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WORK EXPERIENCE IN SCIENCE

Massachusetts General Hospital (MGH) Cancer Center for Research – Ott Lab (July 2020 – Present)

Research Associate – Epigenomics & Computational Biology

Worked on the following projects and mastered the following skills:

- ChIPseq, CUT&Tag, ATACseq, scATACseq
- Western Blot, PCR, qPCR
- DNA quantification, KAPA library quantification, DNA purification
- High Throughput Drug Screening, Cell Viability Assays
- Tissue & Cell Culture, Cell Counting
- Next Generation Sequencing
- Omics Data Analysis, Single Cell Data Analysis
- Experimental Design, Scientific Presentations

PUBLICATIONS

Arising from my work in the Ott Lab at Massachusetts General Hospital Cancer Center for Research, I have co-authored the following articles:

- “Targeted degradation of the enhancer lysine acetyltransferases CBP and p300”, Cell Chemical Biology 28 (4), 503-514. e12, 2021
- ‘Abstract 1146: Targeted degradation of the enhancer lysine acetyltransferases CBP and p300’, Cancer Research 81 (13 Supplement), 1146-1146, 2021

RESEARCH EXPERIENCE (Forthcoming publications/Unpublished Data)

Massachusetts General Hospital (MGH) Cancer Center for Research

1. Targeted degradation of the enhancer lysine acetyltransferases CBP and p300 (August 2020 – Present)

Role: Research Associate – Epigenomics, Ott Lab

Principal Investigator: Dr. Christopher J. Ott

- Objectives: Performing epigenomics experiments on cancer cell lines to study the effects of a series of p300/CBP chemical degraders on enhancer lysine acetylation and chromatin accessibility.
- Experiments/Methods Used: Cell Cultures, ChIPseq, ATACseq, qPCR, Next Generation Sequencing, Omics Data Analysis

2. Single-cell analysis of tumor sites in follicular lymphoma (May 2021 – Present)

Role: Research Associate – Epigenomics, Ott Lab

Principal Investigators: Dr. Christopher J. Ott & Dr. Abner Louissant, MGH Pathology (collaboration)

- Objectives: Performed scATACseq using microfluidics to identify tumor epigenetic heterogeneity and to intersect with scRNAseq data to assign gene expression signatures.
- Experiments/Methods Used: scATACseq, Next Generation Sequencing, scRNAseq & scATACseq Data Analysis and Integration

3. High throughput drug screening of a diverse set of 300 cancer cell lines (June 2021 – Present)

Role: Research Associate – Epigenomics, Ott Lab

Principal Investigators: Dr. Christopher J. Ott

- Objectives: Testing a set of chemical compounds (drugs) on different types of cancer, using robotics, to identify potential therapeutic drug targets.

- Experiments/Methods Used: Cell Culture, Mycoplasma Testing, Multi-well Seeding, Robotic Drug Delivery, Luminescence Cell Viability Assay, Viability Data Analysis

4. Acquired resistance to targeted therapies in ALK positive non-small cell lung cancer (June 2021 – Present)

Role: Research Associate – Epigenomics, Ott Lab

Lead Investigator: Dr. Satoshi Yoda, Hata Lab (collaboration)

- Objectives: Analyze ATAC-seq data to identify differential chromatin accessibility between parental and clonal tumor cell lines
- Experiments/Methods Used: ATAC-Seq Sequencing Data Alignment, Peak And Signal Generation, Differential Expression Analysis, Motif Analysis, Foot-Printing Analysis

5. The effects of p300/CBP degradation on prostate cancer (August 2021 – Present)

Role: Research Associate – Epigenomics, Ott Lab

Principal Investigators: Dr. Christopher J. Ott

- Objectives: Investigate potential drug therapies using chemical degraders on prostate cancer
- Experiments/Methods Used: Cell Culture, Western Blot, Wes, Viability Assays

6. The effects of dTAG system protein degradation on chromatin accessibility in neuroblastoma (December 2020 – March 2021)

Role: Research Associate – Epigenomics, Ott Lab

Lead Investigator: Yuxiang Zhang, Erb Lab, The Scripps Research Institute (collaboration)

- Objectives: Perform ATAC-seq on neuroblastoma cell lines treated with dTAG, sequence, and analyze ATAC-seq data to identify differential chromatin accessibility between treated and untreated samples
- Experiments/Methods Used: ATAC-seq, cDNA Library Construction, qPCR, Next Generation Sequencing, Sequencing Data Alignment, Peak And Signal Generation, Differential Expression Analysis, Motif Analysis, Foot-Printing Analysis

7. ATR inhibition effects on global chromatin accessibility (October – December 2020)

Role: Research Associate – Epigenomics, Ott Lab

Lead Investigator: Dr. Sneha Saxena, Zou Lab (collaboration)

- Objectives: Analyze ATAC-seq data to identify changes in chromatin accessibility with ATR inhibition
- Experiments/Methods Used: ATAC-seq Sequence Data Processing, Differential Expression Analysis

Harvard University

1. Characterizing a New Nuclear Envelope Protein and its Role in Autoimmune diseases (September 2019 – December 2019)

Role: Research Student – Life Sciences Teaching Lab, Northwest Science, Harvard University, Dr. Alain Viel

Principal Investigator: Dr. Angela Bair Schmider (MGH, HMS)

- Objectives: Isolate and purify the nuclear envelope from myeloid cells and identify proteins involved in immune diseases.
- Experiments/Methods Used: Cell Cultures, Western Blot, Site Directed Mutagenesis, Electron Microscopy, dSTORM, Eliza

TEACHING EXPERIENCE

Harvard University Division of Continuing Education (Jan2020 – May2020)

Teaching Fellow – CSCI E-33a: Web Programming with Python and JavaScript

Supervising Professor: David J. Malan, Ph.D.

Evaluated by students for teaching effectiveness with a score of 4.75 out 5.

- Lead discussion sections
- Scheduled and maintained regular office hours to meet with students
- Evaluated and graded examinations, assignments, or papers and record grades
- Returned assignments to students in accordance with established deadlines

Harvard University School of Engineering and Applied Sciences, Cambridge MA (Fall semesters 2018 & 2019)

Teaching Fellow – CS50: Harvard's introductory course in CS

Supervising Professor: David J. Malan, Ph.D.

Evaluated by students for teaching effectiveness with a score of 4.56 out of 5.

- Lead discussion sections and tutorials
- Evaluated and graded examinations, assignments, or papers and record grades
- Returned assignments to students in accordance with established deadlines
- Scheduled and maintained regular office hours to meet with students
- Informed students of the procedures for completing and submitting class work

EDUCATION

Harvard University, Graduate School of Arts and Sciences, Cambridge, MA (Academic years 2018 – 2019 & 2019 – 2020)

Special Students & Visiting Fellows Program, Department of Biostatistics, Harvard Medical School

Selected as a special student through formal application process for two consecutive academic years.

Coursework: Computational Biology & Bioinformatics, Dr. Xiaole (Shirley) Liu

Biological Data Analysis, Dr. Sean Eddy Experimental

Research in Molecular and Cellular Biology, Dr. Alain Viel

Advanced Topics in Gene Expression, Dr. F. Winston, Dr. S. Buratowski, Dr. R. Kingston

Harvard University Division of Continuing Education, Cambridge, MA, Class of 2019

Bachelor of Liberal Arts, cum laude in Extension Studies (GPA of 3.75)

Field of Study: Biology

Minors: Mathematics & Computer Science

Dean's List Academic Achievement Award

TECHNICAL SKILLS

- **Computer Languages:** Python, R, JavaScript, SQL, C, HTML, CSS
- **Bioinformatics Tools:** STAR, Bowtie, BWA, kallisto, MACS2, BEDTools, SAMtools, deepTools, DESeq2, chromVAR, Seurat, Signac, ArchR, BMO, Homer, ROSE, HINT-ATAC
- **Data Analysis & Statistics:** UMAP, LSI, PCA, t-SNE, k-Means, Linear Regression
- **Environments & Libraries:** Anaconda, Pandas, NumPy, Scikit-learn, Matplotlib, RStudio, GitHub, Photoshop
- **Office Software:** MS Office (Word, Excel, PowerPoint, Outlook, OneNote, Microsoft Teams, Microsoft Power BI), Google Docs

CERTIFICATIONS

- Laboratory Biosafety – Harvard University – Environmental Health & Safety
- General Laboratory Safety – Harvard University – Environmental Health & Safety
- Heartsaver First Aid CPR AED – Pro EMS – American Heart Association
- Certificate in English Subtitling, British Council, Thessaloniki, Greece
- Standard Diploma in Aviation Studies, IATA/ UFTAA, FUA AV, Geneva, Switzerland
- Certificate of Proficiency in English Translation from and into Greek, University of Cambridge, UK
- Certificate in Communication and Public Relations, Hellenic Management Association, Thessaloniki, Greece

WORK EXPERIENCE (Airline Industry, before moving to Scientific Career)

Icelandair, Quincy, MA (2012 – 2020)

Head of Sales – The Americas

Executive for North America, responsible for revenue and passenger growth by ~10% year over year. Other accomplishments include:

- Researched, analyzed, and interpreted data for decision making and strategy implementation
- Analyzed revenue and inventory data to set targets and provide input into budget planning
- Researched and analyzed market conditions to provide input to network and route planning
- Researched, compiled, and prepared reports, manuals, and presentations for management meetings
- Implemented corporate and departmental policies, procedures, and service standards
- Negotiated and signed commercial and corporate contracts

- Supervised the work of sales, administrative, and customer service employees to ensure adherence to quality standards, deadlines, and proper procedures, correcting errors or problems
- Provided employees with guidance in handling complex problems and resolving escalated complaints or disputes
- Discussed job performance problems with employees to identify causes and to work on resolving issues
- Recruited, interviewed, and selected employees
- Trained and instructed employees in job duties and company policies and arrange for training to be provided
- Designed and implemented staff training and development programs, and set performance measurement criteria
- Organized and participated in network events, trade shows, conferences, and training seminars

SEMINARS

- The Program on Negotiation at Harvard Law School - Negotiation and Leadership: Dealing With Difficult People and Problems, Cambridge MA (2013)
- Negotiation and Leadership Conference at Harvard Division of Continuing Education, HBS, HKS, HLS, Boston, MA (2012)

INTERESTS

Epigenetic regulators in hematological malignancies, Genetics and epigenetics in physiological and malignant hematopoiesis, Cancer Biology, Bioinformatics, Computational Biology, Biological Data Analysis, Programming, Data Science & Machine Learning.