April Newsletter

Flowers are blooming and the rain means that Spring is around the corner! As we all adjust to life during the COVID-19 pandemic, Jasmine Gajeton has shared tips for working from home in our monthly feature. This month we introduce LRI alumnus Dr. Chinthasagar Bastian, postdoctoral fellow, Dr. Yoko Henderson, and graduate student, Abigail Dooley. We also have a recap of last month’s virtual LEADERS seminar on bioinformatics and coding in R. Finally, the communications team would like to say thank you to all graduate students for their hard work and dedication in acknowledgement of National Graduate Student Appreciation Week!

Don’t forget to submit your accomplishments so they can be featured in our newsletter and, as always, stay active on our LinkedIn group.

Join our LinkedIn group

The Lerner Postdoctoral Association and Alumni Network is a group of current and former postdoctoral fellows, research associates and graduate students at Cleveland Clinic Lerner Research Institute. Our goals are to provide opportunities for career development, networking and highlighting our scientific achievements. We also post reminders about upcoming events, so make sure to turn on notifications.

Request to join today and tell all of your fellow trainees!
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When did you work in Lerner and in which lab? What positions did you hold?
I began working at Lerner in the Department of Neurosciences in 2010 as a postdoctoral fellow in Dr. Sanjay Pimplikar’s lab. Later, I transitioned into Dr. Selva Baltan’s lab and worked as a research associate before I moved on to my current job.

What did you work on at Lerner?
In Dr. Pimplikar’s lab, I worked on elucidating the role of amyloid precursor protein intracellular domain (AICD) in Alzheimer’s disease progression. My work in Dr. Baltan’s lab was on understanding the mechanisms of white matter injury during stroke and how aging contributes to increased vulnerability of white matter to stroke.

Where are you now, and what do you work on?
Currently, I work as a Clinical Trial Manager (CTM) at Medpace. In a nutshell, CTMs coordinate and manage project start-up, project maintenance, and project close-out activities. CTMs also serve as the primary contact for the sponsor, clinical research teams at various sites that run trials, and the clinical operations and monitoring teams. If anyone is interested to learn more, please feel free to reach out to me.

How did being at Lerner prepare you for your current role?
Working at Lerner helped me to advance not just my technical skills, but also transferable skills that I was able to highlight during my interview. These skills have eased the transition to my current role. My lab and time at Lerner provided me with fantastic opportunities to improve my communication, leadership, teamwork, and organizational skills. For example, I was able to hone my skills through communication with internal and external collaborators, writing papers, drafting and updating protocols, giving presentations, training and supervising research technicians/undergraduate/medical students, working as Chair of the Communications Committee, volunteering as a judge for research events, maintaining the lab budget/supply purchasing, and ensuring lab compliance.

What is something you miss from your time at Lerner?
I miss the interaction with my friends at Lerner. I always looked forward to the Communication Committee meetings. It was an absolute pleasure working with everyone in the group and I enjoyed the opportunity to sample the homemade treats we brought to share during the meetings (sorry other committees!). I also feel that Lerner provides a safety net to help postdocs and graduate students in need. I want to thank Dr. Baltan and Dr. Erzurum for providing me with their guidance and support at the most opportune of times in my career.

How was the transition to your current role?
Medpace has a well-structured training program that was very helpful during my transition into my current role as a CTM. My supervisor and the different teams I interact with everyday have been amazingly helpful, patient, friendly, and knowledgeable.

What is your favorite part of your current job?
I love that my job is challenging enough to keep me interested and constantly learning. Also, it feels great to know that my daily efforts in assisting clinical trials move forward has a direct impact on patient health. The extra perk of my current job is the additional time I now get during weekends to pursue my hobbies and spend time with family and friends.

What advice would you give current Lerner postdocs?
Reassess your life goals regularly and identify the key values you want in your life. This helped me identify the career track that worked best for me. You may have heard this a hundred times but it still holds true: networking is the key to move on to your next role. I used to dread the prospect of networking. Some of us are experts in cold calling strangers and striking up conversations while others must develop that skill. What worked best for me was reaching out to my close friends and peers, who would think of me when they met a new contact or were made aware of a new opportunity that aligned with my interests. I am thankful to a former colleague who introduced me to someone at my current workplace.
Dr. Yoko Henderson is a postdoctoral fellow in Dr. Christopher Hine’s laboratory in the Department of Cardiovascular and Metabolic Sciences. She is originally from Osaka, Japan, but has lived abroad since the age of 17, in both Switzerland and the U.S. She graduated from Wittenberg University in 2005 with a BS in Psychology, and from East Tennessee State University in 2007 with an MA in General Psychology, with a concentration in Behavioral Neuroscience. She received a second MA followed by a PhD in Neuroscience at Georgia State University under the guidance of Dr. Marise Parent in 2015. Her PhD training was in rodent cognitive and ingestive behavior, with the hypothesis that the dorsal hippocampus (a brain area critical for learning and memory) forms a memory of an eating episode and disrupts subsequent meal patterning. She also investigated the effects of sex and aging on meal patterning and eating-related memory using a clinically relevant animal model of early-life stress. During her PhD training, she authored/co-authored 6 peer-reviewed articles and received 4 awards and grants, including the Alumnae Educational Grant from Chi Omega Foundation. In 2016, Dr. Henderson and her husband welcomed their first daughter into their family, and for 2 years she worked as a stay-at-home mom. During this time, she never lost interest in research, and in 2018 she joined Dr. Hine’s laboratory to study the role of caloric restriction as a late life anti-aging intervention. Their research goals are to determine the impact of caloric restriction on cognition and on aging-related multicomponent frailty (e.g., metabolic and musculoskeletal deficits), and to identify the molecular mechanisms critical to the effects of late-onset caloric restriction. Her work on this project led her to obtain the Glenn Foundation for Medical Research Postdoctoral Fellowship in Aging Research for 2019-2020. Outside of the laboratory, she spends as much time as she can with her husband and two little girls. They love playing at home, exploring the neighborhood, and visiting either the Cleveland Botanical Garden or the Cleveland Metroparks Zoo nearly every weekend!

“I never lost my interest in pursuing a career in science, specifically in aging research... Luckily, in 2017, I found out that Dr. Christopher Hine’s research interests and my research interests coincided.”

-Dr. Yoko Henderson
“I have gained comprehensive training experience in research, clinical translation, and professional development that is unique to Lerner.”

-Abigail Dooley

Abigail Dooley is a graduate student who was awarded an American Heart Association 2020 Predoctoral Fellowship titled “Investigating the role of US28 in HCMV latency-enhanced atherosclerotic plaque formation.” Abigail is from Vineland, NJ and graduated from Rensselaer Polytechnic Institute (RPI) with a BS in Biochemistry and Biophysics. She is a 3rd year Molecular Medicine graduate student in the lab of Dr. Christine O’Connor in the Genomic Medicine Institute. Before joining the program, she started in Dr. Richard Gross’s biocatalysis lab as an undergraduate student at RPI. The O’Connor lab studies Human cytomegalovirus (HCMV), which infects the majority of the US population, and like all herpesviruses, remains with an individual for life. Following initial infection, HCMV remains latent, although during conditions that dysregulate the immune system, the virus can reactivate to its active state, often leading to severe disease. The goal of Abigail’s thesis research is to understand the underlying biological mechanisms by which the HCMV viral G protein coupled receptor US28 manipulates the host cell to maintain latent infection as well as elucidate the mechanistic link between HCMV infection and the progression of atherosclerosis. She chose Lerner and the Molecular Medicine PhD program because of the focus on translational research, and the O’Connor lab specifically for her thesis research because she wanted to study virology. She found her lab to be the perfect match for her research interests, and enjoys its helpful and encouraging environment. Outside of the lab, Abigail enjoys running throughout Northeast Ohio and across the US, including a half marathon she ran in Zion National Park in late February! She also runs at the Ohio Erie Canal Reservation Park Run every Saturday which is a free 5K held every weekend all year long. “If anyone is interested in running all levels racers, joggers, and walkers are welcome! Contact me at dooleya2@ccf.org for the info!”
MEET YOUR LPDA CAREER DEVELOPMENT COMMITTEE

Dr. Christina Du Ross is originally from Northeast Ohio. She was born in Cleveland and grew up in North Royalton. Dr. Du Ross did her undergrad at Case Western and graduated with a dual major in biology and sociology. She also received her MS degree from CWRU in biology in the area of plant genetics and her PhD from Loma Linda University in Southern California working on prostate cancer chemoresistance and health disparities. Currently she is in the lab of Dr. Laura Nagy where they are focusing on understanding the effects of alcohol on organ systems and the immune system in alcohol-related liver disease. She chose to work at Cleveland Clinic because of the ability to participate in both basic and translational research, with opportunities to collaborate and learn different techniques or new technologies. Outside of work she spends a lot of time with her 4-year old son and husband. She loves being back in Cleveland, close to her extended family, after being in California for so long. On the weekends, she loves to take her son to the children’s museum or zoo.

“Cleveland Clinic allows me to participate in both basic and translational research.”
-Dr. Christina Du Ross

MEET YOUR LGSA LEADERSHIP TEAM

Alyson Wolk grew up near Cleveland in the Strongsville suburb. Her undergraduate degree is from John Carroll University, also in the Cleveland area. She majored in cell and molecular biology and had a secondary major in Spanish that allowed her to travel to Spain and El Salvador during her time at JCU. She has worked at Cleveland Clinic in several departments since her freshman year on a variety of projects. Currently, she is a PhD candidate in the Molecular Medicine program. She works in Bela Anand-Apte’s lab in Cole Eye Institute where she studies inherited retinal diseases. She is interested in changes that occur in the retinal pigment epithelium due to mutations in TIMP3. She chose to come to Lerner for grad school because she was excited about the translational science that is done here. She feels that Cleveland Clinic provides a unique environment where the impact of research on patients is apparent. Outside of work, Aly loves to cook. During self-isolation this month, she has spent her free time playing Animal Crossing and Stardew Valley on her Nintendo Switch. She also really loves the cultural scene in Cleveland and frequents events at the Cleveland Museum of Art, the Cleveland Museum of Natural History, and Playhouse Square.

“I’ve really enjoyed my time working with other trainees at Lerner, either within Molecular Medicine events or previously serving as president of LGSA. All of these experiences have made grad school a rewarding time.”
-Alyson Wolk, General Member
UPCOMING EVENTS

2020 Lerner Experience in Advanced Development of Educational and Research Skills (LEADERS)

Biostatistics
Part 1

- Provides Lerner trainees with career development tools that will accelerate their professional development.
- Sessions open to all Lerner Research Institute trainees.
- 12 sessions in 2020
- Receive a certificate of completion if 75% of sessions are attended.

WHO: Amy Nowacki, PhD
Department of Quantitative Health Sciences, LRI

WHEN: April 29, 2020
12:00 – 1:00 PM

WHERE: Virtual (Zoom)
https://cwrz.zoom.us/j/613973057
April 6th–10th is National Graduate Student Appreciation Week! The Lerner Graduate Student Association and the Research Education and Training Center would like to show our gratitude for all of your hard work and dedication!
UPCOMING EVENTS

Looking for a chance to get involved?
Join the Lerner Graduate Student Association

Run for a position on the Leadership Team:

› **President**: Official spokesperson of LGSA

› **Chair of Public Relations**: Organizes and writes the LGSA portion of the Trainee Newsletter and advertises LGSA events

› **Chair of Professional Development**: Organizes professional development seminars and workshops

› **Chair of Student Engagement**: Organizes Graduate Student Appreciation Week and is the liaison between graduates students and administrators

› **Chair of Community Outreach**: Alerts graduate students of volunteer opportunities and organizes volunteering and outreach events

› **Or join as a General Member!**

**Elections will be held this summer!**

Contact [LGSA President Gabrielle Mey](mailto:meyg@ccf.org) with any questions!

Email: meyg@ccf.org or gmm86@case.edu
Did you miss the virtual LEADERS session on ‘Bioinformatics’ led by Dr. Ignacio Mata and Dr. Dennis Lal? Here is the recap!

On March 23rd, Drs. Ignacio Mata and Dennis Lal, from LRI’s Genomic Medicine Institute, held a virtual LEADERS seminar introducing the use of coding in R for biologists. They started by acknowledging that bioinformatics can be intimidating to scientists lacking experience, but assured everyone that it shouldn’t scare them away. You can learn this skill!

Bioinformatics is a growing field and it’s important for biologists and biochemists to learn these skills to be able to handle the large datasets that we are seeing more and more often. Knowing a little bit of basic bioinformatics allows you to do independent data analysis, deal with large datasets comfortably, and get rid of “spreadsheet addiction.” It also gives you the ability to open up new research perspectives, automate many processes, and get creative.

What is R? R is an interactive programming language that focuses on statistical computing and graphics. It is designed to operate the way that problems are thought out. Why R? Dr. Mata presented several reasons for why biologists should consider using R over other platforms such as GraphPad Prism, SPSS, and Excel. When using R, you have a lot more freedom to make publication-quality graphs and to show your data exactly how you think it should look. You can also process big files and analyze huge amounts of data, perform high-throughput sequencing analysis, and scan abstracts from PubMed instead of going through them manually. There is a large online community of support for R users, as well as a group of experts at the LRI willing to help troubleshoot and answer your questions.

In coordination with this LEADERS seminar, RETC also recently rolled out an opportunity for Lerner trainees to sign up for a monthly subscription with Data Camp. Trainees are encouraged to take the “Data Scientist with R” track consisting of 22 courses each lasting 2-5 hours with self-paced training. Trainees will be reimbursed for up to 3 months, if they complete the track. Dr. Lal gave an introduction to the course and explained what to expect while also assuring everyone that coding in R and succeeding in the course is attainable for everyone.

Teams with Drs. Lal, Mata, Cheng, and Blankenberg will be hosting regular virtual office hours for help with coding in R and coding in Python. If trainees are interested in further discussions and troubleshooting help, they can request to be added to the GMI’s computational genetics Slack channel. Please reach out to RETC if you have questions about any of the opportunities listed above. You can also access a copy of the slides from the LEADERS presentation here.
Many of us have been affected by the protective measures surrounding the coronavirus pandemic. This comes at a time when the weather is nice and many universities are usually preparing for commencement celebrations. Our daily routines have been changed, travel plans have been disrupted, emails are being sent with news of cancelled or postponed events. While we are all finding ways to work remotely, it can be difficult to work in a place that you associate with comfort (in your homes or apartments, etc.). So, what does it take to be productive, motivated, and still persevere while working from home? Here are some tips based on the recently published article from Cleveland Clinic Health Essentials:

1. Stick with a routine and establish a schedule
   - Telecommuting give you the advantage of being comfortable at home, but we also need to figure out a way to **treat the day like a normal work day**. In the morning, get ready as you would usually do – for me, that means snoozing twice, THEN getting up to make coffee and eat breakfast, feeding my cat, preparing my lunch and water bottle, and going to change and put on makeup. Now that I’m working from home, I don’t need to take the extra time for many of those things!
   - Physical therapist Mary Morrison, PT, DScPT emphasizes the importance of **getting changed out of your pajamas** as a way to get your mindset ready for the work day. Schedule your regular working hours, making sure to also allocate time for lunch and breaks. If you’re like me, I’m not productive when I have all day to work on whatever needs to get done. Use online tools like Google Calendar or Trello to help you schedule out your day. Video chat friends during lunch or go for a short walk and call to catch up. Keeping a schedule is easier when you have other people keeping you accountable, too.

2. Have a dedicated workspace and set boundaries
   - While it may be extremely tempting, your bed and the couch are not the greatest places to start your work day. Depending on your home life and space, this may look different for each of you. **The basic idea is to have a space that you associate with work** – maybe that means clearing off the mail on the other end of your dining table or setting up a desk in the corner of your living room. If you find yourself needing more extreme measures, completely shutting yourself in your guest bedroom may be the best course of action, so you’re not tempted by the snacks in your pantry or your suddenly playful cat.
   - Set up your work area with everything you would need if you were at work. No, that does not mean bringing your pipettes or cells home – have a notebook handy, post-it notes, pens or pencils, etc. As you’re working, whether you choose to sit or have a standing desk, **your spine should be aligned with your chin pointed straight ahead**. Try your best to not eat lunch at your desk – use your lunch break to step away from work to clear your head.
   - Setting boundaries may mean no background TV or music, or that you are in a room separated from children or pets. If you have roommates, maybe set a rule that having headphones in means “do not disturb.”
3. Set goals
   - At the beginning of each week, write a simple goal for what you plan to accomplish that week. Before starting your work day, write out a daily to-do list and try to stick to it. For me, I like to set my to-do list in chunks of time. If I’m working on a manuscript or my dissertation, I tend to get writer’s block and dwell on a topic to a point where I am unproductive. When I set a 2-hour block to work on something more specific, I feel more prepared and motivated to get it done, while knowing it will have an end point so that I can work on something else.

4. Get up and move
   - Looking at those of you who ignored tip number 2 and are reading this in bed or on your couch. Thinking back to tip number 1 – schedule your break times but also make sure to get up and stretch every once in a while. Morrison suggests setting a timer every hour as a reminder to focus on stretching your lower and upper back. My Fitbit has a silent buzz reminder to move every hour if I have not done 250 steps in that hour. I try to use that time to also make sure that I drink water.

5. Check in often
   - As my favorite Cavalier and former UCLA Bruin, Kevin Love, said in his Instagram story, “social distance but don’t socially isolate yourself.” In this time, we need to “practice a sense of community.” Morrison suggests to check in with people often, even when it doesn’t relate to work. Your break times can be a great chance to text your labmates, friends, and family. Just try not to get too distracted. Scheduling phone or video calls, may help you feel more connected with others in this time of isolation or give you something to look forward to in the evening. Zoom game night or trivia night, anyone?
   - Most departments in Lerner are now requiring daily remote work to be documented and sent to our PIs once a week. Regular check-ins with your PI, lab, or team can help to quickly resolve any issues while also keeping other people (and yourself) accountable.
   - I’d also like to note - check in with yourself as well. It is hard to take care of others if you haven’t done so for yourself. Keeping an eye on your mental health and wellness is key to building resilience in these uncertain times.

6. Know when to log off
   - You’ve established your regular working hours – leave or “log off” as if you would if you were leaving lab or the office for the day. While many of us tend to bring work home on a normal day, this can be a great exercise to establish better habits and a more fulfilling work-life balance.
LOOKING FOR A JOB? NOW HIRING!

(Sr.) Scientist, Immunology- BXilio Therapeutics, Waltham, MA. This position seeks a PhD level scientist to join our Immunology group. This person will be responsible for development and execution of immunophenotyping, ex vivo, and in vitro assays in multiple models for the characterization of immuno-oncology focused protein therapeutics. The candidate will work with immunology team and other project teams to identify the optimal points to design immune-oncology therapeutics and any potential complications. They will should have 3 or more years of experience in the field of immunology or a relevant field. For more details, click here.

Research Fellow in Stem Cell Biology and Engineering, New York Blood Center Inc, New York City. A postdoctoral position is available at the New York Blood Center, one of the most comprehensive blood centers in the world. The candidate will provide key scientific support to a team of scientists conducting translational research in hematology, blood disorders, and stem cell biology. The ideal candidate will have experience with cell culture, ELISA assays, histology, and other molecular bench work techniques. They must have a PhD in cellular biology, molecular biology, biomedical engineering, or a related field, and demonstrate superior analytical, problem-solving and multitasking skills. For more details click here.

Scientist, Convelo Therapeutics, Cleveland, OH
Convelo Therapeutics is a biotechnology company incubated by BioEnterprise and is working to develop novel medicines for multiple sclerosis to enhance remyelination in the central nervous system. Convelo seeks a research scientist to oversee histological studies of remyelination. The scientist and will be in charge of harvesting, embedding, sectioning, staining, and analyzing tissue from preclinical rodent studies. The ideal candidate will hold a Master’s or Ph.D. in biology, biochemistry, or neuroscience and will have experience with neurohistology. For more details click here.

Senior Staff Scientist, Harvard University, Boston, MA
The Wyss Institute seeks a talented, faculty-level staff scientist in the field of tissue and organ regeneration. The ideal candidate will have a strong entrepreneurial mindset and will bridge tissue engineering expertise and product development. They will help lead initiatives toward the goal of whole-organ engineering with support from world-leaders in 3D organ engineering. They will collaborate closely with more junior postdoctoral fellows to conduct cutting-edge research designed to facilitate technology translation and product development. Candidates will hold a PhD in biology or bioengineering and will have experience in tissue engineering. For more details click here.
Congratulations to Nicholas Sarn from the Eng lab in the Department of Genomic Medicine Institute!

Nicholas Sarn was selected to give a talk at the American Society of Human Genetics 2019 in Houston, Texas. The title of the talk was “Cytoplasmic-predominant Pten increases microglial activation and synaptic pruning in a murine model with autism-like phenotype."

He also published an original article titled, “Cytoplasmic-predominant Pten increases microglial activation and synaptic pruning in a murine model with autism-like phenotype” in Journal of Molecular Psychiatry. His Figure 3C will be featured on the journal cover. For more details, click here.

Congratulations to Varadha Balaji Venkadakrishnan from the Heemer Lab in the Department of Cancer Biology!

Varadha Balaji Venkadakrishnan won the first place Outstanding Performance Award at an inter-departmental 3-Minute Thesis Competition 2020 held at Cleveland State University (CSU). The title of the talk was, "PKN1 is an alternative target in advanced prostate cancer". He was invited to represent CSU as a participant in the 3-Minute Thesis Competition hosted by Midwestern Association of Graduate Schools in Milwaukee, Wisconsin.
Congratulations to Dean Pontius from the Scacheri lab in the Department of Genomics and Genome Sciences-CWRU!

Dean Pontius received an F31 Predoctoral Fellowship as principal investigator, titled “Unraveling KLF4 dependency in metastatic osteosarcoma.” The goal of this proposal is to determine if the pluripotency factor KLF4 is necessary and sufficient for osteosarcoma lung metastasis through its role in maintaining and generating stem cell-like enhancer chromatin. Successful completion of this study will not only reveal new therapeutic targets and prognostic biomarkers, but may also inform the treatment of patients suffering from other metastatic cancers.

Congratulations to Alyson Wolk from the Bela Anand-Apte Lab in Ophthalmic Research!

Alyson Wolk published an original article titled, “The Role of FGF and Hyaluronan in Choroidal Neovascularization in Sorsby Fundus Dystrophy” in Cells in The Molecular and Cellular Basis of Retinal Disease Issue. For more detail, click here.

Congratulations to Tyler Alban from the Justin Lathia Lab in the Department of Cardiovascular & Metabolic Sciences!

Tyler Alban is the 2020 Doctoral Excellence Award winner in Molecular Medicine from the Molecular Medicine PhD program in the Case Western Reserve University School of Medicine.
GET INVOLVED!

Did you publish a paper recently or receive a grant or award? We want to highlight your accomplishments in the next newsletter! As part of the LPDA, we strive to improve this organization to its maximum potential. To do so, we will need the participation and input of all postdoctoral fellows and research associates. If you would like to be involved with our events or have any suggestions or accomplishments we can highlight, please email lri-postdoc-assoc@ccf.org.

LPDA Communications Team
Kelsey Bohn, PhD
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Mihyun Hwang, PhD
Isha Kapoor, PhD
Morgan Rogers-Carter, PhD
Maksim Sinyuk, PhD

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Abigail Dooley
Jasmine Gajeton