



Education

New York University - Tandon School of Engineering

Present - 06/2020

Master of Science

Major: Bioinformatics

Hybrid Program

Udacity - Data Analyst Nanodegree

05/2018 - 09/2018

University of California - Los Angeles

09/2011 - 06/2015

Bachelor of Science

Major: Microbiology, Immunology, and Molecular Genetics



Work and Research Experience

Research Associate - Discovery Virology

02/2017- 06/2018

Gilead Sciences: *Foster City, California*

- Performed phenotyping on patient isolates from Hepatitis B virus (HBV) clinical trials for Tenofovir development, which supported NDAs and iVSRs for approval of novel drug use globally.
- Used HepG2 cells and primary human hepatocytes to characterize novel HBV genotype infection via qPCR and ELISAs.
- Analyzed the response to novel inhibitors and immune modulators by woodchuck models with woodchuck hepatitis virus.
- Authored multiple abstracts and reports in global liver symposiums and presented data at Gilead's biology department meetings.

Research Associate - Clinical Virology

02/2016 - 02/2017

Gilead Sciences: *Foster City, California*

- Provided phenotyping data on patient isolates from HCV clinical trials for Vosevi development and support.
- Characterized multiple mutations and their antagonistic effects on HCV nucleotide analog inhibitors.
- Designed and ordered primers for site-directed mutagenesis to incorporate the mutation of interest into inhouse amplicons.
- Analyzed the effects of NS3 and NS5b mutations on HCV protease and RNA polymerase inhibitors by using data gathered from patient isolates and/or SDM samples.
- Managed a clinical study for the retreatment of Vosevi.

Student Research Project Genome Curator

01/2015 - 06/2015

UCLA MIMG Computer Lab: *Los Angeles, California*

- Curated Bacteriophage genomes for publication in GenBank and other databases.
- Assessed gene potentials, locations, and parsed ORFs into digitally read format (FASTA) with corresponding gene lists.
- Compared assembled genomes with other published genomes and visualized with a phylogenetic tree and dot plots.



Lab and Software Skills

- Python, SQL, Ruby
- Anaconda, Numpy, pandas, and Jupyter Notebook
- Data Analysis, AB Testing, Hypothesis Testing
- Bioinformatics Tools (Vector NTI, BLAST, Phylogenetics)
- Consensus/Patient Sequence Assembly/Contigs
- Microsoft Office XP (Word, Excel, PowerPoint)
- Windows and Mac with WPM of 80+
- Adobe Photoshop, InDesign, Illustrator
- Primer Design and q/PCR Amplification
- SDS-Page, E-Gel, Gel Electrophoresis and Extraction
- In-fusion Cloning, Transformation, Bacterial Selection
- Maxi/Mini DNA Extraction, Linearization, and Transcription
- Mammalian / PHH Cell Culture Techniques
- Staining/Microscopes (Electron, Light, Phase-Contrast)
- Transient and Stable Transfection
- Site-Directed Mutagenesis



HEPATOLOGY - Volume 66 Issue S1

10/2017

The 68th Annual Meeting of the American Association for the Study of Liver Diseases: The Liver Meeting 2017

- **Susceptibility to Voxilaprevir of NS3 Resistance-Associated Substitutions and of Clinical Isolates from Direct Acting Antiviral-Experienced and-Naive Patients** (p. 1176)

Hadas Dvory-Sobol, Bin Han, Julia Lu, Bandita Parhy, David Hsieh, **Eric Zhou**, Marc Bourlière, Ira Jacobson, Luisa M. Stamm, Gregory Camus, Ross Martin, Evguenia S. Svarovskaia, Hongmei Mo

- **No Resistance to Tenofovir Alafenamide Detected Through 96 Weeks of Treatment in Patients with Chronic Hepatitis B** (p. 26)

Henry Lik-Yuen Chan, Patrick Marcellin, Calvin Q. Pan, Andrea L. Cathcart, Neeru Bhardwaj, Yang Liu, Stephanie Cox, Bandita Parhy, **Eric Zhou**, John F. Flaherty, Michael D. Miller, Anuj Gaggar, Shalimar, Namiki Izumi, Young-Suk Li

Mycobacteriophage Horchata

- Isolated a novel phage and published to NCBI Genbank and phagesdb.org