Chapel Hill, NC (2004)
- “Exploring Genetic Diversity in Wild Derived Inbred Mouse Strains”. UNC Department of Genetics and Duke University Cell and Molecular Biology Retreat. Pinehurst, NC (2003)
- “Targeted Deletion of the Lipoxxygenase Gene Clusters in the Mouse”. Curriculum in Genetics and Molecular Biology Annual Symposium. University of North Carolina, Chapel Hill, NC (2003)

SOCIETIES/CONSORTIA

- | | |
|----------------|---|
| 2017-present | Environmental Mutagenesis and Genomics Society (EMGS) |
| 2016-present | Society for the Study of Reproduction (SSR) |
| 2016-present | Genetics Society of America (GSA) |
| 2015-present | International Society for Developmental Origins of Health and Disease (DOHaD) |
| 2015-present | Carolina Chromatin Consortium (C3) |
| 2013-present | Society of Toxicology (SOT) |
| 2011-present | Association for Women in Science (AWIS) |
| 2003-2007, | |
| 2013 - present | International Mammalian Genome Society (IMGS) |
| 2014-2016 | American Society for Nutrition (ASN) |
| 2013 -2017 | American Society for Biochemistry and Molecular Biology (ASBMB) |
| 2012-2016 | American Society of Andrology (ASA) |
| 2012-2014 | The Endocrine Society |

CENTERS & CURRICULA

- 2016 – present Member, Center for Environmental health and susceptibility (CEHS), UNC, Chapel Hill, NC
- 2014 – present Preceptor, Curriculum in Toxicology, University of North Carolina, Chapel Hill, NC
- 2013 – present Preceptor, Curriculum in Genetics and Molecular Biology, UNC at Chapel Hill, Chapel Hill, NC

TEACHING ACTIVITIES

GRADUATE COURSES

- 2017-present Co-mentor, BBSP First Year Group, UNC at Chapel Hill, NC
- 2015-present Co-Instructor, GNET 646 Principles and Exp. Appr. of Mamm. Genetics, UNC at Chapel Hill, NC
- 2013 Guest Lecturer, NUTR862-001 Epigenetics in Nutrition, UNC at Chapel Hill, NC

WORKSHOPS

- 2016 - present Instructor, Short course on Nutrigenetics, Nutrigenomics & Precision Nutrition, Kannapolis, NC
2015 Speaker/Panelist, ASBMB Grant writing, Washington, DC
2014 Speaker/Panelist, "Data Analysis Workshop" UNC NRI Catalyst group, Kannapolis, NC
2014 Presenter, Science Technology, Engineering and Math (STEM) club, Imani House Inc., Brooklyn, NY

MENTORING

Current mentees

Postdoctoral researchers

Jing Xue, PhD (2014 – present)

Graduate students

Laetitia Meyriux, Nutrition PhD student, (2016- present)

Undergraduate students

Alvaro Nava, UNC BSPH student (2018 – present)

Changran Niu, UNC BSPH student (2018 – present)

Deepika Senthil, UNC Quantitative Biology student (2018 – present)

PhD committees

Patricia Vigneau, Curriculum in Genetics and Molecular Biology PhD student (2015 – present)

Megan Schertzer (Chair) Curriculum in Genetics and Molecular Biology PhD student (2015 – present)

Evan Paules, Nutrition Department PhD student (2016 – present)

Keri Barron, Nutrition Department PhD student (2016 – present)

Brea Hampton, Curriculum in Genetics and Molecular Biology PhD student (2017 – present)

Previous mentees

Postdoctoral researchers

Kanika Kanchan, PhD (2016-2017)

Judy Oakes, PhD (2013-2015)

Graduate students

Marwa Elnagheeb, MPH student (2016 - 2018)

Anandita Pal, Nutrition PhD student, (2015 – 2017)

Undergraduate students

Conner Gleason-Wallace, Appalachian state summer intern (summer 2017)

Joshua Baulch, Highpoint University summer intern (summer 2015)

Katherine Shumaker, Catawba College summer intern (summer 2015)

Whitney Miller, Rowan Cabarrus Community College intern (spring 2015)

Lisa Baucom, Rowan Cabarrus Community College intern (spring 2015)

Cayce Finger, Rowan Cabarrus Community College intern (2014)

Hanna Pless, UNC Chapel Hill summer intern (summer 2013)

High school students

Andrei Niculescu, (summer 2014)

Andrew Wu, Bartolomei lab (summer 2009)

PhD committees

Daniel Lupu, Nutrition Department PhD student (2015 – 2017)

Amelia Clayshulte, Curriculum in Genetics and Molecular Biology PhD student (2016)

Rachael McMullen, Curriculum in Genetics and Molecular Biology PhD student (2015 – 2017)

Secondary Mentoring & visiting scholars

Postbaccalaureate students

Cierra Dungee, UNC PREP, Dr. Jeremy Purvis laboratory (2017 - 2018)

Undergraduate students

Padam Kumar, BSPH student, Dr. Lisa Tarantino's laboratory (2016 - 2018)

Graduate students

Mitra Hariri, visiting PhD student, Ghiasvand lab (2015 – 2016)

Chelsea Nehler, PhD candidate, Cheatham lab (summer 2013)

Stella Hur, PhD candidate, Bartolomei lab (2012)

Kate Palozola, PhD candidate, Bartolomei lab (2011)

Andrea Freschi, PhD candidate, Bartolomei lab (2010-2011)

Lara Abramowitz, PhD candidate, Bartolomei lab (2008-2011)

Undergraduate students

Janet Sung, Bartolomei lab (2009- 2011)

Sherry Wen, Bartolomei lab (2007- 2007)

PROFESSIONAL SERVICE

TO DISCIPLINE

- 2015 – present Editorial Review Board member, Environmental Epigenetics
2014 – present Editorial Review Board member, Journal of Nutritional Biochemistry
2015 – 2017 Genomic Sciences Reg. Exchange committee, David H. Murdock Research Institute, Kannapolis, NC
2016 Session leader, Environmental Endocrine Disruptors – late-breaking topics, Gordon Research Conference, Sunday River, ME
2016 Session leader, Nutri-epigenetics, Short course on Nutrigenetics, Nutrigenomics & Precision Nutrition, UNC Nutrition Research Institute, Kannapolis, NC
2016 Adhoc reviewer, PLOS One
2016 Adhoc reviewer, Genetics
2013, 2016 Adhoc reviewer, FASEB journal
2015 Panelist, ASBMB Grant writing workshop, Washington, DC
2014 – 2015 Co-Organizer & Session leader, Nutrition & epigenetics, 9th Congress of the International Society of Nutrigenetics/ Nutrigenomics, Chapel Hill, NC
2014 Adhoc reviewer, Genes and Genomes
2014 Adhoc reviewer, Nutrition reviews
2012 – 2014 Chair, Environmental Endocrine Disruptors – Mechanistic insights into the effects of environmental endocrine disruptors; deciphering genetic and epigenetic influences, 2014 Gordon Research Seminar, Tuscany, Italy
2011 - 2014 National Conference Abstract Reviewer, ABRCMS
2010 - 2012 Graduate student mentor, Scientific Mentoring Initiative (SMI) program, Biomedical Postdoctoral Council Diversity Committee, University of Pennsylvania, Philadelphia, PA
2007 - 2012 Science Mentor, IPRAXIS, Philadelphia, PA
2010 - 2012 Scientific Mentoring Initiative (SMI) (co-founder), Biomedical Postdoctoral Council Diversity Committee, University of Pennsylvania, Philadelphia, PA
2011 Facilitator, Women in Science (AWIS) Day, Da Vinci Science Center, Allentown, PA
2010 Science Fair Judge, Shiloh science fair, Chester
2008 – 2009 Co-Chair, Diversity committee, Biomedical Postdoctoral Council Diversity Committee, University of Pennsylvania, Philadelphia, PA
2008 – 2009 Chair, Social Committee, Biomedical Postdoc Council, University of Pennsylvania, Philadelphia, PA
2007 - 2009 National Conference Abstract Reviewer, SACNAS
2007 - 2009 Science Mentor, SPARK, Philadelphia, PA
2008 Annual Biomedical Research Conference for Minority Students (ABRCMS) Judge, Orlando, FL
2006 – 2007 Member, Graduate Training Advisory Committee, University of North Carolina, Chapel Hill, NC
2006 Teacher's Assistant (volunteer), INSPIRE, Chapel Hill High School, Chapel Hill, NC
2004 - 2006 Student Event Committee, Curriculum in Genetics and Molecular Biology, University of North Carolina, Chapel Hill, NC
2003 - 2006 Student Recruitment Committee, Curriculum in Genetics and Molecular Biology, University of North Carolina, Chapel Hill, NC
2005 Student Mentor, Womentoring, University of North Carolina, Chapel Hill, NC

WITHIN UNC-CHAPEL HILL (COMMITTEES, ADMINISTRATIVE ACTIVITIES)

- 2015 – present UNC-CH Nutrition Obesity Research Center (NORC) internal governance committee, UNC Nutrition Research Institute, Kannapolis, NC
2014 – present Preceptor, Curriculum in Toxicology, University of North Carolina, Chapel Hill, NC
2014 – present Member, Carolina Chromatin Consortium, University of North Carolina, Chapel Hill, NC
2014 – present Member, Carolina Black Caucus, University of North Carolina, Chapel Hill, NC
2013 – present Preceptor, Curriculum in Genetics and Molecular Biology, UNC at Chapel Hill, Chapel Hill, NC

2016 – 2017 UNC-CH Nutrition Department nutrigenomics search committee, UNC Nutrition Research Institute, Kannapolis, NC
2015, 2016 Session Chair, Genetics Department annual retreat, University of North Carolina, Chapel Hill, NC
2014 – 2015 UNC Nutrition Research Institute Impact award Committee, Kannapolis, NC
2014 – 2015 UNC-CH Nutrition Department fetal alcohol spectrum search committee, Kannapolis, NC
2014 – 2015 UNC-CH Nutrition Department cardiovascular and metabolic search committee, Kannapolis, NC
2014 – 2015 UNC-CH Nutrition Department nutrition and cancer search committee, Kannapolis, NC
2013 – 2014 Coordinator, UNC-CH Nutrition Research Institute Seminar Series, UNC NRI, Kannapolis, NC
2013 UNC-CH Genetics Department computational faculty search committee, Chapel Hill, NC
2013 UNC-CH Nutrition Research Institute Strategic planning committee member, Kannapolis, NC

OTHER (SITE VISITS, REVIEW PANELS)

2014 NIH site visit for UNC-CH Curriculum in Genetics and Molecular Biology training grant renewal
2014 USDA Project Plan reviewer, USDA Office of Scientific Quality Review
2013 UNC-CH Nutrition Research Institute Board Meeting

GRANTS

ACTIVE

Nutrition Obesity Research Core Pilot – UNC 4/1/2018 - 3/31/2019

Role: PI

Pilot and Feasibility Award

Title: Establishing the Collaborative Cross mouse reference population as a model for studying genetic determination of vitamin D status. Project goals: to investigate the impact of genetic differences among CC inbred strains on vitamin D metabolism, vitamin D depletion, and physiological response to dietary vitamin D depletion

UNC Nutrition Department – UNC 1/1/2018 - 6/30/2018

Role: Co-PI, Beck

Pilot and Feasibility Award

Title: Weight loss and weight gain: Impact on immunity. Project goals: to determine the role of epigenetic changes in conferring stable T cell dysfunction in obese conditions.

P30ES010126

Role: PI 9/1/2016-8/31/2018

UNC Center for Environmental Health and Susceptibility (CEHS) Pilot Project Awards

Title: Profiling an endocrine disruption model for risk assessment of epigenetic outcomes

Project goals: To identify susceptible targets of epigenetic response to the endocrine disrupting chemical vinclozolin

K22 - KES023849A

Role: PI 12/01/2014-11/30/2018

NIEHS – PA-12-188 Transition to Independent Environmental Health Research Career Development Award

Title: A genetic approach to understanding mechanisms of epigenetic perturbation by environment

Project goals: To determine the role of DNA sequence differences in influencing the extent and heritability of epigenetic response to the endocrine disrupting compound (EDC) vinclozolin.

COMPLETED

NC TraCs

Role: Co-PI 10/1/2016-9/30/2017

The North Carolina Translational and Clinical Sciences Institute (NC TraCs) \$5-\$50K grant

Title: Role of epigenetic factors in beta-cell dysfunction in type 1 diabetes

Project goals: To identify biomarkers that distinguish slow vs. rapid beta-cell decline in type 1 diabetes

University Research Council Award

Role: PI 5/1/2015- 4/30/2017

Title: Targeted bisulfite sequencing to determine epigenetic perturbation caused by EDC exposure

Project goals: To determine the level of genome-wide epigenetic perturbation caused by exposure to vinclozolin

IBM J. Faculty Development Award

Role: PI 12/1/2014- 11/30/2015
Title: Characterizing mechanisms of environmental epigenetic perturbation
Project goals: To determine the level of genome-wide epigenetic perturbation caused by exposure to vinclozolin

NC TraCS – 550KR81416

Role: Co-investigator 9/1/2014- 8/30/2015
UNC- CH NCTraCs

Title: Role of phthalates and vitamin E in risk of diabetes.
Project goals: To determine correlation between urinary phthalate levels and diabetes status in a Mexican cohort of human participants and to determine the role of vitamin E intake in diabetes occurrence in individuals with high phthalate levels.

NRI- collaborative grant

Role: Co-PI 1/1/2015- 6/1/2015
UNC-CH Nutrition Research Institute Collaborative grant

Title: Methylation patterns in placental tissue in relation to maternal weight status and glycemic control during pregnancy.

Project goals: To determine the role of global DNA methylation patterns in human placenta in determining birth outcomes from women with different weight and glycemia status phenotypes during pregnancy with the ultimate goal of understanding maternal influences on fetal growth and body composition.

1P30 ES013508-05

Role: PI 10/1/2010 - 9/30/2011

Center of Excellence in Environmental Toxicology (CEET), Mentored Scientist Transition Award, National Institutes of Health-NIEHS, University of Pennsylvania, Philadelphia, PA

Title: Understanding the additive effects of genetic-epigenetic-environmental interactions on disease.

Project goals: To develop a model to study the role of genetic differences in epigenetic response to the (EDC) endocrine disrupting compound vinclozolin.

F32 - GM085999

Role: PI 9/1/2008 - 8/31/10

Ruth L. Kirschstein National Research Service Award, NIH-NIGMS, University of Pennsylvania, Philadelphia, PA

Title: Role of regulatory sequence at the *H19* imprinting control region (ICR).

Project goals: To generate and characterize three targeted mouse models to investigate the role of Beckwith-Wiedemann Syndrome associated microdeletions at the *H19* ICR in imprinting mechanisms.

T32 - HD007516

Role: PI 7/1/2007 - 7/31/2008

Department of Cell and Developmental Biology Training grant, University of Pennsylvania, Philadelphia, PA

Relationship to project: Role of regulatory sequence at the *H19* imprinting control region.

Project goals: To determine the role of CTCF site spacing and transcripts at *H19/Igf2* locus in imprinting mechanisms.