

Students OSzczecin Bydgoszcz Bialystol get a leg up Poland Poznań Warsaw on virtual Brest Брэст Łódź learning Lublin Wrocław Kielce Months before COVID-19 and physical Uniwersytet Jagielloński distancing became part of everyday vocabulary, Katowiceo **Collegium Medicum** Lviv two groups of medical students, one in Cleveland and the other in Krakow, Poland, participated in a novel virtual problem-based learning (PBL) experience, representing a new Ostrava avenue for PBL and health systems learning. kopane Under the supervision of Julie Tebo, PhD, Assistant Professor of Molecular Medicine and Director of PBL Facilitator Development, and Tomasz Rogula, MD, Košice

Medicine and Director of PBL Facilitator Development, and Tomasz Rogula, MD, PhD, a former physician with Cleveland Clinic and professor at Case Western Reserve University who now works in Poland, four fourth-year CCLCM students and four students from the Jagiellonian University Medical College (JUMC) participated in a two-day live video conference. With some 4,500 miles between them, the two groups worked through a clinical case together, with particular emphasis on the key differences between the U.S. and Polish healthcare systems.

Jacob Chyla, Jacob Johansen, Katherine Kitura and Angelica Trybulska participated from JUMC, and Lauren Larkin, Adam Lauko, Chan-Mi Lee and Daniel Moussa participated from CCLCM.

On the first day of the videoconference, the students worked through a clinical case on gastric cancer together and identified eight learning objectives, including gastric cancer risk factors, pain management techniques and health maintenance, and how they are managed in the US and Poland. Each student selected one specific learning objective to research. On the second day, all eight students discussed their learning objectives using credible, evidence-based resources.

continued >>

Students get a leg up on virtual learning continued

"The experience allowed both sides to gain a deeper insight into global health and epidemiological differences between the countries," says Daniel, offering, as an example, that we in the US struggle mostly with managing chronic diseases.

Adam agrees, adding, "When you reach out and have discussions, you never know what you will learn. In this case, one thing I discovered is that gastric cancer is significantly more prevalent in Poland than the United States, and exact etiology of this difference is not fully understood."

The students also shared these perspectives:

HEALTHCARE SYSTEMS: As part of the curriculum, most medical students learn about different healthcare systems, but unless you hear from those who have direct experience with a particular system, you're only learning the theory and you're missing out on the practical application, explains Chan-Mi, who has lived in and experienced the healthcare systems of South Korea, New Zealand, Canada and the US. "Learning how another country cares for patients gives you a better idea of how their healthcare system works," she says. This understanding is particularly crucial when a healthcare system is thinking of expanding into other regions, the way Cleveland Clinic has in Canada, Abu Dhabi and now the UK.

HEALTH DISPARITIES: "Learning about the healthcare system in Poland gave me a greater appreciation for the role that health disparities play in global health," says Lauren. "By coming together, we can learn from each other and find more effective ways to address disparities in our own system."

HEALTH INSURANCE: The CCLCM students found it challenging to explain the US insurance system, with its myriad intricacies around co-pays and deductibles. "By trying to understand the Polish health system, I better appreciated the complexity of our own insurance system and how it's managed," says Daniel.

PATIENT CARE: Discussions with people from other countries can improve patient care by determining what's working well, sharing best practices and learning what can be improved. Chan-Mi says, "True leadership and change comes from collaborative learning and information sharing. Together, we might be better."

SKILL BUILDING: This virtual PBL experience helped students enhance their communication and collaboration skills – two skills that will prove invaluable in their future careers as physicians. "To optimize patient care, interprofessional collaboration is becoming increasingly important and requires effective communication," notes Lauren. "I was able to use the teambuilding skills that I acquired in PBL during my first two years at CCLCM to effectively interact with colleagues from Poland."

continued >>



Students get a leg up on virtual learning continued



Top row, from left: Event organizers Justyna Kacarow, Eirik Krager, Kamil Winnicki and Dr. Tomasz Rogula; bottom row, from left: Participants Jacob Chyla, Katherine Kitura, Angelica Trybulska and Jacob Johansen

This virtual PBL experience demonstrated the feasibility and ease of the technology to learn about myriad issues. All the students and faculty felt the two-day session was valuable and were eager for future collaborations, both with one another and with students from other countries.

"The current situation with the COVID-19 pandemic offers an excellent opportunity for medical students from countries such as China, South Korea, Singapore and Japan to discuss how their countries approached the coronavirus — for example, testing and social distancing — to mitigate its effects and compare their country's response with that of the US," says Dr. Tebo.

Overall, the students felt satisfied with the virtual learning experience. "I think it has truly proved that we are at a point in time when education has very few boundaries," says Kamil Winnicki, a JUMC student who helped prepare the PBL case along with fellow students Justyna Kacarow and Eirik Krager. "In an age where e-learning is really becoming commonplace, I think this is a wonderful opportunity to gain new viewpoints from people across the globe. While I believe we can always read about global perspectives of medicine, an exchange like this really goes the extra mile!"



Dr. Julie Tebo



Lauren Larkin



Adam Lauko



Chan-Mi Lee



Daniel Moussa





J. Harry (Bud) Isaacson, MD

Faculty flourish with strong support

More than a dozen years ago, Gene H. Barnett, MD, MBA, Professor of Neurological Surgery, was invited to join the CCLCM Faculty Affairs Committee, where he demonstrated an abundance of energy, passion and wise counsel. Shortly thereafter, he was selected to serve as the Associate Dean for Faculty Affairs, a role he continues to serve in with exceptional leadership and skill. With the help and support of Dineen Lancaster, Faculty Affairs Manager, Dr. Barnett has built the Faculty Affairs Office into a trusted resource where current and future faculty can get help not only with the application and promotion process, but also with continuing education and skill building.

The work of the Faculty Affairs Office is integral to our meeting the accreditation requirements of the Liaison Committee on Medical Education (LCME). For example, all CCLCM faculty who teach students must have a faculty appointment.

In addition, the office is keen to help faculty develop professionally by encouraging them to apply for the appropriate promotion level. Cynthia Kubu, PhD, ABPP-CN, Professor of Medicine, has been championing both this cause and efforts to increase diversity within our faculty ranks.

The office promotes numerous continuing education opportunities to help faculty succeed in their roles. We train faculty serving in specific roles in PBL, admissions, longitudinal clinic and more, and we offer regular training for clinical faculty. Many faculty take advantage of training courses and programs through the Cleveland Clinic's Office of Educator and Scholar Development, and faculty can look forward to even more continuing education opportunities in the future.

The work of the Faculty Affairs Office occurs largely in the background but is critical to CCLCM. We are extremely fortunate to have Dr. Barnett leading this effort. I encourage you to read more about the important work being done by our Faculty Affairs Office in "Focus on faculty," p. 9.

Our faculty are a significant source of strength for CCLCM. They are among the nation's leaders in academic medicine and research, and, with the support of the Faculty Affairs Office, they are enthusiastic and engaged medical educators, committed to delivering exceptional education for the benefit of our future physician investigators and, ultimately, patients everywhere.

NEWS Student interest group takes aim at Cleveland's high infant mortality rates

Cleveland has one of the highest infant mortality rates in the country. In the first quarter of 2019, Cuyahoga County's infant mortality rate increased to 10 deaths per 1,000 live births, compared to the 2018 rate of about 8.5 deaths per 1,000 live births.

The increase in infant mortality rates was driven largely by preterm births of African-American babies.

Sokhna Seck and Cydni Akesson, both first-year CCLCM medical students, formed the Addressing Infant Mortality (AIM) in Cleveland student interest group to bring awareness to social, behavioral and health risk factors that affect birth outcomes and contribute to high infant mortality rates for minority groups.

"Awareness is really important because of the disparity between infant mortality rates of black babies compared to other races," Sokhna says. "It really is something due to structural racism and addressed by our implicit biases."

The goal of AIM, she says, is to motivate those entering a service profession to identify implicit biases and work to prevent its impact on women and children.

"Every person has biases, regardless if you think they exist or not," Cydni says. "The difficult part as future doctors is it has a direct effect on care we'll give to our future patients."

AIM in Cleveland is targeting high infant mortality rates through a series of events for students at CCLCM and CWRU School of Medicine, some of which have been postponed until after the COVID-19 pandemic.

Prior to the pandemic, the group live-streamed a panel discussion held at the City Club of Cleveland. They then held their own panel discussions, featuring physicians from the Cleveland Clinic Ob/Gyn & Women's Health Institute, focused on how disparity and implicit biases come into play and how they impact the health of black women and minority babies in general. The group also promoted a research seminar from Kent State University psychology professor Angela Neal-Barnett, PhD, about how cortisol levels in the hair of pregnant women relate to outcomes and adverse effects of preterm birth.

The group would like to host a movie screening of "Toxic: A Black Woman's Story," which highlights a day in the life of an African-American woman and how racism and toxic stress affect her and her unborn baby. A discussion would follow the screening.

"All of the events have had certain aspects focused on implicit biases," Cydni says. "You can't remove them. We discuss how to be aware of them and how you should step into every patient room knowing you have them and be aware of that and not act on them."

AIM in Cleveland was recruited by Stacie Jhaveri, MD, Clinical Assistant Professor of Ob/Gyn & Reproductive Biology, who is starting a new program in Ob/Gyn that will target women who have their first prenatal visit in the emergency room. Dr. Jhaveri's vision is to have a student advocacy program help pregnant patients presenting to the ED with follow up as needed and offer appropriate community resources. She hopes to work with AIM in Cleveland to solicit student volunteers.

Cydni and Sokhna will work with Dr. Jhaveri initially to determine what deficits exist. The hope, Sokhna says, is to conduct a pilot study to evaluate how many pregnant patients present to the ED before they are seen by a provider, determine if they have follow-up appointments and see if they follow through with those appointments.

"Implicit biases affect all types of patient care," Cydni says. "It's important to our development as physicians. Until you sit down and address what biases you have, you may carry them into each patient exam room and never know what kinds of outcomes it can have for patients."



Cydni Akesson



Sokhna Seck



Dr. Stacie Jhaveri

NEWS Compassion, empathy CENTRAL TO EDUCATION







Heeruk Bhatt

Dr. Colin Killeen

Before the COVID-19 pandemic brought the world to its knees, on any given Friday afternoon during the school year you'd find CCLCM and CWRU students at the Lutheran Metropolitan Ministry's Men's Shelter at 2100 Lakeside – the largest shelter in Ohio – providing health screenings to men in crisis.

Through CCLCM's Community Health Initiative, first- and second-year students perform blood pressure and BMI screenings, as well as offer health education to help men in poverty improve their health. Second-year students typically train new first-year students, who take over student leadership the following year.

Depending on the results of those screenings and the recommendations from the staff member, nurse or physician on site, a patient might be asked to return the following week for a follow up, or they may be referred to the Care Alliance mobile clinic that provides primary medical care to Clevelanders who live in extreme poverty.

"We are helping provide them with screenings vital for their care," said Heeruk Bhatt ('23), a second-year CCLCM student who was the student lead at the shelter last year.

Colin Killeen, DO, Clinical Assistant Professor of Medicine and faculty sponsor, is enthusiastic about the work that the students perform at the men's shelter because it so unique from what they learn in the classroom. "Volunteering at the men's shelter allows students to meet patients on their own turf. The students really get a feel for the men's medical needs and insights about how the social determinants of health impact patients on a daily basis. While the students glean information on how to provide a basic exam, they also get a good dose of humility and empathy," Dr. Killeen says.

Dr. Killeen has served as the faculty sponsor since Alan L. Hull, MD, PhD, now Professor Emeritus of Medicine, retired.

Dr. Hull says the program has grown over time and is now an interprofessional education (IPE) program that includes students from the CWRU Jack, Joseph and Morton Mandel School of Applied Social Sciences. The social work students educate men at the shelter about Medicare/Medicaid eligibility, Supplemental Nutrition Assistant Program (SNAP) benefits, community resources and housing. Social work student Lindsey Gopinath ('20) said CWRU social work students came into the fold last spring to help fill in gaps in service. She said the IPE aspect of the program is valuable in helping students recognize the role of different professions and how someone can fit into that.

"We all have something of value to add," she says, adding that students often play off of each other. While medical students are taking blood pressure or BMI readings, social work students are providing educational materials on topics like foot health related to diabetes or triggers affecting someone's ability to stop smoking.

"We added a support group for some of the guys upstairs – a place they can vent – because this is a challenging place to be," Lindsey says, adding that one man shared something very personal and became emotional during one session. "He got teary eyed, and the other guys shared and opened up to each other and started giving each other advice. We just sat back and let them do the work themselves.

"A lot of times they put up these walls, which is understandable. To provide a space where they felt comfortable to share something really personal was a special thing to be a part of."

Heeruk said last year he talked to a patient about his smoking and drinking history. He saw that patient again this year and learned the man made the recommended changes to his lifestyle, and he thanked Heeruk for talking to him.

"When you think of healthcare, oftentimes you think about the very flashy procedures and technological advances," Heeruk says. "The best thing about the Community Health Initiative is it takes medical students early in their training and teaches them to be kind, to listen to people, to talk to patients."

Heeruk says the faculty who participate in the Community Health Initiative are another plus for students, who learn through role modeling and see how to interact with patients and show empathy and compassion.

"You think that could be me; I could do that and be involved in the community," Heeruk says. "It's very fulfilling to help someone who wants the help, and doing it with your classmates builds interclass connections."

Faculty, students adapt to virtual Capstone with grace

Each year, our graduating students engage in a final curriculum experience to help them prepare for their first year of residency — no matter where they go or which specialty they enter. Much of the first week of Capstone for the graduating class of 2020 proceeded as planned. The second week, however, thanks to the COVID-19 pandemic, had to be completely modified.

Although this year's Capstone activities weren't executed quite as planned — most were converted to virtual activities and a few had to be canceled outright — everyone involved showed remarkable flexibility, patience and grace. Below is a recap of how this year's event unfolded:

WEEK 1 MONDAY, MARCH 9

> The Capstone rotation opened with a brief orientation by Neil Mehta, MBBS, MS, Professor of Medicine, Associate Dean of Curricular Affairs and Director of the Capstone program, and Debbie Schuster, Program Coordinator.

>Bud Isaacson, MD, Associate Professor of Medicine and Executive Dean; Cheryl O'Brien, RN, JD; and Susan Rehm, MD, Professor of Medicine and Executive Director, Physician Health, facilitated an interactive discussion on "Playing by the Rules: What Every Intern Needs to Know About State Medical Boards, Licensure and Malpractice." The course helps students reduce professional risk and avoid medical malpractice. Dr. Rehm also presented on the role of organizational and personal well-being.

>Cleveland Clinic CEO and
President Tom Mihaljevic,
MD, Professor of Surgery,
met with the students to offer
insights about the next step in
their medical career.

>Leonard Calabrese, DO, Professor of Medicine; Martin, Kohn, PhD, Associate Professor of Medicine; Eric Kodish, MD, Professor of Pediatrics; and Katherine Burke, MFA, Adjunct Associate Professor of Medicine, concluded the Monday morning session with a program on professionalism, called "Looking Back/ Looking Ahead: On Becoming a Doctor."

>In the afternoon, students attended a session on graduation requirements, presented by Tanya Moore, MBA, and Marcy Pardee, RRT, MEd.

>Elizabeth Myers, MEd, facilitated a financial management workshop for students, covering such topics as debt management, loan repayment and preparing for financial security.

>That evening, medical students from all the classes were invited to attend an Internal Medicine Residency Panel Discussion, organized by Jessica Zhang ('20).

TUESDAY, MARCH 10

>All the students met at the Cleveland Clinic Simulation and Advanced Skills Center for a day of skill-building exercises including laparoscopic knot tying, cardiac auscultation, IV fluid management and wound care.

WEDNESDAY & THURSDAY, MARCH 11 AND 12

>The students spent two full days at the Simulation and Advanced Skills Center getting trained and certified in Basic Life Support (BLS), Advanced Cardiovascular Life Support (ACLS) and Pediatric Advanced Life Support (PALS).

FRIDAY, MARCH 13

>Although the 10th Annual CCLCM-wide Research Day was canceled, we continue to celebrate the incredible work of our graduating class. See "Kudos to graduating students on stellar research," p. 10.

During the second week, all hands-on simulation training was canceled, and in-person classes were transformed into virtual presentations.





WEEK 2 MONDAY, MARCH 16

>Jeremy Lipman, MD, Associate Professor of Surgery, presented virtually on "How to Be an Effective Intern," elaborating on the new roles and responsibilities that the graduating students will assume in their new positions and explaining specific behaviors that are important to being an effective team member.

>Dr. Lipman and Abby Spencer, MD, MS, Associate Professor of Medicine, along with interns Stephanie Braunthal, MD, and Caitlin Blaskewicz, MD, led virtual group discussions with graduating students who were planning to match to Medicine, Surgery or Pediatrics, giving them specific tips on how to excel in those areas. Stacey Jolly, MD, Associate Professor of Medicine, offered a virtual NRMP Match Review.

TUESDAY, MARCH 17

>Students participated in virtual radiology reviews, covering radiology and ultrasound knowledge for interns.

WEDNESDAY, MARCH 18

>Students participated in a series of virtual meetings on topics ranging from back pain and antimicrobials to optimizing lab testing and patient handoffs.

THURSDAY, MARCH 19

>Students again participated in a series of virtual meetings on topics ranging from diabetes management in the hospital and pain management to ECG interpretations and ophthalmology exams.

FRIDAY, MARCH 20

Capstone concluded with Match Day. See <u>"A Match Day</u> <u>like no other"</u> and view the <u>2020 Match results</u>.

Although most activities were carried out with modifications, a few were canceled, including the Intubation and Mock Code session, Stress Management and Relationship Survival session, Alumni Luncheon, Spring Alumni Reception and the Whirly Ball social activity. In the case of educational sessions, students received relevant materials electronically.

Kudos to all the staff and faculty who mastered the technology to conduct virtual meetings; to the faculty who adapted their lesson plans to deliver them virtually; and to the students who stayed flexible and enthusiastic amid all the upheaval. Everyone involved adapted smoothly and in short order. Special thanks go out to Stacy Fears, Marcy Pardee, Debbie Schuster and Bruce Spevak for helping to turn the second week of Capstone, which could have well been canceled, into a valuable learning experience.

The Capstone program is designed to help our graduating students build their skills and give them one last chance to spend time together before graduation. Despite the hurdles, this year's Capstone not only turned out to be a rich and meaningful experience for the students, but it also demonstrated the power of ingenuity, collaboration and grace under pressure. Kudos to all for making it happen!

FOCUS ON FACULTY

Titles matter

That's the message from the Cleveland Clinic Lerner College of Medicine Faculty Affairs Office, which manages the faculty application and promotion process, the Committee on Appointments and Promotions (CAP), Junior CAP and CCLCM academic chairs, as well as assists with the School of Medicine Faculty Council and its representatives.

"It's the only office at CCLCM that really focuses on faculty, as opposed to students. Virtually all other deans and offices are student-centric," says Gene H. Barnett, MD, MBA, Professor of Neurological Surgery, Associate Dean for Faculty Affairs and Chair of the CAP and JCAP committees. "We are all here for the students. That's why we exist. You want to have effective faculty, and faculty that are recognized for the appropriate rank for their academic accomplishments."

Dr. Barnett navigated the appointment and promotion process on his own. He became involved with Faculty Affairs more than 12 years ago when he was tapped for a committee position and later selected for the Associate Dean position.

He says the appeal of the position is shepherding faculty through the process of achieving the academic rank they deserve.

"It's not uncommon for someone to come up and thank me for the help we gave them in achieving their rank after they get their official appointment from CWRU," Dr. Barnett says. "It's very rewarding to help people navigate through this process."

Increasing the ranks

Cynthia S. Kubu, PhD, ABPP-CN, Professor of Medicine, staff neuropsychologist and a member of CCLCM CAP, says there are multiple benefits for academic appointments, including academic prestige and opportunities for research and national grants.

"My goal is that your academic rank should reflect only the work you've done in your CV," says Dr. Kubu, who also co-chairs the CWRU School of Medicine Committee on Appointments, Promotions and Tenure. She offers this example: "We have an incredibly bright and talented staff member whose CV is that of a professor, but she hasn't gone through the promotion process. There is a recognition we need to help people understand this is an important thing – it's beneficial to role modeling for students."

During Dr. Barnett's tenure as associate dean, CCLCM has gone from just over 300 faculty to 3,530. Dr. Barnett says the process has become much more daunting over time. In 2018, the Faculty Affairs Office oversaw 522 appointments and promotions, and in 2019 that number was 538. The average number of appointments and promotions is 530. This year, 48 faculty applied for senior promotions.





Dr. Gene Barnett

Dr. Cynthia Kubu

Dr. Barnett credits Faculty Affairs Manager Dineen A. Lancaster with making that process more efficient. The addition of a new CCLCM Faculty Development Opportunities intranet page focuses not so much on the business of medicine as on academic development opportunities within the Cleveland Clinic Education Institute and CWRU, as well as other educational resources.

Increasing diversity

In 2018, Dr. Kubu was awarded a Chief of Staff grant to increase diversity in the upper academic faculty ranks.

"We know nationally it's not equitable, in terms of men and women at the senior ranks. Something is getting in the way. It may be implicit biases. Minority data is even worse," Dr. Kubu says. "I saw an opportunity to improve those numbers in CCLCM."

As part of her grant, she produced a short video – posted on the Faculty Affairs Appointments and Promotions page – to intentionally highlight diverse faculty, detailing what the advantages of an academic title are and why it's important. Dr. Kubu also used the grant to partner with Faculty Affairs to host promotion workshops to demystify the promotions process.

Although it's still early, she says the number of women and minorities applying for an academic title doubled over the past year. Overall she's seen a 20% jump in people applying for promotions.

"This is a labor of love," Dr. Kubu says. "I'm just a faculty member very invested in helping people develop. I'm very interested in making sure women and underrepresented minorities are recognized for their contributions as well."

Pathways to promotion

Dr. Kubu says there are multiple pathways for promotion, including grants and papers, outstanding curriculum and government service.

"You have an opportunity to serve as a role model to students on the importance of academic medicine and your contributions to academic medicine," she says. "We all can't be deans, COOs or department chairs, but it's a way of recognizing your leadership and contributions to academic medicine, and there are many different ways you can demonstrate that. If you see those role models out there, you're more likely to do it."

JANET ADEGBOYE*

ACCOLADES

Mild Acute Kidney Injury after Noncardiac Surgery is Associated with Long-term Renal Dysfunction Mentor: *Daniel Sessler, MD*

LESTELLA (BELL) BIVENS

Clinical Associations of Autoantibodies, Smoking, and Antimalarials in Patients with Discoid Lupus Erythematosus Mentor: *Anthony Fernandez, MD*

ROBERT BORDEN, BS

Comparison of Biomechanical and Histologic Properties of the Aortic Root and Ascending Aorta Mentor: *Eric Roselli, MD*

WILLIAM ALEXANDER CANTRELL

Evaluating Osteoarthritis of the Knee Prior to Arthroscopy – Comparing Tunnel Simple Radiographs with MRI and Arthroscopy Mentor: *Kurt Spindler, MD*

HARRY CHOI

Treatment of Psoriasis with Biologic Therapy is Associated with Improvement of Coronary Artery Plaque Necrotic Core and Positive Remodeling: Results from a Prospective, Observational Pilot Study Mentor: *Nehal Mehta, MD (NIH)*

KATHARINA CLORE-GRONENBORN

Investigating the Interrelationships of Sleep, Emotion, and the Hypothalamic-Pituitary-Adrenal (HPA) Axis using Mobile Technologies in a Community-based Sample Mentor: *Kathleen Merikangas, PhD (NIH)*

Kudos to graduating students on stellar research

Because the 10th Annual CCLCM-wide Research Day, scheduled for March 13, was canceled because of the COVID-19 pandemic, the graduating students missed the opportunity to share their research projects broadly. All of the students' names, the titles of their research work and their research mentors are listed below.

Our graduating students deserve a world of credit for the critical thinking and intensive work they put into their projects over the past year. We hope you join us in celebrating their accomplishments:

ALBERT FEENY

Machine Learning of 12-Lead Electrocardiogram Waveforms to Identify Cardiac Resynchronization Therapy Patients with Differential Outcomes Mentor: *Mina Chung, MD*

CAROLINE FRANKE

Patient Perceived Empathy, Provider Burnout, and Patient Outcomes Mentor: Susannah Rose, PhD

SURESH GARUDADRI

Systemic Markers of Inflammation Among Symptomatic Smokers with Preserved Lung Function Mentors: Prescott Woodruff, MD, MPH; Stephanie Christenson, MD, MAS (University of California, San Francisco)

BRITTANY GOLDSTEIN

Mindfulness-Based Stress Reduction as Adjunctive Therapy for Postural Orthostatic Tachycardia Syndrome Mentor: *Christine Moravec, PhD*

VISHHVAAN GOPALAKRISHNAN

The Design and Development of an Open Source, Self-Contained, and Multiplexed Bacterial Evolver and Bioreactor Mentor: *Jacob Scott, MD, DPhil*

BRETT GRAHAM

Immunologic and Genomic Effects of and Online Mindfulness Program Mentor: *Leonard Calabrese, DO*

*This student was scheduled to make an oral presentation and present his/her poster at Research Day.



Kudos

NIKHIL GUPTA

The Micropeptide ORF60 Modulates Insulin Sensitivity Mentor: *Haiming Cao, PhD (NIH)*

C. BEAU HILTON

Geno-Clinical Model for the Diagnosis of Bone Marrow Myeloid Neoplasms Mentor: *Aziz Nazha, MD*

SEVERINE KAKO

Investigating the Epigenetic Modulators Decitabine and 5-Azacytidine as Candidates for Combination Therapy with Alectinib in Non-Small Cell Lung Cancer Cell Lines (NSCLC) Mentor: *Yogen Saunthararajah, MD*

KAITLIN KEENAN, BS

Characteristics of Opioid Receipt during an Acute Medical Hospitalization and Associations with Persistent Use Mentor: *Kathryn A. Martinez, PhD, MPH*

ANN KIM

Identifying miRNA Biomarkers and Predicted Targets Associated with Venous Thromboembolism in Colorectal Cancer Patients Mentors: *Keith McCrae, MD; Alok Khorana, MD*

ANNE E. KIM, BS

The Effects of the Menstrual Cycle and Short-term Caloric Restriction on Actigraphy-Defined Sleep in Young Women Mentor: *Janet E. Hall, MD, MSc (NIH)*

ERIKA J. LAMPERT

Immune Modulation by Cell Cycle Checkpoint Kinase 1 (CHK1) Inhibition in High Grade Serous Ovarian Cancer Mentor: *Jung-Min Lee, MD (NCI)*

DIANE LIBERT*

Targeting Leukemic Antigen Expression to Enhance Chimeric Antigen Receptor (CAR) T Cell Therapeutic Efficacy for Pediatric B Cell Acute Lymphoblastic Leukemia Mentor: *Jack Shern, MD (NIH)*

SHIMING LUO

Insulin Use in Diabetics is Associated with Disorganization of Retinal Inner Layers (DRIL) on spectral domain optical coherence tomography (SD-OCT) Mentors: *Alex Yuan, MD, PhD; Bela Anand-Apte, MD, PhD*

JOHN L. MCAFEE*

Directed Differentiation of Pluripotent Stem Cells to Neural Fates Guided by High-Dimensional Design of Experiments Mentor: *Jan Jensen, PhD*

APPLEDENE S. OSBOURNE, MS

Comparative Effectiveness of Psoriasis Therapies on Systemic Inflammation Mentor: *Kevin D. Cooper, MD (CWRU/University Hospitals Cleveland Medical Center)*

RADHIKA RASTOGI*

Treatment and Outcomes of Inpatient Hypertension Mentor: *Michael B. Rothberg, MD, MPH*

*This student was scheduled to make an oral presentation and present his/her poster at Research Day.



Kudos

NAVIN SABHARWAL

Phenotypes Associated with the HSD3B1 1245 A->C Adrenal Permissive Allele Mentor: *Nima Sharifi, MD*

ELIZABETH SHAY

Bacteriome and Mycobiome and Bacteriome-Mycobiome Interactions in Head and Neck Squamous Cell Carcinoma Mentor: *Charis Eng, MD, PhD*

SHEHRYAR (SHERRY) SHEIKH, MPH*

The Cost Effectiveness of Surgical Evaluation and Surgery for Drug Resistant Temporal Lobe Epilepsy in the US Mentor: *Lara Jehi, MD*

CHRISTINA SNIDER

RORa is a Potential Prognostic Biomarker and Therapeutic Target for Patients with Acute Myeloid Leukemia Mentor: *Anjali Advani, MD*

ROBERT UNGER, BS

Stimulation of the Premotor Cortex Enhances Interhemispheric Functional Connectivity in Association with Upper-limb Motor Recovery in Moderate-to-severe Chronic Stroke Mentor: *Ela Plow, PhD, PT*

LAMONT J. WILKINS

Decisional Conflict among Patients Undergoing Counseling for Nephrolithiasis Mentor: Sri Sivalingam, MD

DAVID XIONG

Improving Staging Systems for Cutaneous Squamous Cell Carcinoma Mentor: *Thomas Knackstedt, MD (MetroHealth System)*

WENDA YE

ASTX660, an Antagonist of cIAP1/2 and XIAP, Promotes Immunogenic Cell Death and Enhances the Expression of Antigen Processing Machinery Components in Preclinical Models of Head and Neck Cancer Mentors: *Nicole Schmitt, MD; Carter Van Waes, MD PhD (NIH)*

EMILY ZHANG*

Neuropsychiatric Lupus in the B6.Nba2 Mouse Model Mentor: *Trine Jorgensen, PhD*

JESSICA J. ZHANG, BA

Transcriptional and Epigenetic Regulation of Human Monocytes by Lipoprotein(a) and its Oxidized Phospholipids Mentor: *Christopher Glass, MD PhD (University of California, San Diego School of Medicine)*

CONGRATULATIONS TO ALL!

*This student was scheduled to make an oral presentation and present his/her poster at Research Day.

Students' contributions make virtual conference a success

A group of CCLCM students, along with staff physicians, residents and fellows, volunteered at the 2020 Student National Medical Association (SNMA) Annual Medical Education Conference (AMEC) in April. The event, of which Cleveland Clinic was a gold sponsor, was scheduled to be held in Cleveland but was converted to a virtual platform because of COVID-19.

AMEC is a national conference organized by medical students across the US. Three CCLCM students held national leadership positions on the Convention Planning Committee: Lestella Bivens ('20) served as Programming Committee Chair; Andrea Boyd-Tressler ('21) served as Community Service Committee Chair; and Lauren Larkin ('21) served as Marketing Committee Chair. Metabel Markwei ('22) served on the Programming Committee, and Janet Adegboye ('20) served on the Technology Committee.

A record number of registrants — more than 2,000 medical and premedical students planned to attend the conference until the COVID-19 pandemic threatened to shut it down. When the in-person conference was canceled, many thought the event wouldn't happen at all. However, through a collaboration with the American Medical Student Association (AMSA), AMEC was converted to a virtual platform.

"I am very proud of the work of the committee members!" says Lestella. "In just a few weeks, we were able to create a virtual event that normally would have taken months to



Emily Abramczyk



Janet Adegboye



Cvdni Akesson



Lestella (Bell) Bivens



Andrea Boyd-Tressler



Ann Kim



Saloni Lad



Lauren Larkin

Students' contributions make virtual conference a success continued

plan and execute. This could not have been done without the generous contributions of Cleveland Clinic, our physicians and the CCLCM students."

Margaret McKenzie, MD, Associate Professor of Ob/Gyn & Reproductive Biology, delivered the opening remarks. Emily Abramczyk ('24), Janet Adegboye, Cydni Akesson ('24), Ann Kim ('20), Saloni Lad ('24), Lauren Larkin, Diana Lopez ('23), Carlos Munoz ('24), Joan Nambuba ('22), Stephanie Njemanze ('23), Derrick Obiri-Yeboah ('24), Maeve Pascoe ('24), Sokhna Seck ('24), Jonah Thomas ('21) and Georgina Whelan ('24) participated in the virtual exhibit and chat rooms, answering questions about life in Cleveland, away rotations, residency training programs and more.

More than 1,500 students registered for the virtual conference. Over the course of the conference, students and colleagues connected, via chat, with many students.

The SNMA is committed to supporting current and future underrepresented minority medical students, which dovetails with Cleveland Clinic's goal of increasing the number of minority residents among our ranks.

The terrific participation from CCLCM helped make the virtual conference and exhibit a meaningful one for the many outside students who attended.



Diana Lopez

Stephanie Njemanze



Metabel Markwei





Derrick Obiri-Yeboah



Maeve Pascoe



Joan Nambuba



Sokhna Seck



Jonah Thomas



Georgina Whelan



Dr. Margaret McKenzie



Cleveland Clinic Lerner College of Medicine | 14 | InSight



CWRU's PA program wins Outstanding Student Society award

The CWRU physician assistant program, named the Charles L. Hudson Society, was chosen by the American Academy of Physician Assistants as the 2020 Outstanding Student Society

for "service to the profession in public education and advocacy, public service and outreach, promotion of diversity, and professional involvement," and it represents the highest honor a physician assistant program can earn from the AAPA.

The program is led by Cynthia Lord, MHS, PA-C, Associate Professor, Physician Assistant Program.

Along with our Lerner College of Medicine students, CWRU's PA students are among the student groups that are housed within the Health Education Campus.

Cynthia Lord

STUDENTS AND FACULTY: Be sure to email Laura Greenwald with news about your achievements so that we can share your terrific news with our entire education community!

Advancing Our Mission

The Education Institute welcomes donations to advance its mission of educating those who serve. Individuals, families, foundations and corporations that believe in the value of education are making a difference in the future of patient care with their generosity. To learn how you can help, please contact Theresa Holthaus at 216.444.1839 or at <u>holthat@ccf.org</u>.

Alumni: Share Your News

We'd like to hear about what you've been doing since graduation. If you have news to share (maybe you're involved in an interesting research project or you recently returned from a global health mission), please email Laura Greenwald at greenwl@ccf.org.



Laura R. Greenwald, MBA, Managing Editor Kimberly Bonvissuto, Writer Mary Reagan, Art Director