

Jane Doe
Address
Email

EDUCATION

Graduate Student, University of California, San Diego 08/2016 - Present
San Diego, CA
Biological Sciences Graduate Program

B.S, University of California, Los Angeles 06/2013
Los Angeles, CA
Molecular, Cellular, and Developmental Biology

RESEARCH EXPERIENCE

The Salk Institute of Biological Sciences, 2017-Present
Graduate Student Researcher,
La Jolla, CA
Advisor: Samuel Pfaff

Board of Governors Regenerative Medicine Institute, 2013-2016
Research Associate,
Cedars-Sinai Medical Center, Los Angeles, CA
Advisor: Clive Svendsen

Modeling the neurological deficits of Allan-Herndon-Dudley Syndrome using induce pluripotent stem cells (iPSC) to generate a disease-in-a-dish model.

Department of Microbiology, Immunology and Molecular Genetics, 2011-2013
Undergraduate Research Assistant,
University of California, Los Angeles, Los Angeles, CA
Advisor: Owen Witte

Assisted in investigating the role of inflammatory cytokines, IL6 and OSM, on prostate cancer pathogenesis

Independent research investigating the effects of *in vitro* culture of primary prostate cells on lentiviral transduction efficiency

Department of Molecular and Computational Biology, 2010-2011
Undergraduate Research Assistant,
University of Southern California, Los Angeles, CA
Advisor: John Tower

Investigating the role of Insulin/Tor signaling on aging in *Drosophila Melanogaster*

TEACHING AND MENTORSHIP

UCSD, Department of Biology Winter 2018
Instructional Assistant
BIMM 101: Recombinant DNA Techniques

UCSD Summer Training Academy for Research Success
Graduate Advocate,
University of California, San Diego, San Diego, CA
Advisor: Elisa Maldonado

7/1/17 – 6/30/19

Provide advising, mentoring, and academic support for underrepresented undergraduate students in an intensive summer research program.

SKILLS

Gene editing | CRISPR/Cas9 mediated genome editing in human iPSC, DNA delivery methods such as lentivirus, lipofection, and electroporation

Tissue culture | human iPSC culture (feeder and feeder free), primary cell isolation, fluorescence activated cell sorting, magnetic cell sorting, oligodendrocyte, brain microvascular endothelial cells, and neural progenitor differentiation protocols (Hu et al *Nature Protocols* 2009, Lippmann et al *Nature Biotechnology* 2012, and Ebert et al *Stem Cell Research* 2013)

Mouse | stereotactic surgery techniques, mouse husbandry, genotyping, perfusion fixation and dissection

Imaging | confocal, fluorescent and brightfield microscopy, calcium imaging

Molecular Biology techniques | all aspects of recombinant cloning in bacteria, PCR and primer design, qRT-PCR, RNA extraction, DNA extraction, immunohistochemistry, immunocytochemistry

Biochemistry | western blot, immunoprecipitation for western blot

PUBLICATIONS

Gad D. Vatine*, Abraham Al-Ahmad*, **Bianca Barriga**, Soshana Svendsen, Ariel Salim, Shenyang Zhang, Zhaohui Chen, Jennifer Van Eyk, Alexandra M. Dumitrescu, Samuel Refetoff, Shlomo Melmed, Eric Shusta[#] and Clive N. Svendsen[#]. *Modeling psychomotor retardation using iPSCs from MCT8-deficient patients indicates a prominent role for the blood-brain barrier*. *Cell Stem Cell*. 2017 Jun 1;20(6):831-843.e5. PMID: 28526555

POSTER PRESENTATIONS

Bianca K. Barriga, Gad D. Vatine, Loren Ornelas, Lindsay Lenaeus, Dhruv Sareen, and Clive N. Svendsen. (2014, November). *Generation of isogenic induced pluripotent stem cells for studying Allan Herndon Dudley Syndrome*, Poster presentation at the 2014 Regenerative Medicine Symposium: Emerging Technologies in Regenerative Medicine, Cedars-Sinai Medical Center, Los Angeles, CA.

Teni Anbarchian, **Bianca Barriga**, Rebecca Masamitsu, Justin Thai, and Ann M. Hirsch. (2013, June). *Isolation and Identification of Bacteria Living in the South African Fynbos Soil*, Poster presentation for MCDB/MIMG Undergraduate Research Symposium, University of California, Los Angeles, Los Angeles, CA.

ORAL PRESENTATIONS

Bianca K. Barriga. *Genome editing using CRISPR/Cas9 in human iPSCs*, Regular contributor to Cedars-Sinai Medical Center Genome Engineering and Editing super-group, Cedars-Sinai Medical Center, Los Angeles, CA. 2014-2015.

Bianca K. Barriga. Generation of isogenic iPSCs for in vitro modeling of Allan-Herndon-Dudley Syndrome (AHDS)s RMI Hot Topics: Gene Editing and Regenerative Medicine, Cedars-Sinai Medical Center, Los Angeles, CA. 2017, March.

TRAINING PROGRAMS AND FELLOWSHIPS

Cell and Molecular Genetics Training Program

7/1/17 – 6/30/19

Program trainees participate in CMG colloquiums and receive two years of support