I am interested in using genetic diversity to understand human demographic and evolutionary processes in human populations. In the past, I have worked in immunology, virology, and my PhD dissertation was in using experimentally evolved Drosophila melanogaster to understand genetic basis of complex traits.

**HONORS AND AWARDS**
- Predoctoral Fellowship (T32), NIH (2012-2014)
- Undergraduate Recruitment Travel Award (55th Annual Drosophila Research Conference), Biological Sciences Division, The University of Chicago (2014)
- Undergraduate Recruitment Travel Award (ASHG), Biological Sciences Division, The University of Chicago, Chicago, IL (2014)
- Future of Science Fund, Keystone Symposia Travel Award (2013)
- PIRE Fellowship, Open Science Data Cloud, The University of Chicago, Chicago, IL (2011-2012)
- Travel Award, 17th International HIV Dynamics and Evolution Conference, Monterey, CA (2010)
- Symposium Fellow, Evolution: the Molecular Landscape, Cold Spring Harbor Laboratory’s 74th Symposium (2009)
- Allan R. Brown Outstanding Student Leadership Award, College of San Mateo, San Mateo, CA (2004)
- Student Services and Associated Students Scholarships, College of San Mateo, San Mateo, CA (2003-2004)

**PROFESSIONAL EDUCATION**
- Doctor of Philosophy, University of Chicago (2015)
- Bachelor of Arts, University of California Berkeley (2007)
- Associate of Arts, College Of San Mateo (2004)

**STANFORD ADVISORS**
- Carlos Bustamante, Postdoctoral Research Mentor

**Publications**

**PUBLICATIONS**
- **Shared Genetic Signals of Hypoxia Adaptation in Drosophila and in High-Altitude Human Populations** *Molecular Biology and Evolution*
  2016; 33 (2): 501-517

- **Whole-Genome Resequencing of Experimental Populations Reveals Polygenic Basis of Egg-Size Variation in Drosophila melanogaster.** *Molecular biology and evolution*
Jha, A. R., Miles, C. M., Lippert, N. R., Brown, C. D., White, K. P., Kreitman, M.
2015; 32 (10): 2616-2632

- Global diversity, population stratification, and selection of human copy-number variation *SCIENCE*
  2015; 349 (6253): 1181-?

- miR-9a Minimizes the Phenotypic Impact of Genomic Diversity by Buffering a Transcription Factor *CELL*
  2013; 155 (7): 1556-1567

- Associations between Antibodies to a Panel of Plasmodium falciparum Specific Antigens and Response to Sub-Optimal Antimalarial Therapy in Kampala, Uganda *PLOS ONE*
  2012; 7 (12)

- Tim-3 marks human natural killer cell maturation and suppresses cell-mediated cytotoxicity *14th International Congress of Immunology*
  AMER SOC HEMATOLOGY.2012: 3734–43

- An Aboriginal Australian Genome Reveals Separate Human Dispersals into Asia *SCIENCE*
  2011; 334 (6052): 94-98

- Human Endogenous Retrovirus K106 (HERV-K106) Was Infectious after the Emergence of Anatomically Modern Humans *PLOS ONE*
  2011; 6 (5)

- HTLV-1 Tax Specific CD8+ T Cells Express Low Levels of Tim-3 in HTLV-1 Infection: Implications for Progression to Neurological Complications *PLOS NEGLLECTED TROPICAL DISEASES*
  2011; 5 (4)

- IL-2 Immunotherapy to Recently HIV-1 Infected Adults Maintains the Numbers of IL-17 Expressing CD4+ T (T(H)17) Cells in the Periphery *JOURNAL OF CLINICAL IMMUNOLOGY*
  2010; 30 (5): 681-692

- A novel human CD4(+) T-cell inducer subset with potent immunostimulatory properties *EUROPEAN JOURNAL OF IMMUNOLOGY*
  2010; 40 (1): 134-141

- Lower numbers of circulating natural killer T (NK T) cells in individuals with human T lymphotropic virus type 1 (HTLV-1) associated neurological disease *CLINICAL AND EXPERIMENTAL IMMUNOLOGY*
  2009; 158 (3): 294-299

- Cross-Sectional Dating of Novel Haplotype of HERV-K 113 and HERV-K 115 Indicate These Proviruses Originated in Africa before Homo sapiens *MOLECULAR BIOLOGY AND EVOLUTION*
  2009; 26 (11): 2617-2626

- Interleukin-10-secreting T cells define a suppressive subset within the HIV-1-specific T-cell population *EUROPEAN JOURNAL OF IMMUNOLOGY*
  2009; 39 (5): 1280-1287
Tim-3 expression defines a novel population of dysfunctional T cells with highly elevated frequencies in progressive HIV-1 infection. *Journal of Experimental Medicine*


2008; 205 (12): 2763-2779

Suppression of HIV-1 plasma viral load below detection preserves IL-17 producing T cells in HIV-1 infection. *AIDS*


2008; 22 (8): 990-992

**PRESENTATIONS**

- Identification of shared adaptive genes in high altitude humans using experimentally evolved Drosophila populations. - Spring Quarter Seminar, Department of Physiology, University of California San Diego

- Signatures of polygenic adaptation from common natural variants in egg size evolution in experimentally evolved Drosophila melanogaster. - 55th Annual Drosophila Research Conference

- Convergent evolution of hypoxia adaptation in laboratory selected Drosophila melanogaster and in high altitude human populations. - Keystone Symposia: Sensing and Signaling of Hypoxia: Interfaces with Biology and Medicine

- Adaptation to hypoxia in experimentally evolved Drosophila melanogaster: convergent and highly polygenic. - 54th Annual Drosophila Research Conference

- The evolutionary dynamics and the role of natural variations in the genetic architecture of hypoxia tolerance in experimentally evolved populations of Drosophila melanogaster. - High Altitude and Cold: Adaptation to the extremes Conference

- “Adaptation to hypoxia is highly polygenic trait and involves genes in metabolic, developmental, and oxygen sensing pathways.” - The University of Chicago Annual Molecular Biosciences Retreat

- “HERV-K106 may be the youngest human endogenous retrovirus.” - 17th HIV Dynamics and Evolution

- Variations in insertion frequencies and haplotypes of polymorphic HERV-K113 and HERV-K115 support “out of Africa” theory of human evolution. - “Evolution: the Molecular Landscape” Cold Spring Harbor Laboratory’s 74th Symposium celebrating Charles Darwin’s bicentennial and 150th anniversary of the publication of *The Origin of species*