

JULY 2024

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Endocrine news

Community SERVICE

Joshua J. Joseph, MD, MPH, is leveling the healthcare playing field for all.

Recipient of the Endocrine Society's 2024 Richard E. Weitzman Outstanding Early Career Investigator Award, Joseph details his ongoing endeavors to make sure Black Americans have equal access to healthcare, while encouraging participation in the medical field.

Special Issue:

Celebrating Early-Career Endocrinologists

SWEET HOMEOSTASIS ALABAMA:

Tanya Pierre on how she hopes her research hits home

RESEARCHERS ROUNDTABLE:

Meet the Endocrine Society's 2024 Early Investigator Award winners.

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Discussing endocrine science with the 2024 Early Investigator Award Winners

Every year the Endocrine Society recognizes endocrinologists who are in the early stages of their research careers with the Early Investigator Awards. *Endocrine News* spoke to the five award recipients from around the world to find out more about their award-winning research, the award's potential impact, as well as the biggest challenges facing them today.

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How the Endocrine Society is taking steps to ensure the future of endocrinology.

As endocrinology fellowships go unfilled, leaders in the field are growing more concerned about the ability for endocrinology to meet the needs of future patients grappling with diabetes, obesity, and other endocrine disorders. To mitigate this potential gap, the Endocrine Society launched the Medical School Engagement Program (MSEP) to boost the interest of medical students across the country.

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How Joshua J. Joseph, MD, MPH, is leveling the healthcare playing field for all.

When his grandmother succumbed to a heart attack when he was only eight years old, Joshua J. Joseph, MD, MPH, was determined to end as much suffering as he could. The recipient of the Endocrine Society's 2024 Richard E. Weitzman Outstanding Early Career Investigator Award, he details his ongoing endeavors to make sure Black Americans have equal access to healthcare and be more inspired to join the medical profession.

BY GLENDA FAUNTLEROY SHAW



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2024

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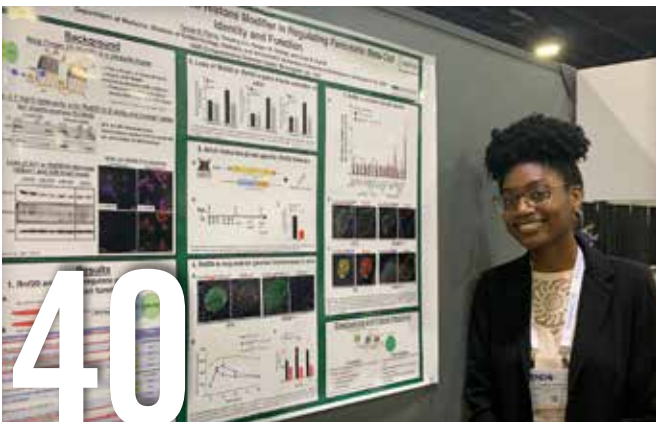
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The Endocrine Society Takes Concrete Steps to Ensure a Clear Pathway for New Endocrinologists

Many of us are now fully back at our day job having returned from last month's **ENDO** in Boston. The meeting was a fabulous success. There was such a buzz around the conference center, where friends and colleagues, old and new, met to discuss the very best in science and clinical practice.

Congratulations and a fantastic job well done must go to Immediate Past-President Steve Hammes, **ENDO 2024** Chair Lauren Fishbein, the other chairs and the whole of the Annual Meeting Steering Committee, and all the dedicated and amazing staff who worked tirelessly to deliver this superb event.

A key theme woven throughout the meeting was nurturing the next generation, and as every parent knows, this requires dedication, planning, and a lot of hard work. I'm proud to say the Society recognizes the importance of this effort and has taken concrete steps to ensure our field remains strong into the future.

One of the most visible steps toward this goal was on display at **ENDO 2024**, where representatives of the inaugural Medical School Engagement Program (MSEP) met to discuss how they can help grow the ranks of endocrinology.

The 2024 MSEP participants are:

- ▶ Albert Einstein College of Medicine
- ▶ Indiana University School of Medicine
- ▶ Stanford University School of Medicine
- ▶ University of New Mexico School of Medicine
- ▶ University of Cincinnati College of Medicine
- ▶ University of Iowa, Carver College of Medicine
- ▶ University of Minnesota Medical School
- ▶ University of Virginia School of Medicine
- ▶ Vanderbilt University Medical Center
- ▶ University of Rochester School of Medicine and Dentistry

These institutions have committed to helping address challenges facing the endocrinology pipeline specifically in the United States. Since 2010, the number of U.S. medical school graduates pursuing endocrinology has declined. This shortfall, however, is not limited to U.S. medical schools. In the U.K., where I teach, we, too, are experiencing challenges in attracting more medical students to this specialty. Although there are some exceptions, many other countries are seeing similar trends.

Overall, we want endocrinology to be seen as an attractive career option for medical students across the globe.

One of the hurdles we recognize is that endocrinology remains largely an outpatient specialty. Medical school curricula are so packed and demanding that it can be tricky for us to provide the same kind of exposure and excitement around endocrinology that practitioners of other high-profile disciplines can provide for students who are doing their rotations in a hospital setting — many students simply do not get to see what endocrinology is all about.

The MSEP gets at the heart of this dilemma. Participating institutions will receive the resources and opportunities needed to demonstrate the clinical and intellectual vibrancy of our field.

Among other activities, the program establishes Endocrinology Interest Groups at each institution. These groups will serve as a conduit for funding faculty-led sessions that highlight the best of endocrine practice and research. The MSEP also aims to generate excitement through a new “Excellence in Endocrinology” Award, which will be open to preclinical and senior-level medical students. Winners of these awards will receive free attendance at **ENDO**, where they will participate in the Endocrinology Mentor Day activities and meet with Society leaders.

Mentorships Underscore Benefits of Endocrinology to Medical Students and Residents

On that note, I’m delighted to announce the success of our second annual Endocrinology Mentor Day at **ENDO 2024**. The program this year attracted roughly 70 students and residents who connected on site with seasoned endocrine professionals.

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A key theme woven throughout the meeting was nurturing the next generation, and as every parent knows, this requires dedication, planning, and a lot of hard work. I’m proud to say the Society recognizes the importance of this effort and has taken concrete steps to ensure our field remains strong into the future.

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I attended and spoke at the welcome session, and it was clear that the program of activities resonated with the attendees. The mentors then guided their charges around **ENDO**, introducing them to the meeting’s signature programs, such as poster presentations, interesting case studies, and a plenary session. The feedback on this day has been phenomenal.

Between the growing interest in our Endocrinology Mentor Day program and our newly minted MSEP class, I can’t help but be optimistic about the future.

Like all professions, success hinges on making personal connections with young people who are at the beginning of their own career paths. With initiatives such as these that the Society is pioneering, I’m confident in the years ahead we will see more and more medical students on the path to becoming our colleagues.

For more information, visit: www.endocrine.org/MSEP. 

*John Newell-Price, MD, PhD, FRCP
President, Endocrine Society*



FROM THE **EDITOR**

JULY 2024

Endocrine news

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Executive Editor: **Mark A. Newman**
mnewman@endocrine.org

Senior Editor: **Derek Bagley**
dbagley@endocrine.org

Art Director/Production: **Anthony S. Picco**
aspicco.wixsite.com/graphicdesigner

Designers: **Catherine C. Neill, Petra Domingo**

Prepress & Printing: **The Sheridan Group**
www.sheridan.com

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Endocrine News informs and engages the global endocrine community by delivering timely, accurate, and trusted content covering the practice, research, and profession of endocrinology.

Celebrating the Endocrine Society's Early-Career Members

Remarkably, 2024 has been a year of firsts for *Endocrine News*. So far this year, we've had the first issue devoted to thyroid cancer, pediatric obesity, Asian American and Pacific Islander Heritage Month, and, last month, June was our first LGBTQ+ Pride issue. All of these have been met with so much positive feedback that it only makes sense to continue this trend of firsts this month with an issue devoted to the Endocrine Society's early-career members.

Appearing on our cover is the Endocrine Society's 2024 Richard E. Weitzman Outstanding Early Career Investigator Award recipient, Joshua J. Joseph, MD, MPH. Glenda Fauntleroy Shaw speaks to Joseph in "**Community Service**" on page 32, where he details how he began his healthcare journey at only eight years old after his grandmother's untimely death due to a heart attack brought on by diabetes complications. He never wanted anyone else to have to live without their grandmother, so he turned that loss into a lifetime of working to ensure that Black Americans have equal access to healthcare as well as inspiring others to consider medicine as a career. Joseph is also passionate about mentorship, so much so that while he was the chair of the Endocrine Society's Clinical Affairs Core Committee, Endocrine Mentor Day was launched at **ENDO 2023** in Chicago and repeated last month in Boston. "Mentors are everything," he says. "I've been fortunate to have outstanding mentors throughout my career. We need mentors at every stage from the time someone has that spark of curiosity of what a career in medicine and science could be all the way through senior investigators."

In the "**2024 Researchers Roundtable**" on page 16, I not only got the chance to meet this year's Early Investigator Award Winners at **ENDO 2024**, but I also got them to answer a few questions about their research,



President: **John Newell-Price, MD, PhD, FRCP**
president@endocrine.org

President-Elect: **Carol Lange, PhD**
lange047@umn.edu

Past-President: **Stephen Hammes, MD, PhD**
Stephen_Hammes@URMC.Rochester.edu

Secretary-Treasurer: **Kristy Brown, PhD**
kbrown46@kumc.edu

Chief Communications Officer: **Aaron Lohr**
alohr@endocrine.org

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the challenges they face in the lab, as well as what the award and the Endocrine Society has meant to their careers thus far. An added treat for this year's presentations was newly minted Society President John Newell-Price, MA,

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Remarkably, 2024 has been a year of firsts for *Endocrine News*. So far this year, we've had the first issue devoted to thyroid cancer, pediatric obesity, Asian American and Pacific Islander Heritage Month, and, last month, June was our first LGBTQ+ Pride issue.

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PhD, FRCP, who served as the session's host and engaged the winners to learn more about their research. “Their presentations were truly inspirational, and the quality of their science exceptional,” he says. “An important message they highlighted repeatedly was the important role that the Society had played in their journeys, from attending and networking at **ENDO**, to publishing in the Society's journals, to emphasizing the crucial need for mentorship and support. With extraordinary talent like this, the future of endocrinology and the Society looks bright.”

Speaking of a bright future, the Endocrine Society has launched the Medical School Engagement Program (MSEP) to ensure that the future of endocrinology remains bright for generations to come. In “**Mind the Gap**” on page 26, Senior Editor Derek Bagley introduces us to the MSEP, which was formally unveiled at **ENDO 2024** last month. The program's goal is to mitigate the gap in endocrinology

programs around the country by heightening the interest of students who are just beginning their careers in medicine. “The Medical School Engagement Program is exactly what we need at exactly the right time,” says Endocrine Society Immediate Past-President Stephen R. Hammes, MD, PhD. “I am thrilled that the Endocrine Society is once again showing tremendous support for their members and for our profession by starting this program, and I am almost certain that it will have a direct and significant positive effect on the pipeline for years to come.”

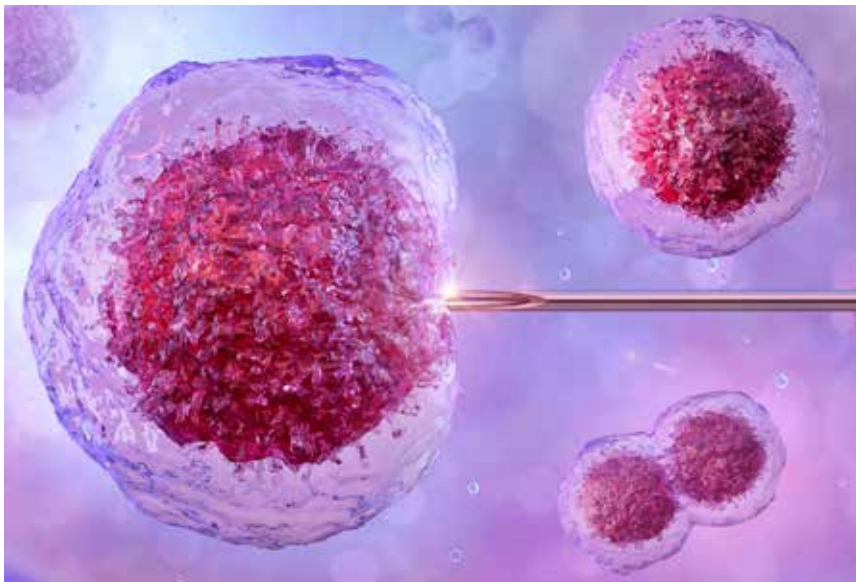
In this month's Laboratory Notes column, Glenda focuses on one of the Endocrine Society's early-career members who hopes her research will one day be able to help her community. Tanya Pierre, a fourth-year graduate student at the University of Alabama at Birmingham's Comprehensive Diabetes Center, remembers how excited she was when she realized she could actually “do science” as a career in “**Sweet Homeostasis Alabama**” on page 40. “The first research program that I was able to participate in was in a lab studying type 1 diabetes and its connection to environmental toxins,” Pierre tells us. “So, after that project, I knew that diabetes was really interesting. I did try to get into other areas, but every other research program I went to, I always ended up in a diabetes lab, so I feel it was meant to be.”

We feel that this early-career issue of *Endocrine News* was also “meant to be” since the Endocrine Society's early-career members are engaging in so much exciting work in their labs, clinics, offices, and classrooms. Hopefully, this issue ably demonstrates that the future of endocrinology is brighter than ever.

Feel free to let me know what you think of this issue and what sort of suggestions you have for future issues. You can always contact me at: mnewman@endocrine.org. 

— **Mark A. Newman**, Executive Editor, *Endocrine News*

Endocrine Society Urges Passage of the Right to IVF Act



Although the legislation was stopped by Senate Republicans last month, the Endocrine Society had endorsed the passage of the Right to IVF Act.


Introduced by Sens. Cory Booker (D-NJ), Patty Murray (D-WA), and Tammy Duckworth (D-IL), the Right to IVF Act's goal was to protect and expand nationwide access to fertility treatment, including in vitro fertilization (IVF). The Endocrine Society urged the Senate to pass the Right to IVF Act on June 12 to ensure that the freedom to start and grow a family is protected and accessible to everyone in the United States.

Infertility affects an increasing number of individuals. In the United States, about 9% of men and about 11% of women of reproductive age have experienced fertility problems. IVF is the main type of assisted reproductive technology. It involves extracting a woman's eggs, fertilizing the eggs in the laboratory, and transferring the resulting embryos into the woman's uterus.

About 2.3% of all infants born in the United States each year are conceived using assisted reproductive technology like IVF. However, access to IVF is limited, and many states have banned or restricted access to reproductive medical services, in some cases including IVF.

Reproductive endocrinologists are a major part of a family's fertility care. They perform IVF and other assisted reproductive technology procedures and diagnose and treat infertility and other hormonal health issues related to the reproductive system.

The Right to IVF Act would help individuals and families who are impacted by infertility by establishing a statutory right to access IVF for all Americans who need it to start or grow a family, and expanding access to coverage for IVF and fertility treatment by requiring that health plans including the VA, TRICARE, Medicaid, Medicare, group and individual market plans, ERISA, and the Federal Employees Health Benefits Program provide coverage for fertility treatment.

A GOP alternative, the IVF Protection Act, was likewise blocked by Senate Democrats. Murray criticized the GOP bill, saying that states could potentially "enact burdensome and unnecessary requirements and create the kind of legal uncertainty and risk that would force clinics to once again close their doors." 



BY DEREK BAGLEY
Senior Editor

Type of Weight Loss Surgery Women Undergo Before Pregnancy May Influence Children's Weight Gain

The type of weight loss surgery women undergo before becoming pregnant may affect how much weight their children gain in the first three years of life, according to a study presented at ENDO 2024.

Researchers found children born to women who underwent sleeve gastrectomy before they became pregnant gain more weight per month on average in the first three years of life compared with children born to women who had Roux-en-Y gastric bypass.

“Either the extent of pre-pregnancy weight loss or the metabolic changes from Roux-en-Y gastric bypass may be favorable for the children’s early childhood weight gain,” says researcher Vidhu Thaker, MD, of the Columbia University Irving Medical Center in New York.

Maternal obesity is a risk factor for obesity in children. Women are more likely to conceive following weight loss procedures, but less is known about the early growth of the children born after pre-pregnancy weight loss procedures.



The researchers examined the weight and length of offspring born after pre-pregnancy weight loss procedures in the first three years of life. The study used data from 20,515 deliveries over three years, of which 450 had pre-pregnancy weight loss procedures. Among the mothers who underwent weight loss surgery, 57% had sleeve gastrectomy, and 41% had Roux-en-Y gastric bypass. Long-term weight and length data were available for about half of the babies in each group.

The researchers found there was no difference in birth weight among the babies born after weight loss surgery. The pace of weight gain was higher in those born after pre-pregnancy sleeve gastrectomy compared to those born following Roux-en-Y gastric bypass, while adjusting for several other variables including pre-pregnancy body mass index.

“While we did not have data on the magnitude of weight loss following bariatric surgery, Roux-en-Y gastric bypass is known to have higher weight loss and metabolic changes compared to sleeve gastrectomy,” Thaker says.

The authors concluded that either the extent of pre-pregnancy weight loss or the metabolic changes from Roux-en-Y gastric bypass may be favorable for the offspring’s early childhood weight trajectory. “A study of the mechanisms underlying the associations of the sustained pre-pregnancy weight loss and the offspring’s early-life growth may also apply to other methods of weight loss, including the most recently approved anti-obesity medications,” Thaker says.



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A study of the mechanisms underlying the associations of the sustained pre-pregnancy weight loss and the offspring’s early-life growth may also apply to other methods of weight loss, including the most recently approved anti-obesity medications.

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Low Socioeconomic Status Raises Pregnant Women’s Risk of Exposure to Thyroid-Disrupting Chemicals

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Our research
underscores
the importance
of addressing
socioeconomic
disparities in
EDC exposure
among women
of reproductive
age and pregnant
women to
mitigate potential
adverse effects
on thyroid
health.”

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Exposure to some endocrine-disrupting chemicals (EDCs) that harm the thyroid gland has increased over the past 20 years among U.S. women of childbearing age and pregnant women, especially among those with lower social and economic status, according to a study presented at ENDO 2024. The researchers focused this study on women who may be particularly vulnerable to negative effects of EDCs on the thyroid: women in their childbearing years and pregnant women.

Researcher Cheng Han, MD, of the Boston University Chobanian & Avedisian School of Medicine analyzed data from the U.S. National Health and Nutrition Survey (NHANES) from 1999 to 2020 for 25,320 reproductive-age women and 2,525 pregnant women. He assessed trends over the past two decades in levels of multiple thyroid-disrupting chemicals in blood and urine samples. Statistical tests helped him to evaluate changes in EDC exposure over time and to identify the effect of socioeconomic status on this exposure.

Han found that exposure to many of the EDCs decreased for both groups of women over the 20-year study period. However, exposure to some thyroid-disrupting chemicals increased in that period. Both reproductive-age women and pregnant women had increased exposure to two types of polyaromatic hydrocarbons. Common sources of exposure to these chemicals include breathing cigarette

smoke, wood smoke, or motor vehicle exhaust or eating grilled foods, according to the U.S. Centers for Disease Control and Prevention (CDC).

“Our research underscores the importance of addressing socioeconomic disparities in EDC exposure among women of reproductive age and pregnant women to mitigate potential adverse effects on thyroid health,” says senior author Elizabeth N. Pearce, MD, MSc, also of the Boston University Chobanian & Avedisian School of Medicine.

Han said that low-income women who were pregnant or of reproductive age had the greatest increase in exposure to thyroid-disrupting chemicals, especially polyaromatic hydrocarbons. “This increased exposure has the potential to worsen disparities in health outcomes among low-income people,” he says.



Two Medication Classes Reduced Cardiovascular and Liver Events in People with Type 2 Diabetes

GLP-1 receptor agonists (GLP-1s) and SGLT-2 inhibitors lower the risk of major cardiovascular events like heart attacks and severe liver complications compared to other diabetes treatments, according to data presented at ENDO 2024.

Researchers reviewed Medicare data documented from 2013 to 2020 and a large U.S. health

work in patients with both type 2 diabetes and metabolic dysfunction-associated steatotic liver disease (MASLD),” says Alexander Kutz, MD, MPH, MSc, a research fellow in the Division of Pharmacoepidemiology and Pharmacoeconomics, Department of Medicine, at Brigham and Women’s Hospital and Harvard Medical School in Boston. “Our study shows that GLP-1 receptor agonists and SGLT-2 inhibitors

are more beneficial in preventing heart-related events compared to another group of drugs such as dipeptidyl peptidase 4 inhibitors (DPP-4 inhibitors), and GLP-1s also help reduce severe liver events.”

Kutz goes on to say that these findings suggest GLP-1 receptors and SGLT-2 inhibitors may be more beneficial than other diabetes medications for patients with type 2 diabetes and MASLD. In addition, using these drugs, which have become popular in recent years, reduces the risk of heart-related events and serious liver complications.

Kutz added that by introducing this treatment, patients with type 2 diabetes and MASLD may experience fewer hospitalizations, despite complex medical needs. “An increasing amount of people live with type 2 diabetes, and a significant proportion of these individuals also struggle with MASLD,” he says. “Understanding which medications can effectively manage these conditions and prevent severe complications is crucial for their health and quality of life.” ^{EN}

insurance database from 2013 to 2022. They performed two analyses, including adults with type 2 diabetes and metabolic dysfunction-associated steatotic liver disease who started GLP-1s, SGLT-2 inhibitors, or DPP-4is.

They analyzed the risk for acute heart attack, ischemic stroke, hospitalization for heart failure, or all-cause mortality. They also examined the incidence of serious liver events.

The people who used GLP-1s or SGLT-2 inhibitors had fewer cardiovascular events than those who were given DPP-4 inhibitors. The researchers also found that GLP-1s reduced severe liver events compared to DPP-4 inhibitors. Moreover, severe adverse events weren’t any more frequent than when people were treated with DPP-4 inhibitors.

“Before this study, there was limited information about how these specific diabetes medications



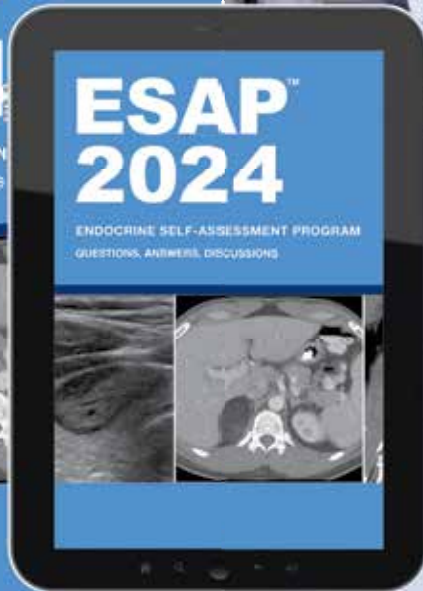
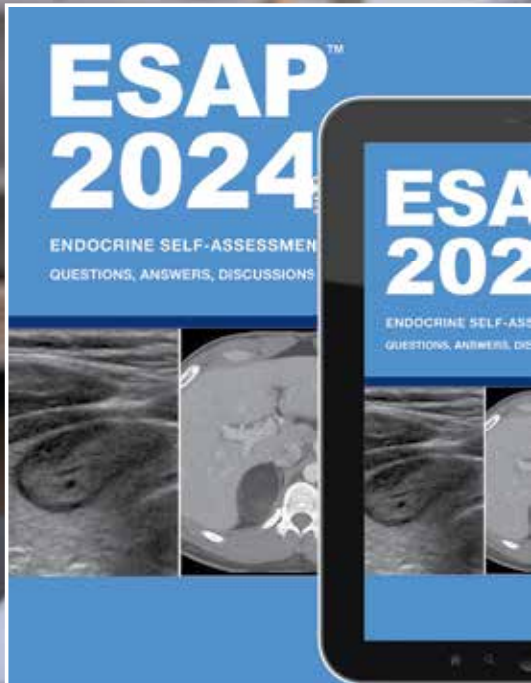
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I envision the Endocrine Society continuing to be a cornerstone of my career, facilitating meaningful connections, and providing avenues for collaboration and knowledge exchange. I am deeply grateful for their unwavering support and the transformative impact they have had on my journey as an endocrine researcher. **With the Society's backing, I am optimistic about the future of our research and the potential to make lasting contributions to the field of endocrinology.”**

2024 Early Investigator Award Winner **Maria Camilletti, PhD**, discussing the importance of the Endocrine Society on her career in “2024 Researchers Roundtable” on page 16.



Women experiencing moderate-to-severe vasomotor symptoms have a three-times greater risk for cardiovascular and metabolic disease compared to those with mild symptom severity. Vasomotor symptoms include hot flashes or night sweats — symptoms that have become synonymous with menopause.

— SOURCE: PRESENTED AT ENDO 2024 BY ELENI ARMENI, MD, MSC, PHD, A RESEARCH FELLOW AT THE SECOND DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, ARETAEIO HOSPITAL NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, IN ATHENS, GREECE



By The Numbers

83% Percentage of physicians who feel artificial intelligence (AI) has the potential to reduce administrative burdens.

93% of those physicians reported they feel burned out.

30% of this year's respondents cited information overload as a growing cause of rising burnout.

— SOURCE: ATHENAHEALTH'S THIRD ANNUAL PHYSICIAN SENTIMENT SURVEY

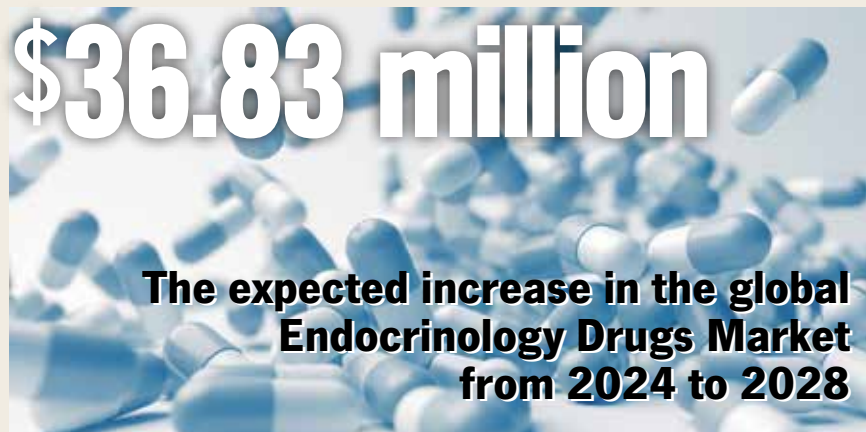


Healthy adults younger than the age of 75 are unlikely to benefit from taking more than the daily intake of vitamin D recommended by the Institutes of Medicine and do not require testing for vitamin D levels.

— SOURCE: THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM

70% The percentage of patients with diabetes who experience diabetes-related ketoacidosis (DKA) at diagnosis, underscoring the importance of screening and clear and concise monitoring guidance.

— SOURCE: ANASTASIA ALBANESE-O'NEILL, PHD, AVP OF COMMUNITY SCREENING AND CLINICAL TRIAL EDUCATION, BREAKTHROUGH T1D



— SOURCE: TECHNAVO

1/4 **Hypercortisolism is present in one-fourth of all adults with difficult-to-control diabetes.**

— SOURCE: AMERICAN DIABETES ASSOCIATION SCIENTIFIC SESSIONS

2024 Endocrine Board Review/Clinical Endocrinology Update

EBR 2024

ENDOCRINE BOARD REVIEW

Sept. 6 – 8, 2024/Virtual Only



EBR is an intensive online learning program for fellows, practicing endocrinologists, and other healthcare professionals preparing for the American Board of Internal Medicine's (ABIM), Endocrinology, Diabetes, and Metabolism Certification Exam.

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from medical experts involved in developing the exam. These specialists understand the exam's nuances and will share essential strategies for success. EBR features case-based questions aligned with the ABIM blueprint, complemented by highly effective tools to bolster your confidence as you gear up for your board exam.

You will receive the latest Endocrine Board Review (EBR) 16th edition book and access to our interactive practice exam sessions on August 5, 2024. Additionally, participants will have the opportunity to interact with our faculty during the Topical Live Q&A Sessions on September 6 – 8.

Join us for an immersive review of endocrinology to advance your knowledge and succeed in your board certification exam.

<https://ebr2024.endocrine.org/>

CEU 2024

CLINICAL ENDOCRINOLOGY UPDATE

Sept. 19 – 21, 2024/Virtual Only

Join endocrinologists and other healthcare professionals for updates on how to treat various endocrine conditions based on the latest expert guidelines in hormone care. With recent breakthroughs in different areas of the ever-evolving field of endocrinology, staying abreast of innovative practices is essential for optimal patient treatment.

CEU 2024 provides a convenient solution for busy professionals by delivering a first-rate education they can immediately implement into their practice. For over a decade, our program has been led by renowned endocrinologists, offering a case-based agenda and evidence-based disease management strategies to equip practitioners with the tools they need to address daily clinical challenges.

CEU is virtual, ensuring accessibility through our online platform. Our expert faculty will cover important endocrinology topics, including adrenal, calcium and bone, diabetes, pituitary, obesity and lipids, female reproduction, male reproduction, transgender care, and thyroid.

With Meet the Professor sessions and a symposium filled with expert insights, this program offers a valuable learning experience for endocrinologists worldwide. Do not miss this opportunity to enhance your knowledge and skills in hormone care. Join us online, and stay ahead in the field of endocrinology!

<https://ceu2024.endocrine.org/>



Endocrine Society Webinars

The Endocrine Society holds webinars throughout the year on many topics, from clinical practice and basic research to career development, advocacy, and more. Check below for information on upcoming webinars and links to previous events. Visit our Center for Learning for a full list of Society educational offerings.

Past webinars have included The Complexities of Cushing's Syndrome: Diagnosing and Managing Patients; Utilizing Nurse Practitioners and Physician Assistants to Optimize Patient Care: How to Build Effective Teams; Genetics in Pituitary Disease; Facts and Controversies of Testosterone Replacement Therapy in Male Hypogonadism; and so much more! Most of the webinars are free for Endocrine Society members, but some do require a small registration fee.

<https://education.endocrine.org/Public/Catalog/Main.aspx>

1st International Conference on Steroid Hormones and Receptors (SHR 2024)

Albuquerque, New Mexico • October 15 – 18, 2024



STEROID HORMONES AND RECEPTORS

SHR 2024 will be held at the University of New Mexico Comprehensive Cancer Center and will be chaired by Eric Prossnitz (University of New Mexico) and Endocrine Society incoming President Carol Lange (University of Minnesota). SHR 2024 is an international biomedical conference that builds on a 25-year legacy of highly successful

conferences: the Steroid Hormones and Receptors in Health and Disease Conference hosted by FASEB Science Research Conferences (SRC) and the Rapid Responses to Steroid Hormones (RRSH) International Meetings hosted by the International RRSB Committee. A joint FASEB-RRSH conference held in 2021 recognized the evolution of the field in which physiological and cellular effects of steroid hormones are frequently the result of the combined effects of rapid and genomic signaling. These advances in steroid hormone and receptor biology highlighted the need for a new series of international meetings. The SHR conferences will explore state-of-the-art advances in steroid hormone and receptor functions, both rapid and genomic, in various aspects of biology and medicine in terms of normal physiology and pathophysiology.

<https://www.endocrine.org/meetings-and-events/shr-2024>

their research, and experience the best the field has to offer. Attend so you can present research, network with scientists, attend sessions and events, and browse the exhibit hall. Join the nearly half a million neuroscientists from around the world who have propelled their careers by presenting an abstract at an SfN annual meeting – the premier global neuroscience event.

<https://www.sfn.org/meetings/neuroscience-2024>

American Thyroid Association 2024 Annual Meeting

Chicago, Illinois

October 30 – November 4, 2024

The ATA Annual Meeting is the world's preeminent event for those interested in thyroid diseases and disorders and provides an opportunity for peer-to-peer learning and collaboration through lectures, interactive discussions, meet-the-professor sessions, and abstracts. This year, the ATA will celebrate its centennial anniversary with a culmination of the celebration and the largest gathering of thyroidologists in the world. Whether you're an endocrinologist, a surgeon, an advanced practice provider, a fellow in training, or a medical student, the topics covered during the meeting will provide in-depth information about thyroid diseases and disorders. With a diverse program planned, attendees can customize their experience by attending sessions that are most important to their professional development.

<https://www.thyroid.org/>

ADCES24

New Orleans, Louisiana

August 9 – 12, 2024

The Association of Diabetes Care & Education Specialists (ADCES) Annual Conference is the premier diabetes care and educational event of the year. More than 3,000 diabetes care and education specialists and other healthcare professionals are expected to participate at ADCES24 in New Orleans, La. Connect, collaborate, and educate yourself and others on the latest in diabetes care and education.

<https://www.diabeteseducator.org/home>

ASBMR 2024

Toronto, Ontario, Canada

September 27 – 30, 2024

The ASBMR Annual Meeting boasts nearly 100 education sessions and 1,100 poster presentations in four information-filled days. The conference includes hands-on workshops focused on the latest technologies and research tools using model data sets, meet-the-professor sessions, the ASBMR Discovery Hall, an exhibition

hall that provides attendees with a truly immersive experience, with access to new science, new knowledge, new tools, and new contacts all in one location.

<https://www.asbmr.org/annual-meeting>

Neuroscience 2024

Chicago, Illinois

October 5 – 9, 2024

Each year, scientists from around the world congregate to discover new ideas, share

INTERNATIONAL ITINERARY

2024 Mammalian Reproduction Gordon Research Conference

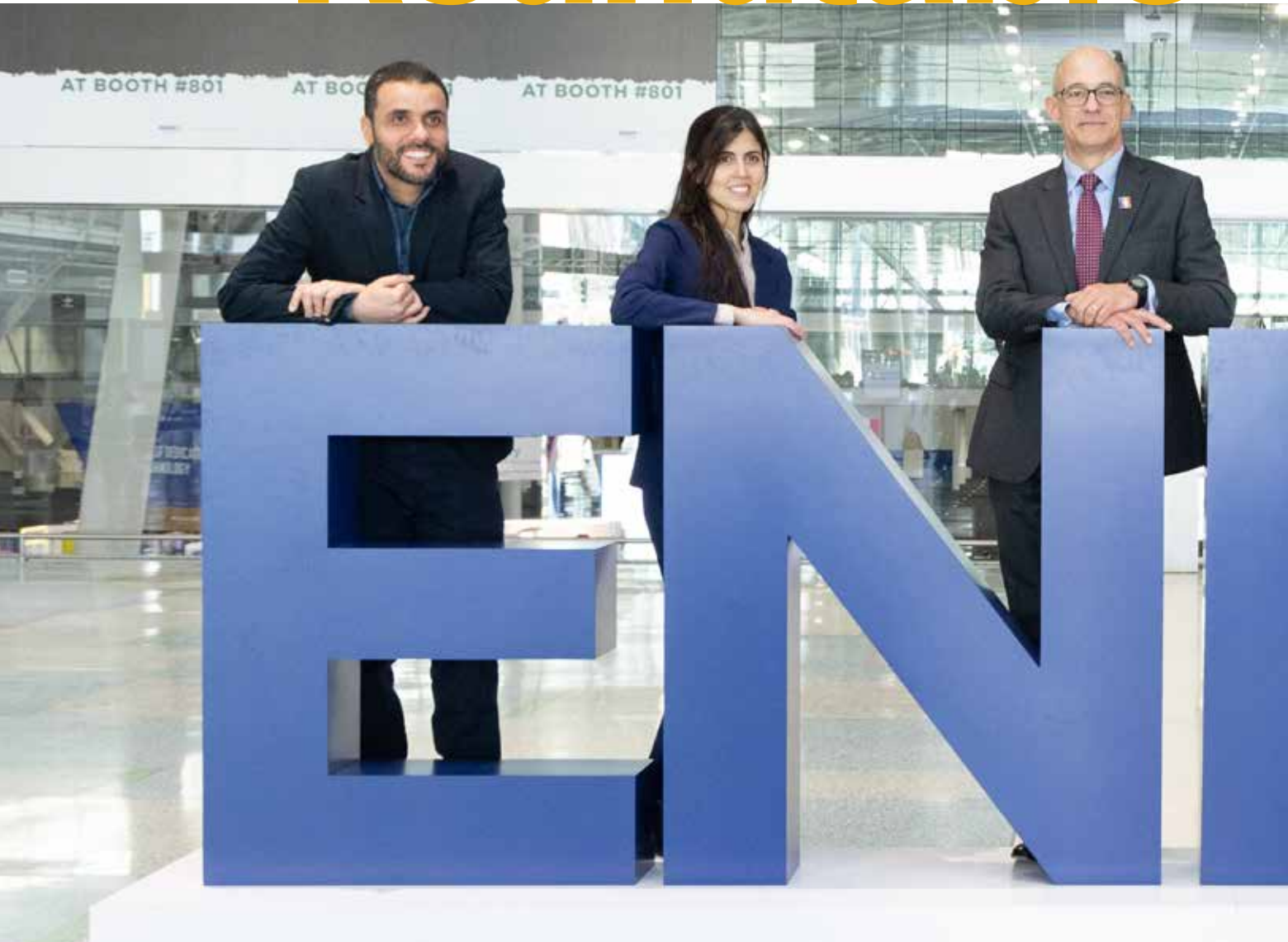
Barcelona, Spain • July 21 – 26, 2024

The Mammalian Reproduction Gordon Research Conference (GRC) provides a unique forum for young doctoral and post-doctoral researchers to present their work and discuss new methods, cutting-edge ideas, and pre-published data, as well as to build collaborative relationships with their peers. Experienced mentors and trainee moderators will facilitate active participation in scientific discussion to allow all attendees to be engaged participants rather than spectators.

<https://www.grc.org/mammalian-reproduction-grs-conference/2024/>

BY MARK A. NEWMAN

2024 Researchers Roundtable



DISCUSSING ENDOCRINE SCIENCE WITH THE 2024 EARLY INVESTIGATOR AWARD WINNERS

Every year the Endocrine Society recognizes endocrinologists who are in the early stages of their research careers with the Early Investigator Awards. *Endocrine News* spoke to the five award recipients from around the world to find out more about their award-winning research, the award's potential impact, as well as the biggest challenges facing them today.



In the midst of the **ENDO 2024** crowds, the 2024 Early Investigator Award winners gathered in the entry of the Boston Convention and Expo Center immediately after discussing their award-winning research. Pictured (l to r): Kleiton Borges, PhD; Cintia Citterio, PhD; Endocrine Society President John Newell-Price, MA, PhD, FRCP; Francesca Galbiati, MD; Leen Antonio, MD, PhD; and Maria Camilletti, PhD.



In her lab at University Hospitals Leuven in Belgium, clinician-scientist Leen Antonio studies andrology, reproductive endocrinology, and steroid hormones.

recipient's enthusiasm for the research being discussed. "The Early Investigator Award symposium was an incredible opportunity for the recipients of these prestigious awards to showcase their data and give insight into the factors that had contributed to their successful careers," Newell-Price tells *Endocrine News*. "It was a phenomenal event!"

The 2024 winners are: **Leen Antonio, MD, PhD**, an assistant professor in the Department of Chronic Diseases and Metabolism (CHROMETA), University Hospitals Leuven in Leuven, Belgium; **Francesca Galbiati, MD**, a clinical research fellow in the Division of Endocrinology, Diabetes, and Hypertension, Brigham and Women's Hospital and Massachusetts General Hospital, Boston, Mass.;

Cintia Citterio, PhD, assistant professor of biomedical sciences, Chapman University School of Pharmacy in Irvine, Calif.; **Kleitton Borges, PhD**, an instructor in pediatrics at Boston Children's Hospital, Boston, Mass.; and **Maria Camilletti, PhD**, with the National Scientific and Technical Research Council in Buenos Aires, Argentina, who also serves as a research assistant in the faculty of Exact and Natural Sciences at the University of Buenos Aires and in the Institute of Neurosciences.

Endocrine News was fortunate enough to catch their presentations in Boston and caught up with them to learn more about their research, the unique challenges they've each faced, and what the award means for their work.

Endocrine News: Tell us a little bit about your research and your motivation to apply for the Early Investigator Award.

Leen Antonio: As an endocrinologist and clinician-scientist, I combine patient care with clinically oriented research, with a focus on andrology, reproductive endocrinology, and steroid

When the recipients of the Endocrine Society's 2024 Early Investigator Awards presented their research at **ENDO 2024**, the atmosphere was electric and filled with anticipation at the Boston Convention and Expo Center.

One by one, as each of this year's winners got up to speak, attendees in the room were treated to an eclectic array of research ranging from oxytocin deficiency; the molecular mechanisms behind thyroid disorders; the molecular basis of adrenocortical tissue homeostasis and adrenal cancer; molecular mechanisms of pituitary development; and male reproductive endocrinology and steroid hormones.

Aside from the award-winning research presentations, a surprising new feature at this year's symposium was the session host and facilitator for the proceedings, Endocrine Society President John Newell-Price, MA, PhD, FRCP, professor of endocrinology and honorary consultant endocrinologist in the Division of Clinical Medicine at the School of Medicine & Population Health at the University of Sheffield Medical School, Sheffield, U.K., who certainly shared the award

hormones. More specifically, I do research on steroid hormone-binding protein interactions and clinical implications of looking at the total versus the free fraction, such as in the case of total testosterone, SHBG, and free testosterone.

During my PhD and clinical training, I had the opportunity to work with several very successful clinician-scientists, especially my research mentor Dr. Dirk Vanderschueren. This convinced me to pursue an academic career and combine clinical care with research and teaching. I am convinced that cross-fertilization between the lab and the clinic is highly beneficial for patient care, both on a day-to-day basis in routine clinical care, as well as in the long run by increasing evidence-based diagnosis and treatment for frequent as well as rare endocrine diseases.

Kleitton Borges: My research is primarily focused on unraveling the molecular pathways underlying adrenal development and the pathogenesis of adrenocortical carcinoma (ACC), a rare and aggressive tumor with limited treatment options. A significant milestone in my career was the development of a genetically engineered mouse model of ACC, which integrates two major mutations observed in patients with aggressive ACC. This model faithfully recapitulates key molecular, hormonal, and cellular features of human ACC. Currently, my main research focus lies in elucidating the epigenetic mechanisms involved in immune evasion in ACC. Employing a multidisciplinary approach, including mouse models, cellular immunology, and functional genomics such as CRISPR screening in vivo, I aim to understand how cancers evade the immune system and identify novel targets to enhance immune responses against tumors. As a junior faculty member, I am continuously seeking opportunities to showcase my research and establish collaborations with both current and new partners to expand my professional network. The international recognition offered by the Endocrine Society makes this award particularly appealing to me, as it provides a valuable platform to disseminate my work and forge new professional connections.



In her lab at Brigham and Women's Hospital and Massachusetts General Hospital, Francesca Galbiati's research focuses on the characterization of oxytocin deficiency and oxytocin replacement in patients with hypopituitarism and arginine-vasopressin deficiency.



Leen Antonio, MD, PhD, assistant professor, Department of Chronic Diseases and Metabolism (CHROMETA), University Hospitals Leuven, Leuven, Belgium

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During my PhD and clinical training, I had the opportunity to work with several very successful clinician-scientists. This convinced me to pursue an academic career and combine clinical care with research and teaching. I am convinced that cross-fertilization between the lab and the clinic is highly beneficial for patient care, both on a day-to-day basis in routine clinical care, as well as in the long run by increasing evidence-based diagnosis and treatment for frequent as well as rare endocrine diseases.

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Endocrine Society President John Newell-Price, MA, PhD, FRCP, served as the session's moderator and said that the "presentations were truly inspirational, and the quality of their science exceptional. It was a phenomenal event!"



Maria Camilletti: My research involves developing an in vitro platform to obtain pituitary cells from human-induced pluripotent stem cells (hiPSCs) to model and study hypopituitarism, a severe condition with an incidence of 1:4000–1:10000 live births. This platform provides a useful tool for validating novel genes and genetic variants identified in patients and exploring their impact on pituitary development and function. The Early Investigator Award is a prestigious recognition, and I was hoping its financial support would allow me to attend the conference. Funding opportunities in my country to travel abroad are scarce, especially nowadays, making this award particularly meaningful to showcase our discoveries and ongoing projects to a global audience of endocrine experts at ENDO.

Cintia Citterio: My research to date has focused on studying the molecular mechanisms of hereditary thyroid disorders, thyroid hormone formation, and thyroid pathophysiology in the whole-body context, to understand disease pathogenesis and improve the treatment of hypothyroid patients. With a strong commitment to advancing discoveries in thyroid endocrinology and motivated to find new opportunities for

career development, I applied for the Early Investigator Award in January 2024. It is an honor to be one of the five recipients of this award this year.

Francesca Galbiati: I started working in Elizabeth Lawson's lab in 2018, when I moved to the U.S. for a postdoctoral research fellowship. We are interested in understanding posterior pituitary physiology and pathophysiology and functions of oxytocin and vasopressin beyond their classical roles in parturition and water balance, respectively. Dr. Lawson's lab has investigated oxytocin-based therapeutics for several conditions including obesity and ADHD, and we are now focusing on the characterization of oxytocin deficiency and oxytocin replacement in patients with hypopituitarism and arginine-vasopressin deficiency (formerly, central diabetes insipidus). Hypopituitarism is, in fact, associated with increased morbidity and mortality and an oxytocin deficiency could contribute to worse overall health and quality of life despite adequate anterior pituitary hormone replacement. We aim to identify and clinically characterize oxytocin-deficient patients to improve their care.

About the Early Investigator Award

The Endocrine Society presents the annual Early Investigator Awards to members who hold an MD, PhD, or MD/PhD and are a third- or fourth-year, post-doctoral fellow or a newly appointed faculty member.

Recipients receive a monetary award, one-year complimentary membership to the Society, one-year

complimentary access to the Society's online journals, and public recognition of research accomplishments in various Society platforms.

Learn more about the application process and when to apply for 2025 at: endocrine.org/awards/early-investigators-awards.

We are also studying the interplay between posterior and anterior pituitary via a multimodal approach including physiology studies in humans, proteomics, and cell-based research with the goal of better understanding how oxytocin modulates anterior pituitary axes as well as clinical implications of oxytocin treatment.

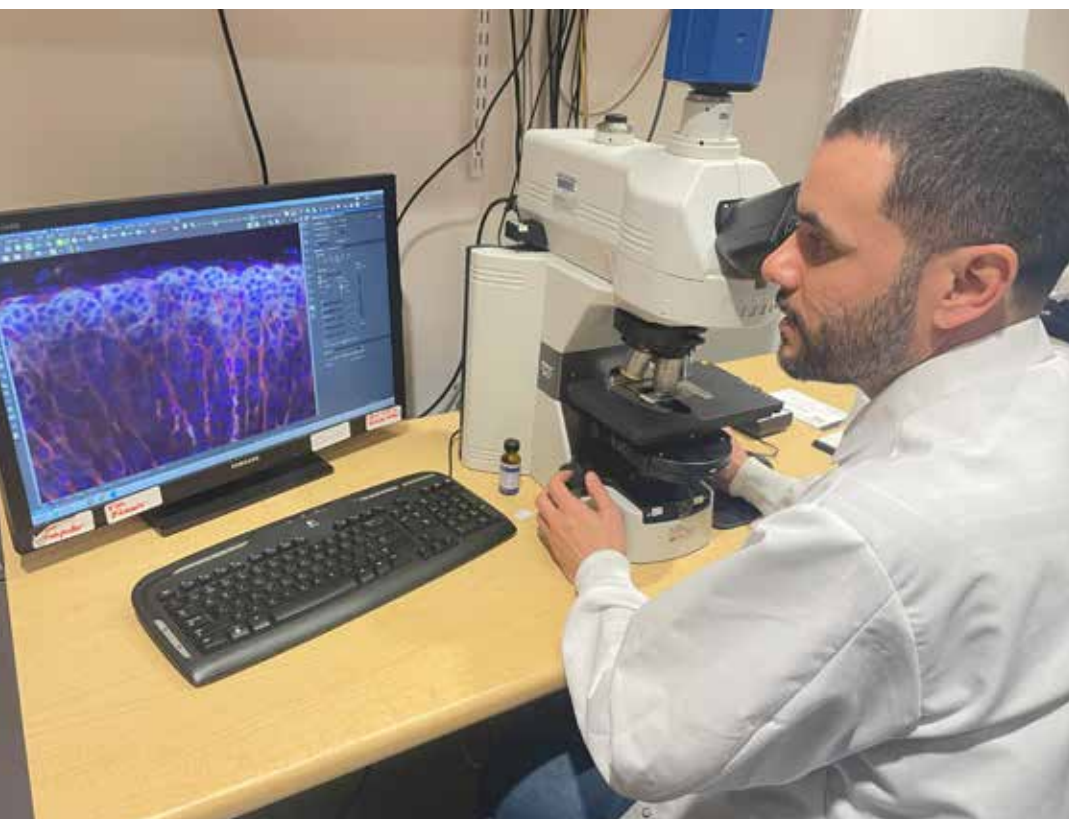
Lastly, I have been studying the vasopressin system in obesity and the bariatric population aiming to identify pathways that could perpetuate versus counteract metabolic derangements and to identify potential treatment targets.

The unique opportunity provided by the Early Investigator Award to share my work with the academic community and endocrinology experts prompted me to apply.

EN: What have been some of your biggest challenges at this point in your career as a scientist and researcher?

Antonio: For me, combining clinical care with research is the biggest challenge. I run clinics in pituitary endocrinology, reproductive endocrinology, and andrology, and I'm also involved in our parathyroid clinics. I became a consultant endocrinologist about five years ago, and I'm still learning every day. As University Hospital Leuven is a teaching hospital, I am also engaged in the clinical training of internal medicine residents and endocrinology fellows. This is very rewarding, but I have to keep up with new developments in all fields of endocrinology, and this can sometimes be challenging.

In the lab at Boston Children's Hospital Kleiton Borges — who called himself an “adrenal guy” during his **ENDO 2024** talk — works on “unraveling the molecular pathways underlying adrenal development and the pathogenesis of adrenal carcinoma.”



Kleiton Borges, PhD,
instructor, Pediatrics, Boston
Children's Hospital, Boston, Mass.

“

As a junior faculty member, I am continuously seeking opportunities to showcase my research and establish collaborations with both current and new partners to expand my professional network. The international recognition offered by the Endocrine Society makes this award particularly appealing to me, as it provides a valuable platform to disseminate my work and forge new professional connections.

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Maria Camilletti, PhD, National Scientific and Technical Research Council; research assistant, Exact and Natural Sciences, University of Buenos Aires and the Institute of Neurosciences, Buenos Aires, Argentina

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I envision the Endocrine Society continuing to be a cornerstone of my career, facilitating meaningful connections, and providing avenues for collaboration and knowledge exchange. I am deeply grateful for their unwavering support and the transformative impact they have had on my journey as an endocrine researcher. With the Society's backing, I am optimistic about the future of our research and the potential to make lasting contributions to the field of endocrinology.

”

Cintia Citterio, who teaches molecular biology and genetics to pharmacy and graduate students at the University School of Pharmacy in Irvine, Calif., discussed her mouse research studies on thyroid disorders during her ENDO 2024 presentation in Boston.



As a researcher, I recently became PI of my own research group. Finding enough time to write high-quality funding applications that are likely to get funded is challenging.

Borges: As an early-career investigator, one of the biggest challenges I've faced is maintaining momentum in scientific discovery while navigating the competitive landscape of funding acquisition for my laboratory. I've been fortunate to receive tremendous support from mentors and colleagues who have provided invaluable guidance and encouragement along the way. Despite the challenges, I remain optimistic about the opportunities that lie ahead.

Camilletti: Over the past few months, I've encountered significant challenges due to severe cuts in scientific funding and the number of PhD scholarships for entering academia. This has resulted in fewer resources for experiments and equipment and less academic productivity. There is uncertainty about how we will continue our lab work, but with the support of a great mentor and an excellent team, we are already seeking international collaborations and grant applications to sustain the continuity of our projects. Also, I'm getting involved in advocating for increased investment in science and education and strongly advocating about the importance of scientific research in the growth and development of our country.

Citterio: Balancing various responsibilities such as conducting research, teaching, and service, and personal life can be challenging. Staying focused is crucial for navigating through these responsibilities effectively.

Galbiati: I have the privilege of doing a job I love, and I look forward to it every day. Nevertheless, challenges come with it and are part of the research learning curve. It is probably a mainstream topic, but funding resources are significantly limited for international researchers working in the U.S. where solid projects and mentorship are not enough. In fact, visa status matters and can be a crucial barrier to apply for funding. This is particularly true for early-career researchers aiming to establish their independent research pathways. However, supportive mentors, enthusiastic team members, and the passion for my job have helped me obtain my first grants and advance my projects.

EN: How do you hope receiving the Early Investigator Award will help support your goals as an endocrine scientist, and what role do you see the Endocrine Society playing in your career going forward?

Antonio: The Endocrine Society has already shaped my clinical and research career in many ways. I attended my first ENDO meeting in 2014, in Chicago. As a second-year PhD student, I got the opportunity to present my research as a poster and received an outstanding abstract award! I also was selected to take part in the Type 1 Diabetes Fellows Conference. I still remember the faculty discussing the results of the first clinical trials with hybrid insulin pumps back then. If you see how that field has evolved over the past decade, it was amazing that I could hear experts discussing this technology as a fellow. I participated in several events the Society organizes for early-career researchers and fellows, and it really helped me enhance my research and networking skills while gaining valuable insights for my clinical and research work. I truly enjoy every ENDO meeting I have attended because every time I meet new international colleagues and run into people I hadn't seen for a while.

I am also very grateful that my first two publications were published in the Society's *Journal of Clinical Endocrinology & Metabolism* (JCEM), the leading journal for getting results of your endocrine research into the world. One even got highlighted with an editorial written by Dr. Bradley Anawalt. Also being asked to serve as a reviewer for the andrology section of JCEM has made a deep impression on me as a junior researcher.



Maria Camilletti spends her days in the lab researching an in vitro platform to obtain pituitary cells from human induced pluripotent stem cells (hiPSCs) to model and study hypopituitarism.



Cintia Citterio, PhD, assistant professor of biomedical sciences, Chapman University School of Pharmacy, Irvine, Calif.

“

I believe that this award offers an excellent opportunity to increase the impact of my research, attract new research grants, and foster new collaborations. All these aspects are essential for the continued growth of my career and the research themes that I have developed.

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Francesca Galbiati, MD, clinical research fellow, Division of Endocrinology, Diabetes, and Hypertension, Brigham and Women's Hospital, Massachusetts General Hospital, Boston, Mass.

“

Receiving the Early Investigator Award at such an early stage of my career is an invaluable recognition from the scientific community. It is a validation of the research trajectory I have been pursuing and a great source of motivation to move forward with my current projects with the goal of becoming a successful independent clinical investigator.

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So, in the future I think the Endocrine Society will continue to play an important role in my career. I look forward to going to future **ENDO** meetings, meeting international colleagues in person, and getting the newest updates in research and clinical practice.

Borges: Receiving the Early Investigator Award from the Endocrine Society is an honor, and the recognition and validation from such a prestigious organization indicates that my research efforts are making meaningful contributions to the field. Moreover, the resources and networking opportunities offered by the Endocrine Society are invaluable for early-career researchers like me. These interactions will not only foster collaboration and innovation but also provide a platform to disseminate my findings and amplify the impact of my research.

Camilletti: Receiving the Early Investigator Award from the Endocrine Society represents a significant milestone in my career as an endocrine scientist. This recognition validates the importance and impact of our research and provides essential support and visibility for our work in hypopituitarism. The Endocrine Society has consistently supported my professional growth since my early years as a PhD student. I still remember my first **ENDO** in 2016 (in Boston, too!), feeling impressed by all the groundbreaking discoveries presented there and motivated at the same time, by the friendly and talented scientists and clinicians I met. Looking ahead, I envision the Endocrine Society continuing to be a cornerstone of my career, facilitating meaningful connections, and providing avenues for collaboration and knowledge exchange. I am deeply grateful for their unwavering support and the transformative impact they have had on my journey as an endocrine researcher. With the Society's backing, I am optimistic about the future of our research and the potential to make lasting contributions to the field of endocrinology.

Citterio: I believe that this award offers an excellent opportunity to increase the impact of my research, attract new research grants, and foster new collaborations. All these aspects are essential for the continued growth of my career and the research themes that I have developed. Right after receiving the 2024 Early Investigator Award, I was invited to serve as a member of the Endocrine Society's Research Affairs Core Committee. I am confident that the Endocrine Society will continue to play an important role in my scientific career.

Galbiati: Receiving the Early Investigator Award at such an early stage of my career is an invaluable recognition from the scientific community. It is a validation of the research trajectory I have been pursuing and a great source of motivation to move forward with my current projects with the goal of becoming a successful independent clinical investigator. I hope that the work we do in Dr. Lawson's lab will lead to improved care of patients with hypopituitarism and to a better elucidation of the role of vasopressin in metabolism to unveil novel pathways underlying metabolic dysregulation and potential treatment targets for obesity.

For his part, Newell-Price was nothing short of enthusiastic after hearing these endocrine scientists discuss their groundbreaking research. “Their presentations were truly inspirational, and the quality of their science exceptional,” he says. “An important message they highlighted repeatedly was the important role that the Society had played in their journeys, from attending and networking at **ENDO**, to publishing in the Society's journals, to emphasizing the crucial need for mentorship and support. With extraordinary talent like this, the future of endocrinology and the Society looks bright.” 

– NEWMAN IS THE EXECUTIVE EDITOR OF *ENDOCRINE NEWS* AND HAS BEEN WITH THE ENDOCRINE SOCIETY SINCE 2013.



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Mind THE GAP

How the Endocrine Society is taking steps to ensure the future of endocrinology.

As endocrinology fellowships go unfilled, leaders in the field are growing more concerned about the ability for endocrinology to meet the needs of future patients grappling with diabetes, obesity, and other endocrine disorders.

To mitigate this potential gap, the Endocrine Society launched the Medical School Engagement Program (MSEP) to boost the interest of medical students across the country.

In 2014, a paper by Vigersky, et al., appeared in *The Journal of Clinical Endocrinology & Metabolism* that concluded, “There are insufficient adult endocrinologists to satisfy current and future demand. A number of proactive strategies need to be instituted to mitigate this gap.”

A 2020 paper in *JCEM* by Romeo, et al., about trends in endocrinology recruitment and possible solutions, asking the question, “How do we make endocrinology appealing for all our trainees and promote the growth of a diverse and competitive workforce?” and concluding that “the inadequate growth of the endocrinology workforce supply will have long-term ramifications on all aspects of academic medicine and clinical care. Bold measures coupled with a renewed focus on values that influence job satisfaction are required to attract top talent in endocrinology fellowships, ensure retention, and revitalize our community.”

A 2022 paper in *JCEM* by Tsai, et al., reported that there are about 8,000 currently active endocrinologists in the United States, “which amounts to 41,460 individuals in the general population who may receive potential care by each endocrinologist.”

In 2010, endocrinology was the most competitive of internal medicine fellowships. But by 2014, cracks were already starting to show, as Vigersky and his co-authors pointed out. And now, just 10 years after that paper and stark

warning, endocrinology ranks as one of the least competitive.

To meet these significant challenges, the Endocrine Society launched the Medical School Engagement Program (MSEP), building on previous work taking it to the next level with a program to directly address the shortage of endocrinologists in the U.S. Training programs have been working to address this shortage, increasing the number of fellowship positions in endocrinology by 78% over the past 15 years. However, many of these spots are not filling, and worse yet, the number of U.S. medical school graduates applying to endocrinology fellowships has fallen over that time.

“With huge shortages of endocrinologists in the United States, and a pipeline that may actually be shrinking, finding novel ways to attract bright, energetic, U.S.-trained medical students into our field is paramount,” says Stephen R. Hammes, MD, PhD, the Louis S. Wolk Distinguished Professor of Medicine, chief of the Division of Endocrinology, Diabetes and Metabolism, executive vice chair of the Department of Medicine at the University of Rochester in Rochester, N.Y., and the Society’s immediate past-president. “The Medical School Engagement Program is exactly what we need at exactly the right time. I am thrilled that the Endocrine Society is once again showing tremendous support for their members and for our profession by starting this program, and I am almost certain that it will have a direct and significant positive effect on the pipeline for years to come.”

“

While the Society has established programs that support clinicians during fellowships and early in their careers, the Medical School Engagement Program is focused on increasing interest in the field before students have made their career choices. We know that most medical students choose a specialty early in their medical school journey.”

— SACHA UELMEN, RD, CDE, DIRECTOR, PROFESSIONAL AND CLINICAL AFFAIRS, ENDOCRINE SOCIETY

In the program’s first year (2024 – 2025), the Endocrine Society is providing 10 medical schools [see box] with support for endocrinology-focused programming including:

- ▶ Establishing Endocrinology Interest Groups for medical students and providing funding to support faculty-led sessions highlighting the best of endocrine practice and research.

- ▶ Supporting two Excellence in Endocrinology awards at each institution, for a pre-clinical and a more senior medical student.
- ▶ Funding attendance at ENDO for each award winner, where they will experience all the annual conference has to offer, meet with inspirational leaders in the field, and participate in eMD (Endocrine Mentor Day).

The Society is delighted to announce the inaugural recipients of the MSEP Award:

- ◆ Albert Einstein College of Medicine
- ◆ Indiana University School of Medicine
- ◆ Stanford University School of Medicine
- ◆ University of New Mexico School of Medicine
- ◆ University of Cincinnati College of Medicine
- ◆ University of Iowa, Carver College of Medicine
- ◆ University of Minnesota Medical School
- ◆ University of Virginia School of Medicine
- ◆ Vanderbilt University Medical Center
- ◆ University of Rochester School of Medicine and Dentistry

“While the Society has established programs that support clinicians during fellowships and early in their careers, the Medical School Engagement Program is focused on increasing interest in the field before students have made their career choices,” says Sacha Uelman, RD, CDE, the Society’s director of professional and clinical affairs who is heading up these efforts. “We know that most medical students choose a specialty early in their medical school journey.”

Providing Access and Hope

And these efforts are needed now more than ever. Based on the latest statistics on diabetes and endocrine diseases, there were 38.4 million people living with diabetes, an estimated 10 million people older than age 50 with osteoporosis, and another 13 million people in the U.S. with undiagnosed endocrine disorders, not to mention patients with thyroid, adrenal, or pituitary disorders. Along with the alarming shortage of medical students choosing to enter the field of endocrinology, there is also a decrease in the number of practicing endocrinologists. This creates barriers and challenges for patients, endocrinologists, primary care, and the entire healthcare community.

Here, Uelman relates a story of a personal experience when she was a diabetes care and education specialist working in a



The inaugural participants of the MSEP met at **ENDO 2024** to discuss how to increase the endocrinology pipeline. Pictured are back row (l to r): Neil Gesundheit, MD, MPH; Joy Wu, MD, PhD; Jennifer Kelley, MD; Adnin Zaman, MD; Rob Lash, MD; Eric J. Epstein, MD; Amal Shibli-Rahhal, MD; Brian T. O'Neill, MD; Sacha Uelmen, RD, CDE; and Al Powers, MD. Front row (l to r): Christina Lovato, MD; Farah Al Sabie, MD; and Dimpi Desai, MD.

clinic setting: A young man with diabetes from a rural area was being managed by his primary care physician and was being treated as if he had type 2 diabetes. He was working closely with his doctor, but still had multiple hospitalizations, including a partial amputation of one foot. He eventually drove seven hours to an endocrine clinic, where he was diagnosed with late-onset type 1 diabetes. Because he was now seeing an endocrinologist, he was able to access diabetes education and started using a CGM and insulin pump. He now has a hope for a healthy life, but that's not the case for so many other people who do not have access to an endocrinologist.

A Death of Procedures

But why this sharp drop in a relatively short period of time? Uelmen tells *Endocrine News* that the issue is complex, but to put it most simply, it's because the number of fellowship spots has outpaced the number of applicants. But that brings up another question: Why aren't applicants interested in endocrinology anymore?

“One important reason is that students have fewer opportunities to work in outpatient endocrine clinics, where the more ‘interesting’ aspects of endocrine diseases will be experienced,” Uelmen says. “Given that endocrinology is not a ‘procedure-based’ specialty, and inpatient rotations focus a lot of time on insulin titration, students and residents are not seeing the wide range of care that is provided and the long-term relationships with patients that keeps those in the field engaged and satisfied. Finally, the salary of clinical endocrinologists is among the lowest of physicians in internal medicine.”

Uelmen wrote in a recent Society blog post about the minimal exposure to more complex and clinically diverse topics, and sure, a low salary may cause some potential applicants to apply for another specialty, but there are other benefits to endocrinology. Again, a lot of the interesting work in endocrinology occurs in the outpatient setting, and a lot of the exposure for students is only happening inpatient.

Endocrine Mentor Day at **ENDO 2024** in Boston was a major success in its second year. Due to the program's popularity, there was even a waiting list for eager participants.

"It's not a representative exposure to a field that focuses on fascinating science, interesting pathophysiology, and, most importantly, patients who can benefit from the care endocrinologists provide!" Uelmen says. "Our [MSEP] awardees have offered a variety of ways that they can make an impact here, and with these enthusiastic leaders making change in their own academic settings, we hope to gain valuable insights to share best practices learned through this work that will help everyone in the field."

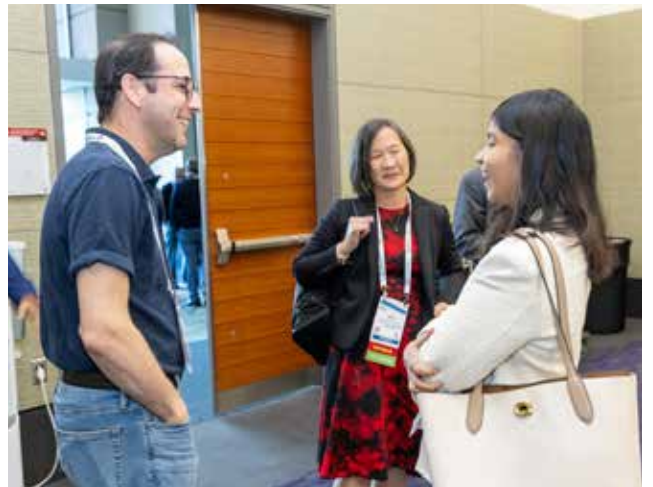
An Excited Reaction

The 10 inaugural recipients of the MSEP Awards were chosen out of 25 medical schools who completed a simple application to ensure basic requirements were met and to answer critical questions around what they planned to do to increase medical student interest in the field through initiating endocrinology interest groups at their institution as well as demonstrating a commitment by faculty to oversee this work over the long term. Applications were blinded and scored by staff and volunteer members.

"In general, the reactions were positive and along the lines of 'finally, so excited this is happening, this is much needed,'" Uelmen says. "Overall, the reaction has been very positive, and I've heard from several people that want to be included in our next application cycle as we grow this program over the next few years."

Hope for the Future

Another of these "proactive strategies" the Society has employed to address the endocrinology pipeline is Endocrine Mentor Day at **ENDO**. Three years ago, the Endocrine Society Clinical Affairs Core Committee (CACC) began talking about ways to increase the number of endocrinologists and found that one way to do that was to have trainees, residents, and medical students attend **ENDO** and devote a day to them. The




committee arranged for mentors in the Society to engage with mentees who will guide them through the meeting and offer networking opportunities with peers and other mentors so that they could have a positive experience at the annual meeting and hopefully set them down the path to a career in endocrinology.

This year, in Boston, was the second Endocrine Mentor Day. Uelmen says there was a wait list for attendees, and the students really enjoyed the day. “As a first-time attendee myself, this was a very exciting event,” she says. “The mentors were enthusiastic and engaged. They shared exciting aspects of endocrinology and connected with students from around the Boston area and beyond.”

“One of the highlights was getting to learn more about diabetes technology and wearing a CGM for the day,” Uelmen continues. “I would say the strong interest in this event and the demand outpacing the spots available certainly gave me hope for the future of the field.”

For now, Uelmen hopes we can spread awareness of the sincere and deep commitment by the Society to take on real

issues that impact our members and the human community at large in a meaningful way to address a huge challenge for the field, while offering multiple pathways to get engaged in endocrinology. And then, get involved, as there are 160 medical schools across the U.S., and the Society hopes to support many, if not all of them in the years to come.

“Get involved in whatever capacity you are able,” Uelmen says, “whether it’s encouraging your medical school colleagues to apply next year, mentoring students and introducing them to the Society, or simply being a super engaged mentor to a medical student to show them what an important and exciting field they could be part of.” 

– BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. HE WROTE ABOUT RECONSIDERING BMI RESTRICTIONS FOR GENDER-AFFIRMING SURGERY IN THE JUNE ISSUE.



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COMMUNITY

Service

How Joshua J. Joseph, MD, MPH, is leveling the healthcare playing field for all.

BY GLENDA FAUNTLEROY SHAW

When his grandmother succumbed to a heart attack when he was only eight years old, Joshua J. Joseph, MD, MPH, was determined to end as much suffering as he could. The recipient of the Endocrine Society's 2024 Richard E. Weitzman Outstanding Early Career Investigator Award, he details his ongoing endeavors to make sure Black Americans have equal access to healthcare and be more inspired to join the medical profession.

Early life experiences often have an indelible impact on choices we make later in life. For Joshua J. Joseph, MD, MPH, the pain of losing his grandmother to a heart attack after many years of living with diabetes spurred a deep curiosity about cardiometabolic disease and a determination to end the suffering it causes for so many others.

Joseph is an associate professor of internal medicine and endowed professor for research in the Department of Internal Medicine at The Ohio State University



As the faculty advisor for a program called HEADS-UP, Joseph goes into area schools to educate children about careers in healthcare. Here, students get practice using a CGM with a smart phone.

College of Medicine. His career discoveries that have helped to advance the prevention and treatment of cardiometabolic disease were recently recognized by the Endocrine Society with the 2024 Richard E. Weitzman Outstanding Early Career Investigator Award.

“I was surprised and excited,” Joseph recalls when hearing the news of the Laureate award. “I know there are a number of outstanding early-career investigators in the Endocrine Society, so I was honored that individuals value the scientific impact of our work to advance cardiometabolic health and health equity. We focus on examining health disparities through epidemiology, followed by designing and implementing novel strategies to advance health equity through quality improvement, health system to community interventions, and community-based participatory research. Ultimately leading to evidenced-based programmatic implementation to reach people in their own communities.”

Joseph earned his medical degree from Boston University, and after completing an internship and residency at Yale University and a fellowship at Johns Hopkins University, he returned to the Columbus, Ohio, community where he grew up and joined the faculty at Ohio State in 2016. His research and community-based interventions have been dedicated to changing the health outcomes of marginalized communities in Columbus and throughout the United States.

A Passion to Save Others

Joseph’s grandmother suffered from diabetes and high blood pressure, which eventually led to cardiovascular disease. He recalls watching her give herself the daily insulin injections and asking a lot of questions, like “what is diabetes?”

“I was at our house when she had her first heart attack and clutched her chest,” he remembers. “We called the emergency squad, and she went to the hospital and,

fortunately, they were able to open up a vessel in her heart and she came home. But a few months later, she had another heart attack and never came home again.” Joseph was only eight years old.

“This was someone who I loved very much,” he continues. “She taught me my 123s and my ABCs, and to see the impact of diabetes and heart disease, I’ve just always wondered what more we can do so that other grandchildren don’t have to see their grandparents being burdened with cardiometabolic diseases.”

Joseph’s curiosity about diabetes led to his early research that helped unlock the critical role the renin-angiotensin-aldosterone system (RAAS) plays in the origin of type 2 diabetes. He found that lower aldosterone levels were associated with lower risk type 2 diabetes in Black people.

In the U.S., Black adults are 60% more likely to be diagnosed with type 2 diabetes than White adults, and this racial disparity has risen over the past 30 years, according to the American Heart Association (AHA). What’s more, the prevalence of high blood pressure in Black populations in the U.S. is among the highest in the world.

Joseph was the first to show that attaining ideal levels of AHA’s Life’s Simple 7 guidelines was associated with lower aldosterone levels and lower risk of diabetes and its complications including cardiovascular disease. Life’s Simple 7 involves adopting seven lifestyle habits: exercising regularly; eating a healthy diet; not smoking; avoiding excess weight; and keeping blood pressure, cholesterol, and blood sugar levels within a healthy range.

In collaboration with Darrell Gray, II, MD; Timiya Nolan, PhD; the National African American Male Wellness Agency; and multiple community partners, Joseph co-developed Black Impact 100, a six-month community-based research study built on the principles of Life’s Simple 7. The study launched in the summer of 2020 and recruited 100 Black men to work with health coaches and meet once a week for exercise and education, along with addressing social drivers of health with a community health worker. The goal was for the men to lose 7% of their body weight and achieve 150 minutes of physical activity a week, followed by a secondary goal of

getting their blood pressure under control. Over 24 weeks, the improvements in Life’s Simple 7 scores equated to a 20% lower risk of cardiovascular disease. Additionally, the men developed strong bonds with one another, the researchers, and community partners.

“The improvements shown in the single-arm trial of Black Impact have led to funding from the American Heart Association for a 340-person randomized clinical trial,” explains Joseph. “The larger trial in addition to focusing on improvements in AHA Life’s Essential 8, which adds sleep to Life’s Simple 7, adds measures of psychosocial stress and interrogation of underlying biological mechanisms including changes in cortisol, inflammation, and the gut microbiome.”

He says that his community-based interventions have helped him understand that an important step providers need to take when



Joseph is all smiles after he accepted the 2024 Richard E. Weitzman Outstanding Early Investigator Award at ENDO 2024 in Boston.



Joshua J. Joseph, MD, MPH

“

Mentors are everything. I've been fortunate to have outstanding mentors throughout my career. We need mentors at every stage from the time someone has that spark of curiosity of what a career in medicine and science could be all the way through senior investigators.

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— JOSHUA J. JOSEPH, MD, MPH, ASSOCIATE PROFESSOR OF INTERNAL MEDICINE, ENDOWED PROFESSOR FOR RESEARCH, DEPARTMENT OF INTERNAL MEDICINE, THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE, COLUMBUS, OHIO

recommending patients adopt lifestyle changes, such as Life's Essential 8, is to first make sure they actually understand them.

“What is the appropriate blood pressure and a normal blood pressure being 120/80?” he says. “What do the systolic and diastolic blood pressures actually mean? This isn't something that many people are getting in school now, and for those who did, it's probably been many years ago.”

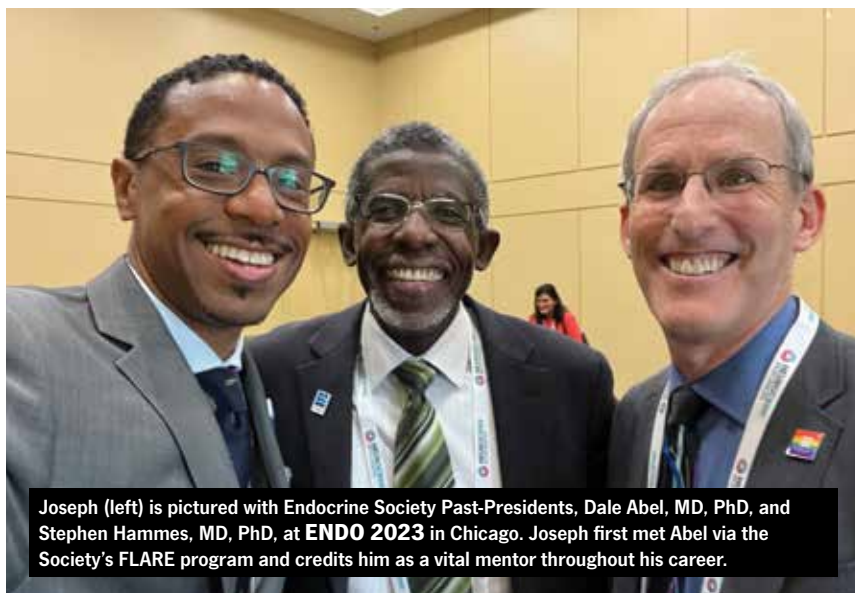
Joseph emphasizes that there is a critical need for easy-to-understand health information about these factors across socioeconomic statuses to increase health literacy.

“I see patients from CEOs to people who are unhoused, and everyone in between,” he says. “Everyone struggles with health literacy, so I think a major piece of advancing health equity is health education so that all individuals can be advocates for their own health, whether that be in a provider's office or at a grocery store advocating for a better selection of healthy fruits and vegetables.”

Diversifying the Messengers

Delivering health messaging and hoping patients follow the recommendations is a goal of all healthcare providers. Who is actually delivering the messaging, however, also often plays a significant role. Past studies have found that Black patients are more likely to follow medical recommendations after visiting Black doctors. Black men, especially, have been found more likely to bring up other health problems when assigned a Black doctor. A key to increasing these types of interactions is to diversify healthcare messengers.

Diversifying the number of healthcare providers in the country has been no easy task. Only 5.7% of physicians in the U.S. are Black, according to a 2022 Association of American Medical Colleges' report. And while medical colleges and associations have been trying to increase that number for decades, progress has been slow. In fact, a 2021 study by researchers at UCLA



Joseph (left) is pictured with Endocrine Society Past-Presidents, Dale Abel, MD, PhD, and Stephen Hammes, MD, PhD, at ENDO 2023 in Chicago. Joseph first met Abel via the Society's FLARE program and credits him as a vital mentor throughout his career.

Developing Evidence

Joseph's work in Columbus, Ohio, and the surrounding communities is multifaceted, and he and his team are currently engaging with Black men in the Black Impact project, as well as three other major studies currently underway:

- ▶ **LINK:** Focuses on linking education, access to fresh produce, and community referrals to improve diabetes care. Participants receive a combination of a food referral, diabetes and cooking education, and referrals to address other social needs. The study aims to deliver insight into what is the right “dose” of these interventions to improve blood sugar among individuals with type 2 diabetes and food insecurity and is funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).
- ▶ **ACHIEVE:** Medicaid-enrolled pregnant women with pregestational uncontrolled type 2 diabetes are provided a continuous glucose monitor and mobile health app with provider dashboards where they can log in their obstetrical needs as well as their social needs. The dashboard information sends information to a community health worker, an endocrinologist, an obstetrician-gynecologist, or a diabetes nurse. The main goals of this trial funded by the Agency for Healthcare Research and Quality, is to improve diabetes outcomes not only in the pregnant women but also perinatal outcomes for the baby.
- ▶ **SUSTAIN:** SUSTAIN (Promoting Sustained Behavior Change and Nutrition Security in Medicaid-Enrolled Individuals with Stage 2 Cardiovascular Kidney Metabolic Syndrome) partners with the grocery delivery service, Instacart, as well as the Ohio Food Collective, to provide access to Instacart for 16 weeks, and access to food through the Mid-Ohio Food Collective for another eight weeks. “The difference between the intervention and the control groups is that the intervention group gets a community health worker and a behavioral nutritionist to address social drivers of health and catalyze lifestyle changes,” Joseph explains. The project is part of the AHA Healthcare by Food Initiative.
- ▶ **FASTER:** The Exercise is Medicine Program at The Ohio State University Wexner Medical Center offers individuals an 11-week physical activity program based on referral by a provider. FASTER examines the feasibility and acceptability of incorporating Fitbit smartwatches into the health system referral-based Exercise is Medicine program in older Individuals.

“Over the next three to five years, our goal is completing these studies and building the evidence-base for novel programs that can be implemented in communities to advance health equity in populations near and far,” Joseph says.



Joseph speaks to a group of community members as part of the Black Impact 100 program.



“

I see patients from CEOs to people who are unhoused, and everyone in between. Everyone struggles with health literacy, so I think a major piece of advancing health equity is health education so that all individuals can be advocates for their own health, whether that be in a provider’s office or at a grocery store advocating for a better selection of healthy fruits and vegetables.

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While he was the Endocrine Society’s Clinical Affairs Core Committee chair, Joseph was instrumental in launching Endocrine Mentor Day, which debuted at **ENDO 2023** in Chicago. He is pictured here with Ellie Cliff, the Endocrine Society’s specialist, Government and Public Affairs, at Endocrine Mentor Day at **ENDO 2024** in Boston in June, along with a roomful of enthusiastic mentors and mentees.

found that the proportion of Black physicians in the country has increased by only 4% over the past 120 years. And the share of Black male doctors has remained unchanged since 1940.

Joseph is involved in multiple efforts that he hopes will change these statistics. He was one of the first fellows of the Endocrine Society’s Future Leaders Advancing Research in Endocrinology (FLARE) program, and now serves as its co-leader. Beyond his work with FLARE, Joseph is also involved with multiple programs in Ohio that aim to increase the number of students from underprivileged and underserved communities pursuing careers in medicine.

“I am the faculty advisor for a program called HEADS-UP where we go into the community and provide health education to elementary, middle, and high school students,” Joseph explains. “We’re showing the students actual human hearts, we’re bringing brains, and we’re talking to these students about careers in healthcare.”

He’s also involved with Made for Medicine — a Columbus-based longitudinal program that offers Black students in grades 6 – 12 who have interest in the medical field opportunities for hands-on learning, simulations, and mentoring with Black physicians in several major specialties.

Under his leadership as chair of the Endocrine Society Clinical Affairs Core Committee, Endocrinology Mentoring Day (eMD) was started at **ENDO 2023**, where trainees spend a day with a mentor at the annual conference. The goal of eMD is to get trainees excited about careers in the specialty to grow the pipeline of endocrinologists and learn more about opportunities within the Endocrine Society. eMD expanded to more than 75 trainees at **ENDO 2024** in Boston last month.



Joseph is looking at the plans for the new Healthy Community Center, where he serves as founder and medical director. Launched in spring 2024, the Center includes a demonstration kitchen, a health retail café, community rooms, and an innovation space, and strives to advance physical and mental well-being with a focus on nutrition, physical activity, gardening, and entrepreneurship.

Joseph knows all too well how important mentoring relationships are for young learners. “Mentors are everything,” he says. “I’ve been fortunate to have outstanding mentors throughout my career. We need mentors at every stage from the time someone has that spark of curiosity of what a career in medicine and science could be all the way through senior investigators.”

He credits several mentors who have made a significant impact on his life — inside and outside of the lab — one of whom is Endocrine Society Past-President Dale Abel, MD, PhD, chair and executive medical director of the Department of Medicine at David Geffen School of Medicine at UCLA.

“I first met Dr. Joseph when he was a participant in the FLARE Program in 2015,” Abel remembers. “It was very clear to me then that Joshua was a humble, yet focused individual, who was committed to developing an academic career that would impact the lives of individuals with diabetes and cardiovascular disease.”

“Joshua took all the feedback received from senior FLARE faculty to heart and with an attitude of continuous self-improvement, coupled with vision, creativity, and hard work. It has been incredibly gratifying to see his career take off like a rocket ship. Our relationship has continued over these years, and I now see Joshua as an academic partner and appreciate his co-leadership of our FLARE program, now in its 13th year.”

Sherita Hill Golden, MD, MHS, was Joseph’s mentor during his fellowship at Johns Hopkins School of Medicine, where she is a professor in the Division of Endocrinology, Diabetes, and Metabolism. She echoes Abel’s sentiments.

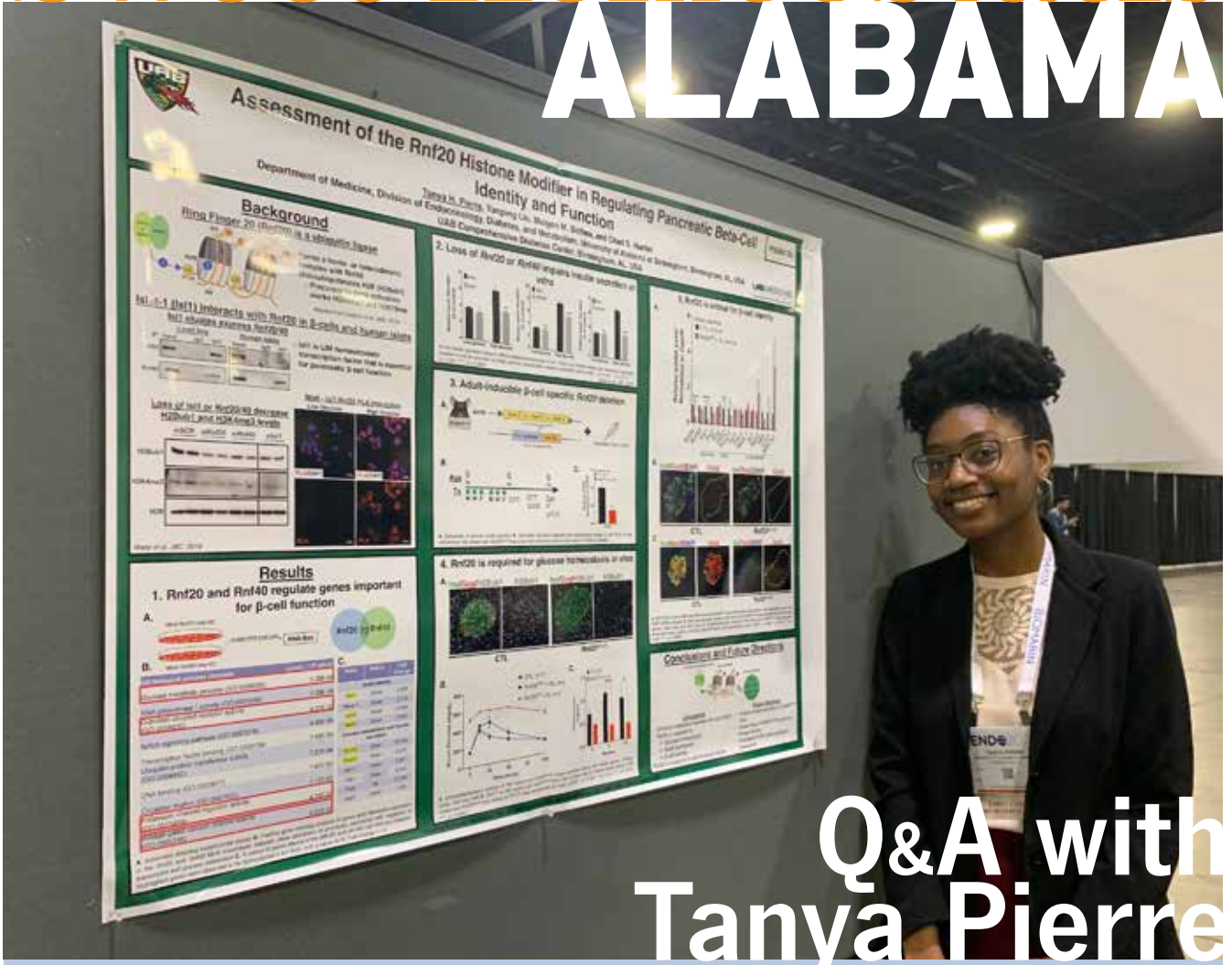
“Dr. Joseph reminded me in many ways of a younger version of myself,” Golden says. “He was interested in using the tools of population science in endocrinology to identify novel targets for preventive interventions in diabetes. Our mutual passion around this scientific approach and his overall love of science nurtured our mentor/mentee relationship.”

Joseph is already building out the next phase of programmatic implementation to advance health as the founder and medical director of the Healthy Community Center in partnership with Director Javonte McDonald. The Healthy Community Center launched in spring 2024 and has a state-of-the-art demonstration kitchen, a health retail café, community rooms, and an innovation space. The center provides programming to advance physical and mental well-being with a focus on nutrition, physical activity, gardening, and entrepreneurship, and classes are free.

“Through our multifaceted team-science approaches, we strive to continue to make scientific advancements that will transform clinical care and population health, so that everyone has an opportunity to lead longer, healthier lives free of cardiometabolic disease.” ^{EN}

— SHAW IS A FREELANCE WRITER BASED IN CARMEL, IND. SHE’S A REGULAR CONTRIBUTOR TO *ENDOCRINE NEWS* AND WRITES THE MONTHLY LABORATORY NOTES COLUMN.

Sweet Homeostatis ALABAMA



Q&A with Tanya Pierre

Fourth-year graduate student Tanya Pierre at the University of Alabama at Birmingham’s Comprehensive Diabetes Center talks to *Endocrine News* about when she realized that she could “do science” as a career, how she hopes her research will help her community, and the importance of awards to help young researchers continue their work.

While at **ENDO 2022** in Atlanta, Ga., Tanya Pierre presented a poster detailing previously published in vitro and new in vivo data about the role of Rnf20 in regulating pancreatic beta cell function.

BY GLENDA FAUNTLEROY SHAW

For many young researchers, working to unlock the mysteries of diseases is coupled with balancing the financial burdens of educational and laboratory expenses. But for Tanya Pierre, a fourth-year graduate student at the University of Alabama at Birmingham (UAB), the balancing was recently made tremendously easier. Pierre is a recipient of the Ruth L. Kirschstein Predoctoral Individual National Research Service Award (F31) — a reward that honors young scientists’ hard work and promising futures.

The Kirschstein-NRSA program’s purpose is to “enable promising students with potential to develop into productive, independent research scientists and to obtain mentored research training while conducting dissertation research,” according to the National Institutes of Health (NIH). The award will support up to three years of Pierre’s completion of her PhD and her research project entitled, “Elucidating the role of the Rnf20 Histone Modifier in Pancreatic Beta Cell Function and Senescence.”

Pierre earned her bachelor’s degree in biochemistry and molecular biology from Agnes Scott College in Decatur, Ga., and after graduation, she knew research was her future. Her search for postbaccalaureate programs led to a position at the UAB Comprehensive Diabetes Center in the lab of Chad Hunter, PhD, where she’s worked for the past five years.

Endocrine News spoke with Pierre to learn more about her NIH-funded project and what life advice helps her reach her goals.

***Endocrine News:* When did you know you wanted to pursue a career in science and research?**

TANYA PIERRE: I wasn’t aware research was a career opportunity for me until my first year of college at Agnes Scott. I think the first thing we did in our biology class was learn about different careers in sciences, so that’s when I thought I could actually do science as a career. We had an office at school that helped students find summer research so I talked to the director there, Dr. Molly Embree, and she helped me figure out where I could go over the summer to explore research more. I was able to do some summer research programs and that allowed me to further fall in love with research and realize that’s what I wanted to do.

***EN:* And when did your focus become diabetes research?**

PIERRE: I knew I wanted to do research where I could make an impact on something that affects members of my [African American] community. And then, fortunately, the first research program that I was able to participate in was in a lab studying type 1 diabetes and its connection to environmental toxins. So, after that project, I knew that diabetes was really interesting. I did try to get into other areas, but every other research program I went to, I always ended up in a diabetes lab, so I feel it was meant to be.

***EN:* The F31 Award includes stipends, living expenses, contributions to the cost of tuition and fees, as well as your research supplies, books, and scientific meetings. That’s phenomenal support to help you complete your PhD and research. Can you share the details of your funded project?**

PIERRE: My current project is focused on a transcriptional coregulator, called Rnf20, and trying to figure out how it impacts pancreatic beta cell development, function, and maintenance. So, right now



Tanya Pierre

“The first research program that I was able to participate in was in a lab studying type 1 diabetes and its connection to environmental toxins. So, after that project, I knew that diabetes was really interesting. I did try to get into other areas, but every other research program I went to, I always ended up in a diabetes lab, so I feel it was meant to be.”

— TANYA PIERRE, GRADUATE STUDENT,
COMPREHENSIVE DIABETES CENTER,
UNIVERSITY OF ALABAMA AT BIRMINGHAM,
BIRMINGHAM, ALA.

I'm currently profiling an adult knockout of *Rnf20* that's enriched within the beta cells to see what happens. Thus far, we have observed some impairments of glucose homeostasis and markers of the onset of senescence that I hope to further elucidate in this project.


EN: And how will your work hopefully impact the lives of diabetes patients?

PIERRE: One of the current therapeutic approaches that is being tested is islet replacement therapy, and while it would be ideal to transplant donor islets, that number is limited. So, another approach is developing islets using embryonic stem cells. And while that has been successful at generating “beta-like” cells, they fail to fully replicate the islets that we already have naturally. Our work is aimed at increasing knowledge about the factors that are needed for beta cell identity and function. In order for them [beta-cells developed from stem cells] to properly maintain glucose homeostasis, you have to have a better idea of what those things [transcription factors and co-regulators] are so we can develop the best beta cells or islets to allow for sustained glucose homeostasis in patients with diabetes.

EN: What do you like most about the lab environment? How do you and your fellow lab mates stay on task and motivated?

PIERRE: I think there's a nice balance in our lab where everyone's willing to help each other figure things out or troubleshoot, if needed. But we also frequently have group outings to do things outside of science that allow us to further connect without focusing on stuff that may be stressing us out throughout the week. Recently, we went to an escape room, and that allowed us to use our brains in another way than we usually do.

EN: Escape rooms are fun! Last question: Has there been some advice that a mentor or past teacher has passed down to you that keeps you going in this specialty?

PIERRE: The one thing that I continuously repeat to myself that I've been told is that ‘everything that's meant for me, will never miss me.’ Sometimes experiments don't work, and I just think, ‘maybe it wasn't the right time,’ or if I'm waiting to see if I get a grant, I think ‘if it's meant for me, I will get it.’ If the result is supposed to happen, it will happen. The data is the data, you can't force it. 

— SHAW IS A FREELANCE WRITER BASED IN CARMEL, IND. SHE IS A REGULAR CONTRIBUTOR TO ENDOCRINE NEWS AND WRITES THE MONTHLY LABORATORY NOTES COLUMN.

Endocrine Society Continues Global EDC Advocacy; EU Election Results Leave Outcomes for EDC Legislation Uncertain

On June 17, the Endocrine Society joined delegations from dozens of countries gathered in Geneva, Switzerland, for the third session of an ad hoc open-ended working group (OEWG) convened under the United Nations Environment Programme (UNEP) to develop proposals to establish a new science policy panel (SPP) charged with helping to inform governments, companies, farmers, and a broad array of other stakeholders to better manage chemicals, reduce waste, and prevent pollution.

Endocrine Society member Scott Belcher, PhD, has represented the Society throughout the OEWG process to ensure that endocrine scientists with expertise in endocrine-disrupting chemicals (EDCs) have a voice in the establishment of the panel, and that as part of its work the panel will help governments around the world address and minimize harms

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While we do not expect this majority to be in favor of ambitious regulations on EDCs, which might cause a ‘burden’ on the chemical industry, our messages and approach will remain focused on educating policymakers.

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due to exposure to EDCs. At the meeting in Geneva, Belcher shared the Society’s perspectives about establishing effective policies to address conflicts of interest that may arise as the panel conducts its work, and why information on human health hazards should be made transparently available to the public. The panel will be an independent intergovernmental body and could be established and begin its work as early as



At an ENDO 2024 press conference, Scott Belcher, PhD, discussed how PFAS are toxic, persistent, bioaccumulative, and mobile, and have a dangerous impact on drinking water.

2025. We look forward to the final proposal from the OEWG and working with the SPP upon its establishment.

Meanwhile, the European elections held June 6 – 9 will have major implications for legislation to address exposures to EDCs proposed as part of the EU Green Deal. While far-right parties made significant gains at the expense of the Greens and other left-leaning groups, pro-Europe, pro-democracy groups have maintained their overall majority of Parliament. Three core pro-EU groups will form the basis of support for Ursula Von Der Leyen to continue as the European Commission president, and this center-right majority will shape key policy decisions.

While we do not expect this majority to be in favor of ambitious regulations on EDCs, which might cause a “burden” on the chemical industry, our messages and approach will remain focused on educating policymakers, especially new Members of the European Parliament on the Environment Committee, about the importance of following through on work on EDCs initiated in the previous term. We also look forward to engaging with the new commissioners for the Environment, Health, and others following their approval by Parliament, to discuss our priorities and opportunities during their term. 

Society Advocates for Protecting Access to IVF Treatment and PFAS Education at AMA Annual Meeting

In June, Endocrine Society members Salwa Zahalka, MD; Palak Choksi, MD; Mandy Bell, MD; and Dan Spratt, MD; who serve as the Society's delegation to the American Medical Association's (AMA) House of Delegates, attended the AMA meeting in Chicago to advocate for policies important to our members.

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Endocrinologists understand the effects of these persistent and bioaccumulative chemicals on endocrine systems at biologically relevant levels of exposure that can have adverse effects on thyroid hormone levels, metabolic systems, reproduction, development, and other areas.

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The AMA House of Delegates meets twice a year to establish policy positions on topics of importance to healthcare providers and patients. This year, we successfully advocated for a resolution to protect access to in vitro fertilization (IVF) treatment. We co-authored a resolution with the American



The Endocrine Society's delegation to the American Medical Association's House of Delegates meeting in Chicago advocated for many policies important to our members. Pictured left to right are: Salwa Zahalka, MD; Palak Choksi, MD; Mandy Bell, MD; and Dan Spratt, MD.

Society of Reproductive Medicine (ASRM) to oppose legislation, ballot measures, or court rulings that would restrict access to IVF treatment. The resolution also directs the AMA's Task Force to Preserve the Patient-Physician Relationship to work on this issue along with access to other reproductive healthcare and gender-affirming care. Spratt, who is one of our delegates to the House of Medicine, serves on the task force.

This resolution was particularly timely because there are multiple pieces of legislation in the 118th Congress that aim to protect IVF. The Society endorsed the Right to IVF Act, which was introduced by Sens. Cory Booker (D-NJ), Patty Murray (D-WA), and Tammy Duckworth (D-IL) to protect and expand nationwide access to fertility treatment, including IVF. The Right to IVF Act would help individuals and families who are impacted by infertility by establishing a statutory right

to access IVF for all Americans who need it to start or grow a family and expanding access to coverage for IVF and fertility treatment. On Thursday, June 13, Senate Republicans voted to block the bill and the legislation failed to advance in a procedural vote. The AMA resolution, however, will help keep pressure from the “House of Medicine” on this important policy issue.

During the AMA meeting, we also co-authored a resolution, which urges the AMA to advocate for education and action regarding the health hazards of PFAS chemicals. Scientific evidence demonstrates that PFAS are persistent and bioaccumulative chemicals with endocrine-disrupting effects at extremely low, biologically relevant levels of exposure. Endocrinologists understand the effects of these persistent and bioaccumulative chemicals on endocrine systems at biologically relevant levels of exposure that can have adverse effects on thyroid hormone levels, metabolic systems, reproduction, development, and other areas.

The Endocrine Society has strongly supported stronger regulation of these chemicals, which are scientifically proven to cause harmful effects on the endocrine system. We were pleased to support this resolution that calls on the AMA to improve physician and public education around the adverse health effects of PFAS along with potential mitigation and prevention efforts. The Society will continue to be a leading voice regarding these two important issues.

Supreme Court Preserves Access to Mifepristone



On Thursday, June 13, the U.S. Supreme Court ruled unanimously to preserve access to mifepristone. The nine justices ruled that abortion opponents lacked the legal right to sue over the Food and Drug Administration’s (FDA’s) approval of the medication and the FDA’s subsequent actions to ease access to it. This case had threatened to restrict access to mifepristone across the country.

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The Endocrine Society continues to be a leading voice in advocating to protect access to mifepristone and believes the FDA should have the authority to approve drugs and determine their efficacy and safety based on medical evidence and established standards and processes.

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The Endocrine Society continues to be a leading voice in advocating to protect access to mifepristone and believes the FDA should have the authority to approve drugs and determine their efficacy and safety based on medical evidence and established standards and processes. The Society will continue to work with the medical community on access to care and to advocate for access to mifepristone for all who need it to treat endocrine-related diseases.

More information and the latest updates on mifepristone access can be found at: www.endocrine.org/news-and-advocacy/news-room. 



Journal of the Endocrine Society

AN OPEN ACCESS PUBLICATION

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THE EDITORS WELCOME INQUIRIES AND SUBMISSIONS

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