

# InSight

Cleveland Clinic Lerner College of Medicine

December 2016



## Getting to the Heart of Disease

One CCLCM student works to foster interest in functional medicine

Some people are not satisfied just knowing about the “what” or “how” of things; they like to delve deeper and discover the “why.” Brett Graham ('20) is one such person, and after he learned about functional medicine, he was hooked.

Before Brett applied to the Lerner College of Medicine, he was already familiar with the Cleveland Clinic Center for Functional Medicine and had even shadowed the center’s director, Mark Hyman, MD, along with Patrick Hanaway, MD, and several nutritionists.

“Functional medicine takes everything into consideration,” says Brett. “It considers what initiates a disease event, what predisposes you to a disease event and what sustains it. What’s going on in one part of the body can affect another part, and what causes one person’s fatigue differs from what causes another’s fatigue. This type of doctoring involves in-depth detective work.”

Brett’s enthusiasm for functional medicine led him to create the Functional Medicine Interest Group within the college, citing the opportunity to give classmates a different perspective on their medical education and a new way of viewing medical problems in patients.

CONTINUED ON NEXT PAGE

The group, which includes medical students from the Lerner College program, university program, Ohio University Heritage College of Osteopathic Medicine and Northeast Ohio Medical University (NEOMED), hosts monthly educational events during the academic year. Drs. Hyman and Hanaway, and a nutritionist have already addressed the group on topics ranging from patient case reviews and taking a patient history, to reviewing a functional medicine timeline and personalizing a diet plan for patients.

The group is open to any medical/healthcare student, including physician assistant and nursing students.

Different from alternative medicine, where in the end one is still treating the symptoms, functional medicine requires the practitioner to look deeper and find a biological cause for the disease. Then you correct it through changes in lifestyle, nutrition and medication.

Generally, the patients who seek a functional medicine consult are those who have tremendous problems, mostly chronic, and who haven't achieved a satisfactory level of relief from traditional medical care. Common issues include autoimmune diseases, fibromyalgia, migraines and inflammatory disorders. Our current medical system is excellent at solving acute care issues, but it's not well-designed to deal with the growing number of chronic health issues that many people now face.

Explains Brett, "For these people, everything's falling apart. This is their last resort."

Begun by a nutritionist, functional medicine has been around for only about 25 years. One of Brett's uncles is a functional medicine practitioner and certified naturopathic doctor, and Brett, not the type of person to take something at face value, often found himself debating the merits of functional medicine with him. Over time, he became interested in exploring its virtues and became a proponent.

Eventually, Brett would like to see functional medicine interwoven into the CCLCM curriculum, much the way nutrition has been, so that his classmates can experience how to apply it clinically and in any specialty. For instance, students could take a PBL case and discuss it through a functional medicine lens.

Also on Brett's wish list is philanthropic funding, which would make it possible for members of the student group to attend conferences, such as the day-long course on Exploring the Functional Medicine Model: A Case-Based Approach, which was held in Cleveland in November. Two students were able to attend this conference as guests of the Center for Functional Medicine, but funding would have allowed more students to benefit from this educational opportunity.

Nationwide and at Cleveland Clinic, functional medicine is making inroads. The Institute for Functional Medicine launched an 18-month certification program for physicians, and Cleveland Clinic is looking to develop graduate medical education programs in functional medicine, as well as pursuing research grants and designing studies to look at patient outcomes.

[Learn more about functional medicine in this three-part Medscape interview with Mark Hyman, MD.](#)

"Talk about personalized medicine," says Brett. "This is what it looks like in my mind. We must look at all the factors, including genetic, social, lifestyle and dietary. That's the key for moving forward. I hope people keep an open mind."

Keep up with the group's monthly events by logging on to [Facebook](#) and searching for the Functional Medicine Interest Group.



## We've Topped Off our Health Education Campus

**The structural phase is complete, and the facility is set to open in 2019**

On Oct. 28, our Health Education Campus (HEC) along East 93rd Street took another step forward toward realizing the vision of a state-of-the-art facility where medical and nursing students will come together to learn and collaborate.

The HEC — being developed in partnership with Case Western Reserve University — will encourage extensive interaction among nurses and doctors in training, including those in the Cleveland Clinic Lerner College of Medicine. The building is scheduled to open to students in the summer of 2019.

The Topping Off Ceremony is a time-honored custom in construction. The last beam is traditionally painted white and signed by all those involved in constructing the building, and it marks the symbolic completion of the structural phase of the project. Senior class students from the Cleveland School of Science and Medicine John Hay Campus joined in the festivities and were among those who signed the beam. An American flag and an evergreen tree are also placed on top of the structure as part of the ceremony.

Many thanks to all the caregivers and other individuals whose knowledge, skills and labor are taking the HEC from concept to reality.



*This article originally appeared on Today, the employee intranet.*

# Lessons in Physician Health



Students at Cleveland Clinic’s Lerner College of Medicine don’t spend all their time learning how to become physician investigators. On any given day you may walk past a group of students mastering tree pose, performing arm circles or meditating. Why the focus on wellness?

CCLCM integrated self-care into its curriculum to help students build resilience, with the hope of preventing burnout, now and later. These skills are necessary in the profession when burnout is an increasingly persistent problem. The 2016 Medscape Physician Lifestyle Report states that burnout has reached a critical level, with the highest percentages of reported burnout occurring in critical care, urology and emergency medicine physicians.

[View the Medscape report.](#)

The self-care curriculum at CCLCM focuses on the development of students’ personal and professional lives. The idea is rooted in patient care now and in the future, with the idea that if physicians learn to take better care of themselves, they will be better equipped to take care of their patients.



Alan L. Hull, MD, PhD

“Patients are more willing to take their physician’s advice if the physician practices what they preach, like eating healthy, getting enough sleep and not smoking,” says Alan L. Hull, MD, PhD, Associate Dean of Curricular Affairs.



Julie Foucher

Students are first introduced to the idea of self-care during a health fair as part of orientation. Student leader Julie Foucher (’17) helped to plan the second annual self-care fair this past July. Students learned what self-care entails, and they participated in yoga and learned quick exercises they can do throughout the day.

“Medical training can be a long and grueling road, but in order to best serve our patients we must first take care of ourselves,” Julie says. “The self-care fair is an opportunity to set the tone from day one for first-year medical students about the importance of establishing

healthy habits. Students learn about nutrition, exercise and relaxation and are connected with tools to explore these areas further as they settle into their new routines as medical students in Cleveland.”

First-year students participated in sessions on emotional intelligence, mindfulness, professionalism and social media. Dr. Hull noted that students also viewed “Fed Up,” a documentary that examines the role of sugar in the U.S. obesity epidemic.

The self-care curriculum resides within the personal and professional development competency, one of nine that CCLCM students must fulfill each year of their schooling. It is hoped that by fulfilling this competency, students will take better care of not only themselves, but also their patients.

## Researcher Selects CCLCM as Best-Practice Site

Suzanne Schut, a PhD candidate from the School of Health Professions Education of Maastricht University, The Netherlands, recently spent a week at Cleveland Clinic as a visiting researcher in medical education.

Ms. Schut's research focuses on formative or low-stake assessment in the context of a programmatic approach to assessment within medical education. She and her research team selected five programs from around the world to study the learners' perspective of low-stake assessment in depth.

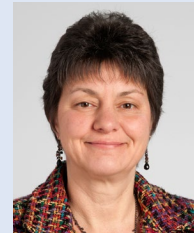
"The Lerner College of Medicine provided a best-practice opportunity for this study," says Ms. Schut, who is hoping to uncover insights that will lead to more effective and efficient assessment programs in medical education.

Ms. Schut is responsible for the assessment and quality assurance of assessment for undergraduate medical education at Maastricht University. She has several years of experience in teaching and faculty development, including educational design, innovation, development, assessment and feedback.

While here, Ms. Schut interviewed first- and second-year students and was mentored by S. Beth Bierer, PhD.



Suzanne Schut



Beth Bierer, PhD

### Patient Safety & Quality Tip:

#### How to Keep Children Safe in Cars

Skyler Kalady, MD  
Discipline Leader – Pediatrics



In pediatrics, discussing key safety considerations is critical to optimizing population health. According to the CDC, motor vehicle crashes remain the leading cause of death for children over 5; thus, motor vehicle safety deserves continued emphasis.

I attempt to take every opportunity to remind caregivers, parents and children of the current American Academy of Pediatric Guidelines:

- Infants and toddlers ride rear-facing until age 2
- Children use forward-facing five-point harness car seats from age 2 until a minimum of age 4 AND 40 pounds
- Children use a belt-positioning booster seat until they're 4' 9" tall AND 8-12 years of age
- Children should ride in the rear of a vehicle until they are 13 years old

### Students Take the Mannequin Challenge

Need a minute of levity? Check out our Lerner College students' "Mannequin Challenge," which has been sweeping the internet of late.

The Cleveland Clinic Corporate Communications team filmed our students and we shared it @ClevelandClinic on both [Twitter](#) and [Instagram](#).

Enjoy!

## How Much Does the Learning Environment Count?

An article recently published in *Academic Medicine* focuses on the restructuring of learning environments and the positive student outcomes that CCLCM has witnessed as a result of such changes.

The article, titled “The Learning Environment Counts: Longitudinal Qualitative Analysis of Study Strategies Adopted by First-Year Medical Students in a Competency-Based Educational Program,” was authored by S. Beth Bierer, PhD, and the late Elaine F. Dannefer, PhD, MSW.

In the article, the authors discuss the move toward competency-based education and how it requires learning environments to be restructured so that the students can take ownership of their learning. Students do this by selecting and implementing study strategies that work for them while focusing on their performance rather than grades.

The authors conducted a study in which 14 first-year CCLCM students participated in three interviews, spaced three months apart, about their previous assessment experiences, their preferred learning strategies and how they monitored their performance. Over the course of a year, students found strategies to personally become more efficient in mastering material in a given amount of time, including:

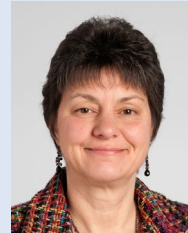
- Keeping a list of questions to ask peers in PBL
- Outlining main ideas; taking fewer notes
- Pursuing interesting topics to remain motivated
- Tracking ability to teach others
- Maintaining a regular study schedule/routine

The study results were clearly positive for students, demonstrating the added value of dropping high-stakes examinations and allowing students to experiment with strategies that were most successful for them.

The CCLCM learning environment requires that students be assessed through feedback in nine competency domains. Students must attain milestones in each competency to advance in the program, making expectations transparent. This learning environment offers the essential trait of student autonomy, which fosters intrinsic motivation.

The progressive learning environment at CCLCM changes the way students both study and learn. The strategies they employed during their undergraduate years were markedly different from those employed during their medical school experience. The research in this study provides a strong indication that “Without the immediacy of exams, students studied more often, reviewing material frequently, and developed more long-term rather than short-term goals.”

[Read the entire article.](#)



Beth Bierer, PhD



Elaine Dannefer, PhD

## Student Team Captures Second Place at Medical Hackathon

Daniel Moussa ('21), Elizabeth Shay ('20) and Jessica Zhang ('20) won second place at the Cleveland Medical Hackathon for developing a potentially lifesaving app.

The team, which also included several public health experts and developers, created an app called FLARE, designed to leverage crowdsourcing to help people who overdose on opioids. Bystanders who witness an overdose can use the app to both call 9-1-1 and locate people in the vicinity who have access to naloxone, which can reverse an overdose.

More than 200 people — students, developers, designers, investors, engineers, programmers, clinicians, researchers, community members, patient advocates, and public health professionals — brainstorm ideas, break into teams and, with the help of advisors, dedicate 24 hours to developing achievable projects. Hackathon teams focus on four categories: access redesign, care redesign, payment redesign and population health improvement.

The CCLCM team was invited to participate in a Q&A the following day at the Cleveland Clinic Medical Innovation Summit.

The Hackathon, which is in its second year, was held in October in conjunction with the summit. Way to go, team!



Daniel Moussa



Elizabeth Shay



Jessica Zhang

## Congratulations to Dr. Jennifer McBride

Jennifer McBride, PhD, has been named Director of Virtual Anatomy Education for the Cleveland Clinic Lerner College of Medicine. In this new role, she will work closely with Richard Drake, PhD, Director of Anatomy, and Neil Mehta, MBBS, MS, who serves as Assistant Dean for Education Informatics and Technology for CCLCM and who leads the Center for Technology-Enhanced Knowledge and Instruction (cTEKI) along with many other educational technology initiatives.

When the new Health Education Campus opens in 2019, students will shift from using cadavers to study anatomy to using Microsoft HoloLens, a mixed-reality device that lets users view and touch the body via 3D holograms. Cleveland Clinic is among the first adopters of this high-definition technology to complement medical education. In fact, Lerner College students have already started testing HoloLens as we look to adopt innovative learning solutions, such as virtual technology, for medical education.

Dr. McBride joined Cleveland Clinic in 2006 and has served as Director of Histology for the Lerner College since 2007. She is a member of the Anatomy Education Committee and co-director of the Cleveland Clinic Body Donation Program.

After earning her BS in psychology from South Dakota State University, she pursued her PhD in neuroscience research at Purdue University.

Congratulations, Dr. McBride!





## CCLCM Student Publishes Poem

Elizabeth Shay ('20) recently published a poem, "The Doctor He Became: Reflections on a Nazi Concentration Camp Doctor," on *in-Training: the agora of the medical student community*.

### The Doctor He Became: Reflections on a Nazi Concentration Camp Doctor

He remembered the days  
his hands were used  
only  
to heal, comfort  
and mend. Now  
he looked down at palms  
stained scarlet,

And saw  
grotesque apparitions,  
whose lungs  
still  
cry for air;  
whose voices  
unceasingly plead  
for the mercy  
he never  
gave;

And  
whose maimed bodies trudge  
wearily across  
the sleepless nights  
of his tormented existence.

He wondered how  
he hadn't noticed the moment  
his fingers had  
morphed imperceptibly  
into weapons of hate.

He pondered how  
right and wrong had become  
as indistinguishable as the twins  
he had sent to Mengele;  
their frail bruised bodies  
saved from the ovens;  
saved for much worse.

He thought of two children  
who baked bread  
for a father who battered bodies;  
who were oblivious  
to the putrid smoke  
rising in the distance.

And he shuddered  
at the man  
and doctor  
he had become.



## Dr. Kendalle Cobb Earns Chief of Staff Award

Kendalle Cobb, MD, Director of Multicultural Recruitment and Development for CCLCM, was one of three winners of the 2016 Chief of Staff Awards, given to support professional development. The awards are named after former chiefs of staff Ralph Straffon, MD; Robert Kay, MD; and Joseph Hahn, MD; and can be applied to tuition and related expenses associated with a professional staff development opportunity that furthers our mission of caring for the sick, investigating their problems and educating those who serve.

Dr. Cobb requested funding for a project related to enhancing diversity and inclusion across the professional staff. In her words, "as we expand access to quality care, it is imperative that we enhance our efforts to increase diversity and inclusion to minimize the negative impact of bias and racial discordance in clinical interactions."

As with the other winners, Dr. Cobb will receive \$25,000 to explore the challenges faced in creating a robust culture of diversity and inclusion and will develop best practices to share enterprisewide.

Congratulations, Dr. Cobb!

Visit [in-Training](#) to see more creative works from medical students across the globe.



### Race, Sex and Abnormality

*How a young South African woman became a symbol of oppression*

Sara Baartman, a young Khoisan woman, was brought from South Africa to Europe in the early 19th century to be exhibited as a human curiosity and examined privately by scientists in Paris. What about Sara was of such great interest? She exhibited steatopygia, a greatly enlarged backside and thighs -- a normal condition in women from sub-Saharan Africa.

About 25 CCLCM students, faculty and guests were introduced to Sara's story by Stephanie Brown Clark, PhD, Director of Medical Humanities and Bioethics at the University of Rochester School of Medicine, during the Nov. 2 Humanities in Medicine Evening event.

In her presentation, called "The Private Parts of Sara Baartman: Race, Sex and Abnormality in European Science in 1800," Dr. Clark urged the audience to think like a historian as she recounted Sara's years of exploitation, including being sold to an animal trainer in Paris.

During the late 1700s, scientists were busy collecting natural items, such as plants and animals, and applying taxonomic hierarchy to the natural world. After French anatomist Henri Marie Ducrotay de Blainville and his colleagues examined Sara, de Blainville classified her more closely with orangutans than with humans.

Dr. Clark also asked the audience to work like a scientist during a button-sorting exercise. Each table was given a small plastic bag of assorted buttons and asked to sort them according to whatever criteria made sense to them. Halfway through the exercise, Dr. Clark introduced a possible "outlier" button to each group. Interestingly, there was much diversity in the criteria the groups used to sort their buttons.

To finish Sara's story, she died in 1815, possibly from smallpox. Her brain, skeleton and genitals were preserved and displayed in a Paris museum until 1974. In 2002, her remains were repatriated and buried in South Africa. Sara has come to represent oppression not only in African-American women, but in all women.

In closing, Dr. Clark asked the audience to think about what Sara's story meant to them, using just one word. When no one volunteered to share their thoughts, she checked the clock and quickly thanked everyone for coming. The last game of the World Series had already begun.





Daniel Moussa



Lynn Daboul



Shadi Ahmadmehrab

## Monthly Cultural Event: Focus on the Middle East

Three first-year CCLCM students, Daniel Moussa, Lynn Daboul and Shadi Ahmadmehrab, presented on the culture and history of the Middle East during the CCLCM's monthly cultural event in October. Each of the students is from a different part of the Middle East, giving them unique experiences and perspectives.

The student leaders asked the attendees what stereotypes they have heard about people from the Middle East and worked to address them. They discussed the heterogeneity and texture of the Middle East, while representing the region through their different backgrounds.

Shadi, whose family is from Iran, says, "I think the conversation was engaging because people felt comfortable asking questions they might have been wondering about for a long time. We made it very clear that we wouldn't be offended and that they were probably all things we had heard before, so I think that created a safe space for discussion."

The students also enjoyed Middle Eastern food and played a game called "Name the Food," which let them connect with people who may be new to their culture. The rest of the event focused on healthcare topics as they relate to Middle Eastern people, including sensitivities to culture while caring for Middle Eastern patients and the Middle East's contribution to medicine throughout history.

The student leaders say they were pleased with the audience's curiosity and contributions, and felt that the event was a huge success.

The monthly cultural dinners are sponsored by Kendalle Cobb, MD, Director of Multicultural Recruitment and Development for CCLCM, and a student committee.



## Update from University of Nebraska Medical Center

If you're a medical student interested in ophthalmology, anesthesiology or global health, you may be particularly interested in this update from Katie Hallahan, MD ('11), who is a Global Blindness Prevention and International Ophthalmology fellow at the Truhlsen Eye Institute and Orbis International in Nebraska.

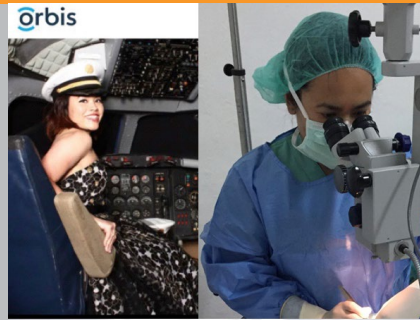
"I graduated from CCLCM in 2011 and while a medical student, helped with the procurement of eyeglasses for the Peru medical missions. It's wonderful that PHOP has been ongoing. After graduation, I completed an ophthalmology residency at the Cole Eye Institute at Cleveland Clinic, and, following that, I did a cornea fellowship with Baylor College of Medicine.

"This year, I was chosen to be the inaugural fellow for the Global Blindness Prevention and International Ophthalmology Fellowship program that is jointly sponsored by the Truhlsen Eye Institute and Orbis International. [Orbis International](#) is a non-profit, non-governmental organization that was established in 1982 to bring training and sustainable eye care to developing countries around the world. It may be best known for its Flying Eye Hospital, an MD-10 airplane that houses a 48-seat classroom, laser treatment room, operating room and pre-op/post-op area. In 2015, Orbis trained 30,000 medical professionals and screened over 2 million patients.

"My fellowship started in July 2016 and lasts for a year, and my experiences thus far have been fantastic. My role changes depending on the needs of the areas which I am serving. So far I spent a month in Haiti doing corneal transplants and cataract surgeries, a month in China with the Flying Eye Hospital completing clinical exams and organizing our visiting faculty members, a week each in Zambia and Uganda leading a cataract surgery wet lab for their residents, and some time in South Africa attending an international ophthalmology conference.

"My upcoming programs will be in Indonesia, Ethiopia, Ghana and Vietnam. If you're curious, I have a [personal blog](#) that covers mostly my non-clinical experiences abroad.

"I hope everyone is doing well at CCLCM!"



# Philanthropic Giving

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 Amy Kubacki, Senior Director of Development, at 216.636.5024 or at [kubacka@ccf.org](mailto:kubacka@ccf.org).

## MARK YOUR CALENDAR

**Dec. 10, 2016 | 6 p.m.**

Doc Opera  
John Hay High School Auditorium

**Jan. 30-31, 2017**

LCME Mock Site Visit  
Cleveland Clinic

### 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](mailto:greenwl@ccf.org).

**Laura R. Greenwald, MBA**, Managing Editor

**Melissa Kus**, Writer

**Thomas A. Fenn**, Art Director

© Cleveland Clinic Foundation 2016