Curriculum Vitae

Daniel Joseph Gomez

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Objective

My career interests are in the educational environments of biology and chemistry, methods and applications of cellular biology and fending off emerging pathogens, and solving diseases with molecular and biotechnical techniques. I will gain the ins and outs of the Omics through research, industry, and academia. I can present data (talk/poster) as it is a big part of the research process. I worked alongside MDs, PhDs and other post-doc fellows, this gave me the insight to the work ethic necessary for a career in medicinal science. Technical writing has always pleased me because I was able to tell and read intricate biological stories. I would like to describe molecular mechanisms, create molecular inventions, and include the structures and functions of elegant peptides and functional ribozymes that point to immunodetections (infections, diseases, disorders, etc), biomarkers, and extract the pathological implications. After obtaining my BS degree, I'll complete a MA/C and then teach high school.

Education

Bachelor of Science. University of California, Santa Cruz. Santa Cruz, CA 2020 - Present
Scientific Education
Department of Physics

John A. Burns School of Medicine
Department of Tropical Medicine, Medical Microbiology, and Pharmacology
John Hopkins University
Department of Neurology and Neurosurgery
Relevant Graduate Coursework

- Intro to the Neurosciences
- Neurovirology

Professional Experience

Manufacturing Associate I. ThermoFisher Scientific, Pleasanton, CA. Jul 2019-Present

- Team based environment to manufacture high quality custom oligonucleotides
- High throughput, fast paced setting
- Manufacture Oligonucleotides by following established protocols and SOP's
- Operate semi-automated and automated basic lab equipment
- Responsible for the production of custom gene based products and/or various intermediates according to established SOPs
- Complete manufacturing batch records to contribute to the daily production schedule
- Operation of robotic laboratory equipment and traditional lab equipment (bioanalyzers, centrifuges, sealers, thermocyclers, spectrometers, HPLCs, Next Gen Sequencing etc.)
- Daily use of traditional molecular biology processes and techniques especially PCR, DNA, quantitation and handling, DNA purification
- Updating and writing work instructions and documentation
- Packaging products

- Ability to work in an ISO, GMP, LEAN mfg environment and follow the lean manufacturing concepts
- Daily completion of assigned tasks to keep MFG on track

Research and Development Coordinator (RDC). dosist. San Francisco, CA Dec 2015-Feb 2016

- Provides pre and post award support by: facilitating, guiding and supporting the development of competitive, high quality research proposals at both the divisional and institutional level.

- This involves networking and liaison with external research funders including federal and provincial granting agencies, research foundations, and private organizations, as well as with current and potential research partners.

- Working in a multi-tasking, team environment, the RDC is responsible for research prospecting; funder cultivation, engagement and solicitation; pre- and post- award support; financial management; liaison with researchers and department staff in identification of new funding opportunities; proposal and report editing; project development and grant stewardship; liaison with RRU Finance division with respect to research grants administration; maintaining the grant reporting calendar for Office of Research; working with, and generating reports from, the Research Project Management database; and the production of research annual reports as well as other communications activities and duties as required.

- A key function of this position entails post-award follow-up, financial management, and communication. As such, the RDC will be responsible for coordinating timely report stewardship interacting with internal stakeholders and the funder. This will entail reviewing and coding expense claims and invoices, processing contracts, following up with project principal investigators and Finance to inform them of reporting guidelines and timelines, providing assistance, where necessary, in obtaining and presenting the necessary data, and reviewing the final report for accuracy and quality.

- The RDC will be responsible for negotiating, when necessary, no-cost extensions and coordinating clarification of questions surrounding grant stewardship with the funder. Another key function involves data management and reporting of research activities.

- The RDC will remain informed about current research through thorough analysis of funding agencies web sites and other information sources. In addition, the position involves participating in certain project-related events, travel to professional conferences and workshops, travel to meetings with funders and other stakeholders and potential partners, and other research functions as assigned.

Research Associate. JABSOM Tropical Medicine, Medical Microbiology, and Pharmacology.
Honolulu, HI Jan 2012 - June 2013

- Developing an immunohistochemistry (IHC) system for JCPyV and HIV-1 Disease.
- PI- Dr. Bruce Shiramizu, Dr. Nerurkar (~40hrs/week).

Biology Assistant. John A. Burns School of Medicine (JABSOM), Honolulu, HI. Aug 2012-Dec 2013
Department of Tropical Medicine, Medical Microbiology, and Pharmacology

- Developing a drug delivery system for HIV-1 Disease in the BBB.
- Develop blood-brain barrier for PBMC permeability assays

- Flow Cytometry (FACS)
- qPCR, NanoDrop
- Autoclave, Vortex, Centrifuge, cell-culture
- PI- Dr. Shiramizu (~20hrs/week).

Research Experience

Undergraduate Research Assistant. UF. Gainesville, FL Jan 2020 – Mar 2020

- Raise awareness of Agricultural and Life Sciences
- Apply fundamental concepts, skills and protocols used to conduct research in fields of microbiology, molecular biology and in host/pathogen.
- Communicate effectively in written form in a manner appropriate in microbiology and the cellular and molecular biological sciences.

Scientific Ambassador. UF. Gainesville, FL Jan 2019 – Jun 2019

- Raise awareness of Agricultural and Life Sciences
- Apply fundamental concepts, skills and protocols used to conduct research in fields of microbiology, molecular biology and in host/pathogen.
- Communicate effectively in written form in a manner appropriate in microbiology and the cellular and molecular biological sciences.
- Communicate orally (including visual aids) in an effective manner appropriate in microbiology and the cellular and molecular biological sciences.

Research and Development Coordinator. dosist. San Francisco, CA Dec 2015-Feb 2016

- Developing disposable bioengineered micro dosed vape pens as deliverables for market.
- Research Human trials (~40hrs/week).
- Dosist pens (relief, bliss, clam, sleep, passion, arousal)

Research Assistant. UCSD School of Medicine Division of Neuroanesthesia. Jan 2014-Jun 2014 La Jolla, CA

- Developing an isolated heart stand and drug delivery system for Neurocardiological Disease protection.
- Mouse handling, *ex vivo* protocols
- Caveolin scaffolding life support for heart organ
- PI- Dr. Patel (~5-15hrs/week). Jan Schilling, MD. Brian Head, PhD.

Research Associate. JABSOM Tropical Medicine, Medical Microbiology, and Pharmacology. Honolulu, HI Jan 2014-Jun 2014

- Developing an immunohistochemistry system for JCPyV and HIV-1 Disease.
- Immunocytochemistry procedures in kidney and brain
- PI- Dr. Nerurkar (~40hrs/week). Mukesh Kumar, PhD.

Research Associate. John A. Burns School of Medicine (JABSOM), Honolulu, HI. Aug 2012-July 2013

- Developing a drug delivery system for HIV-1 Disease in the BBB.
- PI- Dr. Shiramizu (40hrs/week). Melissa Agsalda, MD. Patrick Kirkland, MD.

Research Interests

Epidemiology	Nanotechnology	Oncology
Bioinformatics	Translational research	Neuroscience
Drug metabolism	Toxicology	Emerging Pathogens

Lab skills

Cell culture (*in vivo, in vitro*)	Nanoparticle synthesis	PCR/qPCR
Mouse handling (anesthesia, *ex vivo*)	Flow cytometry (*in vitro*)	R programming (*in silico*)
Bioinformatics (*in silico*)	Microscopy (*in situ*)	Sequencing
Gel Electrophoresis	Python programming (*in silico*)	Western blots
Drug encapsulation	DNA/RNA extraction (*in vitro*)	Toxicity assays

Excellent computer and analytical skills using a large variety of programs and software, excellent public presentation skills. Good documentation skills and ability to write procedure and report. Experience with common lab equipment such as pipettes, nanodrop, centrifuges, thermocyclers, microscopes, etc.

Publications

Anticipated 2020

Awards and Honors

Undergraduate Research Opportunities Program (UROP) Award 2013

- $5000 award.

Teaching Experience

Tutor. 10hrs/week 2012

- Organic Chemistry Tutor
- General Chemistry

University Tutor. 15hrs/week 2011

- CHEM161 General Chemistry (Dr. Hemscheidt)
- Learning Emporium

Undergraduate Teaching Assistant. 20hrs/week 2011

- CHEM161 General Chemistry (Dr. Talisman)
- CHEM161L General Chemistry Lab I (Dr. Talisman)

Medical and Clinical Experience

Volunteer (Shadowing) 2012

- Observed Dr. Slavin, pediatrics and clinical geneticist, in the Medical Genetics section, City of Hope (9 hours/month)

Certifications

IRB Training
March 2019
Life Sciences Responsible Conduct of Research Course (RCR)
March 2019
Medical School Pathology – Certificate of Achievement

June 2018
DNA Research with Biopython
Nov 2017
Data Science and Machine Learning Bootcamp with R
Oct 2017
Google's Go (golang) Programming Language
Oct 2017
Python for Data Science and Machine Learning
Sep 2017

Community Service

Market Research. Berkeley Humane 2014
- Animal Welfare

Community Wellness Advocate. American Cancer Society 2014
- Social Services

International Experience

Teacher. English Language Summer 2005
- Thailand, Laos

Violinist. Orchestra Summer 2006
- France, Belgium

Technical Skills

Computer proficiency (MS office, Stats, SAS, R), 7 years of lab and research experience, technical writing, strong organizational and leadership skills, project management, Organizational leadership

Professional Organization Membership

The American Society for Cell Biology (ASCB)
2019

American Society for Microbiology
2019
University of Florida Student Chapter
(ASM Gators)

The Journal of Experimental Biology
2014
Transforming the Future through Science
Federation of American Societies for Experimental Biology

The Journal of Immunology (AAI)
2013
AAI Centennial
A Century of Excellence: Celebrating 100 Years of The Journal of Immunology
The American Association of Immunologists, Inc.

Hobbies

Designing, Drafting, Drawing, Stagecraft, Lighting and Sound, Violin Music, Travelling, Photography, Cooking, Health and Fitness