February 2021 | Issue 2

Biomedical Genetics Section

Newsletter

Welcome to the new Biomedical Genetics Section Quarterly Newsletter!

Meet the People

We are pleased to welcome new Data Analyst, Yibo Zhu, to the Biomedical Genetics Section! Yibo has kindly given an introduction about himself and his background.



Yibo Zhu

My name is Yibo Zhu, and now I am a new research data analyst at the Biomedical Genetics, Boston University School of Medicine since November 2020. At first, I really appreciate Dr.Qiu and Dr.Zhang for giving me this opportunity and it's my honor to work with their research group. I think Boston is a great city for living and working even if I just came here once before and I believe it will be a wonderful experience in my life.

I graduate as a master student at Northwestern University in the biotechnology program, and I have my undergraduate degree in chemical engineering from UC Davis. Before attending graduate school, I was thinking of studying further on biomaterials and

biomedicines as an engineer. But somehow, I learned about bioinformatics and data science when I was a master student. I realize that I have the passion for analyzing and interpreting genomic data via computational methods. My goal now is to become a great problem-solver and contribute to the current research.

With my master's research, I mainly do genomic data analysis about translational factor expressions in various cancer cell lines and discover the functions of these genetic and biologic pathways. By analyzing microarray and RNA-seq data across different cancer cell line types, I have computed and visualized gene expressions and correlations to figure out what genes are regulated together. I also did my intern at the Department of Biochemistry and Molecular Genetics, Northwestern University. My duty is to support the Next Generation Sequencing projects, use existed or generate new code and pipelines for analyzing, interpreting, and visualizing datasets, which mainly focus on RNA-Seq and ChIP-seq data.

During my research at BU, I will work as a data analyst focusing on multi-omics data for FHS study project 2 which lead by Dr.Qiu and Dr.Zhang. For now, I started with using current tools to estimate different cell types in different data (either brain or blood samples) based on specific gene signatures and then generate models to figure out the correlation with Alzheimer's Disease (AD), dementia, or other covariance factors. In the future, my research goal is to generate our own gene signatures for certain cell types so that we can estimate and predict specific cell proportions in AD.

Boston University News

Historic Day for BU as the first doses of the vaccine for COVID-19 were administered

Friday, January 15th marked a historic day for Boston University, as the first doses of the vaccine for COVID-19 were administered. According to an article by Sara Rimer from BU Today, the first dose was given by Student Health Services (SHS) Director of Nursing, Anne Patey in the FitRec basketball gym. The gym has been converted into BU's COVID-19 vaccination center. The dose was given to SHS Athletic Trainer, Emily Gibb. SHS Nurse Practitioner, Deb Lipkin, referred to the vaccine as "liquid gold." Read more here

The number of new cases of Coronavirus at Boston University is beginning to drop, according to the BU Weekly COVID-19 Report

With 35 students and 8 staff members testing positive for coronavirus between February 10th and February 16th, Boston University saw a drop in the number of new cases. BU Vice President and Associate Provost for Research, Gloria Waters, attributed the drop in cases to increased caution, masks, and social distancing. Waters explained that a renewed sense of urgency has potentially resulted from the threat of new variants of COVID-19 in the state and from "a flurry of public health messages urging people to buckle down on wearing masks, washing hands, and practicing physical distancing."

Waters also discussed that BU is preparing to move into the stat's 2B phase of vaccination, which will include people aged 65 or older and people who have two or more comorbid conditions. Director of BU Student Health Services, Judy Platt, added that "everyone is encouraged to get a COVID vaccine as soon as they are eligible – and not to wait to get their vaccine from BU." If you would like to locate other potential vaccination sites, you can visit Massachusetts Vax Finder. Read more here

Updated Mask-Wearing Guidance from BU and the CDC

With new COVID-19 strains on the rise, BU stresses the importance and effectiveness of wearing a mask. According to an article by Art Jahnke from BU Today, research by the Centers for Disease Control and Prevention (CDC) shows that wearing two masks, or "double-masking" can reduce the risk of COVID-19 transmission by 95%. The CDC suggests wearing a cloth mask over a surgical mask and tucking the ear loops of the surgical mask around the ears to make the mask fit more tightly on the face, which can significantly help to reduce the risk of transmission. Director of Student Health Services and chair of the Medical Advisory Group, Judy Platt, has seconded this CDC masking guidance update by encouraging the use of "face masks that consist of two or three layers of material, and that completely cover the chin, mouth, and nose." Platt recommends checking that masks are snug against the face by making sure that air is not passing through the openings on the sides and bottom of the masks. Read more here

Updated Postdoctoral Compensation Guidelines

The updated Postdoctoral Compensation Guidelines for 2021, which include an increase to the minimum stipend level, have been announced. According to the Vice President and Associate Provost for Research, Gloria Waters, and Assistant Provost for Professional Development & Postdoctoral Affairs, Sarah Hokanson, BU looks to the National Institutes of Health (NIH) Ruth L. Kirschestein National Research Service Award minimum stipend level as the standard for the minimum stipend level for postdocs. The NIH raised the minimum from \$52,704 to \$53,706, which is a two-percent increase. BU's postdoc salary and stipend minimums have been frozen as a result of the pandemic; however, effective July 1st, the salary and stipend minimum for all BU postdocs will increase based on the new NIH minimum level. Read more here



Fun Facts!

Before February became Black History Month, the second week of February was dedicated to recognizing the history of African-Americans by Black leaders in 1926, a week that coincided with the birthdays of Abraham Lincoln (Feb. 12) and Frederick Douglass (Feb. 14).

Source: https://cateinsuranceagency.com/14-fascinating-facts-about-february/

Biomedical Genetics Section Updates

Dr. Zhang honored as a recipient of the 2021 Spivack Young Investigator Award



Dr. Xiaoling Zhang

Dr. Xiaoling Zhang has been honored as the recipient of the **2021 Spivack Young Investigator Award** as part of the **Jack Spivack Excellence in Neuroscience Awards**. These awards were established in 2013 to honor the work of outstanding BUSM faculty conducting research in Parkinson's (PD), Alzheimer's (AD), Chronic Traumatic Encephalopathy (CTE) and other neurological disorders. Dr. Zhang is being honored for her outstanding research in Alzheimer's Disease and "aims to to explore how individual cell types/subpopulations contribute to Alzheimer's Disease patients with diverse ancestral backgrounds." Results from Dr. Zhang's research will help to "inform targeted functional studies to regulate AD-related GWAS genes

in specific cell types in the AD brain." Dr. Zhang's research will also help with finding potential new drugs related to different ethnic groups in AD. Read more here

Dr. Gyungah Jun awarded new pilot grant to study genetics of Alzheimer's Disease in Asian-Americans and Asian-Canadians



Dr. Gyungah Jun

<u>Dr. Gyungah Jun</u>, along with fellow Principal Investigators, <u>Dr. Li-San Wang</u>, Professor of Pathology and Laboratory Medicine in the Perelman School of Medicine at the University of Pennsylvania, <u>Dr. Helena Chui</u>, of the University of Southern California, and <u>Dr. Van Ta Park</u>, of the University of California—San Francisco, has been awarded a two-year, \$4.8 million pilot grant by the National Institute on Aging (NIA) for studies of the genetics of Alzheimer's Disease in people of Asian heritage.

According to the official press release, "A key goal of the new project, which is called the Asian Cohort for Alzheimer's Disease (ACAD), is to enroll a population of at least 5,000 participants of Asian Ancestry in the United States and Canada—a large enough sample to enable the discovery of new gene variants related to AD risk. ACAD will be recruiting participants over age 60 who have evidence of cognitive impairment, as well as age- and sex-matched controls who have no cognitive complaints. The researchers will compare the DNA, medical histories, and lifestyle factors of these two groups for clues to risks for dementia and will track participants' memory and other cognitive test scores." Read more here

Biomedical Genetics office space begins renovations

The section office space will look a bit different when faculty and staff are able to return to campus. Renovations to the section office space began in mid-February and will include a number of changes. Among other changes, the front desk area will be given a full makeover and there will be a large amount of additional space, as the BMC lodine Lab has moved out of the section.

Fun Facts!

The odds of being born on February 29th are about 1 in 1,461. If you're born on a leap day, you're typically known as a "leaper," and depending on where you live, Feb. 28th or March 1st is typically considered your birthday in non-leap years. Source: https://cateinsuranceagency.com/14-fascinating-facts-about-february/



New Hires

We are pleased to welcome the following New Hires to the Biomedical Genetics team!

We are happy to welcome Nancy Ortega, who will be working with our team as the new Program Manager for the U19 FHS-BAP Projects and Xinyu Sun, who will be working as a new Data Analyst! Congratulations!

Reminders

In a recent message from the Office of the Provost, Dr. Jean Morrison announced the updated Workplace Adjustment Process for Faculty and Ph.D. Students for Summer 2021

In a message from the Office of the Provost, University Provost and Chief Academic Officer, Dr. Jean Morrison addressed new details regarding the updated Workplace Adjustment Process for Boston University Faculty and Ph.D. Students. According to the message, all Workplace Adjustment requests specifically for Faculty and Ph.D. Students are due by **March 16, 2021.** The message states that the Workplace Adjustment Process for Staff will be announced later this

semester. Workplace Adjustments are available to individuals who suffer from or live with someone who suffers from a COVID-19 high-risk medical condition. Age alone will be considered for individuals who are 65 or older by August 13, 2021. Anyone considering Workplace Adjustment for summer 2021 will need to submit a Workplace Adjustment Request Form, found on the Workplace Adjustment website. If you were approved for Workplace Adjustment in the fall or spring, you will still need to fill out a new request form but will not need to re-submit medical documentation. New applicants will still need to submit medical documentation along with the form. Read more here

Interested in joining the Boston University Documentary Club?

The Boston University Documentary Club is a peer-led group that meets via zoom to watch and discuss various documentaries and docuseries together. The club meets on Fridays at 3:00pm until 4:00pm. This club is free to join, and this week, they will be watching and discussing a documentary from 2016, by director Christopher Cannucciari, titled "Banking on Bitcoin." Other documentaries the club plans to watch include Black Fish, a documentary detailing the harms of marine amusement parks, like SeaWorld, and Dark Tourist, which discusses tourism that relates to places with dark historical pasts. For more information, follow the link, or you can reach out to Program Director, Courtney Joly-Lowdermilk, of the College of Mental Health Programs.

Resources

Have any questions regarding COVID-19 testing?

Here is a great resource, from Back 2 BU, that covers Screening, Testing, & Contact Tracing!

COVID-19 Paid Leave Program for Staff

As a response to COVID-19, Boston University has introduced a supplemental paid leave program for staff. This will provide up to ten additional days of COVID-19 Paid Absence leave. This paid leave may be used if you are unable to work due to your own COVID-19 related illness or COVID-19 related disruptions that require care for family members. This will be retroactive to March 13th, 2020 and applies to regular staff. Read more here

Have any questions regarding Faculty Personal and Family Leave Policies?

<u>Here</u> is a great resource, from the BU Faculty Handbook, that covers each type of personal and family leave for faculty.

IS&T adds additional Technology Training Opportunities for this semester

Are you interested in remote learning opportunities? A new series has been added to the current list of remote courses that are available to BU faculty and staff. IS&T has added a series of trainings on Teams topics, which will be hosted by Microsoft staff. The series will offer a Teams Introduction course, as well as courses on Teams Lists and Teams Planner. Read more & register here

Sponsored Programs Award and Proposal Five-Year Trends Reports

The Sponsored Programs Data and Reporting Team recently developed a report showing five-year trends. These reports are longitudinal trend reports that include all proposals and awards recorded by the University. They are summarized by Administering School/College and Principal Investigator primary academic appointment (PAA). Read more here

Submit an Announcement Request Form and share your news in the next issue of the Biomedical Genetics Section Newsletter!

Do you have exciting news that you want to share in the next issue of our quarterly Biomedical Genetics Section Newsletter? Submit an <u>Announcement Request Form</u>, located on the Resources page of our <u>website</u>!



Fun Facts!

While February 14th has been known as "St. Valentine's Day" since the 5th Century, it wasn't until the 1300s that the holiday became associated with love and romance. This tradition first started from the common belief in France and England that birds started their mating season on February 14th.

Source: https://www.goodhousekeeping.com/holidays/valentines-day-ideas/a26863/valentines-