

FEBRUARY 2025

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

# Endocrine news

"You belong in this field, and your journey can inspire others to follow."  
– Stanley Andrisse, PhD, MBA, Howard University



"Endocrinology is a dynamic and rewarding field that offers endless opportunities to make a difference in patients' lives." – Estelle Everett, MD, UCLA

## Lift Every VOICE

### Endocrine News Celebrates Black History Month

Endocrine News spoke to several of the Endocrine Society's Black members to learn about their career accomplishments, goals, and even their challenges as well as advice for the next generation of Black endocrinologists.

"Some challenges cannot be faced alone, and having the right people around you will make all the difference in your journey."  
– Atentor O. Hinton, Jr., PhD, Vanderbilt School of Medicine



"The Endocrine Society has made me feel accepted and that I belong in science."  
– Dequina Nicholas, PhD, University of California, Irvine

"I liked internal medicine, but I wanted to be an 'expert,' and endocrinology afforded me the chance to be able to do just that." – Barbara Onumah, MD, The Diabetes & Endocrine Wellness Center



### GOING WITH THE FLOW:

The Society's efforts to recruit in medical schools

### AT ARM'S LENGTH:

A new mealtime, injection-free insulin patch

# ENDO2025

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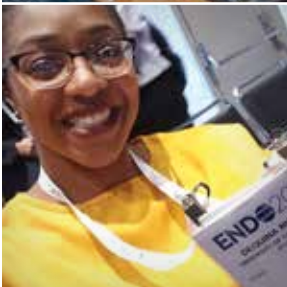
To commemorate Black History Month, *Endocrine News* reached out to several of the Endocrine Society's Black members to get their insights into their career accomplishments, goals, and even their challenges, as well as advice they have for any young Black endocrinologists just beginning their careers. **BY GLENDA FAUNTLEROY SHAW**



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*Endocrine News* speaks with Niki Karavitaki, MSc, PhD, FRCP, of the University of Birmingham, Birmingham Health Partners, and the University Hospitals Birmingham National Health Service Foundation Trust in Birmingham, U.K., lead author of the Endocrine Society's recent Scientific Statement on opioids' impact on the endocrine system. She discusses gaps in research, as well as why healthcare professionals should be aware of opioid-induced endocrinopathies. **BY DEREK BAGLEY**



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Endocrine Society member Tina Gupta, MD, spent many years managing her patients' type 1 diabetes when she was in a clinical setting. Now that she's associate medical director on the Type 1 Diabetes Medical Affairs team at Vertex Pharmaceuticals, she's even more determined to help find solutions to help these patients.

**BY TINA GUPTA, MD**

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#### GOING WITH THE FLOW MEDICAL SCHOOL ENGAGEMENT PROGRAM IS OFF TO A STRONG START

When the Endocrine Society launched its Medical School Engagement Program in 2024, it was an effort to increase the flow of endocrinologists into the workforce. Now, less than a year later, *Endocrine News* gets an exclusive update from some of the universities that have

taken an active role in keeping endocrinology a viable career option for future generations.

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**BY DEREK BAGLEY**

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As your professional home, the Society offers a variety of resources to help you keep pace with the latest trends and cutting-edge science and clinical practice. No matter what time zone you live in, no matter how you prefer to stay connected, we have the tools to keep you informed.  
”

## Stay Connected with the Society's Curated Communications Channels

**W**e grow as professionals by staying informed on emerging research and developments in our field.

As your professional home, the Society offers a variety of resources to help you keep pace with the latest trends and cutting-edge science and clinical practice. No matter what time zone you live in, no matter how you prefer to stay connected, we have the tools to keep you informed.

For those who love delving into peer-reviewed papers, our *Endocrine Feedback Loop* podcast offers a journal club experience you can listen to anywhere, even on the treadmill or during your commute. Host Chase Hendrickson, MD, MPH, does a fantastic job and has hosted more than 50 episodes exploring a variety of endocrine topics. Experts discuss the latest research published in our journals covering the full range of endocrine topics, so there is something for everyone.

If you enjoy the podcast format, we also offer the *Endocrine News Podcast*. Chief Communications Officer Aaron Lohr sits down with well-known experts to discuss the latest clinical advances and research findings. The podcast has a catalog of nearly 100 episodes, and these are really worth a listen.

Our social media platforms offer another way to obtain timely updates. This year, we have added a presence on Bluesky, which is a microblogging site growing in popularity among the scientific community. You can find the Society there at: [@endocrinesociety.bsky.social](#), and we also have a dedicated account for journal news at: [@endosocjournals.bsky.social](#). Be sure also to connect with us on our other social media platforms. You can find us on Facebook, LinkedIn, X, Instagram, Threads, and YouTube.

Speaking of YouTube, our Annual Meeting Steering Committee (AMSC) leaders are sharing sneak peeks of this summer's **ENDO 2025** meeting program via our YouTube channel. It is wonderful to see that more than 1,600 people have watched the video of AMSC Chair Niki Karavitaki, MSc, PhD, FRCP, and yours truly announcing the plenary lineup. There will be more to come from the AMSC chairs, so make sure to subscribe to the Society's YouTube channel

for upcoming previews of content being presented at ENDO July 12 – 15 in San Francisco, Calif.

The Society's 10 Special Interest Groups (SIGs) offer another avenue to staying in touch with peers who share your professional interests. There are SIGs with a specific endocrine focus, such as adrenal and pituitary, bone and mineral, endocrine-disrupting chemicals, neuroendocrinology, obesity, or other endocrine topics. There are also SIGs that cater to those interested in professional career development, including the Early-Career and Entrepreneurship SIGs. The SIGs distribute a monthly e-newsletter to keep members informed about upcoming webinars and networking events, such as those at ENDO. I really recommend getting involved with SIGs.

Society members can stay in touch with peers and fellow SIG members around the world through our exclusive online community, EndoForum. The community gives you the ability to post questions or share thoughts with endocrine clinicians and researchers at any time of day or night. Given the International nature of our Society, there is always someone active in differing time zones and able to reply. It is the perfect place to ask for advice or offer insights on challenging cases, and gain insights into management strategies from other healthcare contexts that one may not have considered.

The Society also keeps news flowing into email inboxes. The weekly edition of *Endocrine eNews* keeps us abreast of Society initiatives, programs, events, and upcoming deadlines. Our journals deliver electronic Table of Contents every time a new journal issue is published. *Endocrine Briefing* uses artificial intelligence to create a customized mix of headlines tailored to each member's interests. For those tracking U.S. policy developments, the weekly *Advocacy in Action* update posted on our website offers analysis of events affecting the endocrine community.


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The Society offers so many options for engaging and learning about breakthroughs and other aspects for all those working in our field — be sure to subscribe to the channels that you find the most beneficial.

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Our website, [endocrine.org](https://www.endocrine.org), provides timely updates in “The Latest” section. The staff also shares a more in-depth look behind the scenes of various Society programs and initiatives in our monthly blog, *Endocrine Signals*.

And the pages of *Endocrine News* magazine, of course, will continue to feature the latest news about our community's achievements and work.

So, as you can see, the Society offers so many options for engaging and learning about breakthroughs and other aspects for all those working in our field — be sure to subscribe to the channels that you find the most beneficial. 

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



FROM THE **EDITOR**

FEBRUARY 2025

# Endocrine news

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

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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.

## Spotlighting Our Black Members

As February gets underway, *Endocrine News* is taking this opportunity to commemorate Black History Month with a roundtable that features some of the Endocrine Society's outstanding Black members who have made remarkable contributions to not only the Society, but to the field of endocrinology ("Lift Every Voice," p. 28). These five members were very generous with their time as they spoke with writer Glenda Fauntleroy Shaw about their biggest challenges, why they chose this fascinating field in the first place, how the Society has helped further their own careers, as well as any advice they would give young Black endocrinologists just entering the field.

Estelle M. Everett, MD, MHS, assistant professor-in-residence in the Geffen School of Medicine at the University of California, Los Angeles, explains how the Endocrine Society has been instrumental in her professional development via the myriad opportunities for networking, collaboration, and mentorship. "My participation in the FLARE program was particularly transformative, providing the support and infrastructure necessary for my success while establishing the Society as my academic home," she says. "The Society's dedication to supporting early-career investigators has been especially impactful. I have greatly benefited from its programs, resources, and the mentorship of its many members, who have generously shared their expertise and guidance to help me grow both personally and professionally."

In October, the Endocrine Society published "Exogenous Opioids and the Human Endocrine System: An Endocrine Society Scientific Statement," that reviews data related to the use and misuse of opioids and the effects of these drugs on the endocrine system. The Statement discusses recent research on the clinical consequences of opioids, especially on the hypothalamic-pituitary system and bone health. In "High Time" on page 16, Senior Editor Derek Bagley spoke to the chair of the committee that authored the statement, Niki Karavitaki, MSc, PhD, FRCP, of the University of Birmingham, Birmingham Health Partners, and the University Hospitals Birmingham National Health Service Foundation Trust in Birmingham, U.K. "Endocrinologists should be aware of how these drugs can impact the endocrine system," Karavitaki says. "This will facilitate their involvement in the optimal holistic care of patients on



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opioids along with the specialists prescribing opioids or the specialists looking after people who misuse opioids or have been diagnosed with opioid use disorder.”

On page 42, we take a look at the Endocrine Society’s Medical School Engagement Program (MSEP) as part of this month’s Early-Career Corner. In “**Going with the Flow,**” Sacha Uelmen, RDN, CDCES, the Society’s director of professional and clinical affairs, catches up with some of the colleges and universities around the country that have been participating in this program. When MSEP was launched last year, the goal was to increase the flow of endocrinologists into the workforce. Loaded with photos from the various events, the individual program directors fill us in on what sort of activities they’ve been using to heighten the awareness of endocrinology as a specialty to hundreds of medical students. Success can be measured in many ways but judging from the engagement and sheer joy on the faces of the participants and instructors alike, the future of endocrinology is indeed bright!

As usual, if you have any thoughts, questions, or comments about this month’s issue, or any suggestions for story ideas, please don’t hesitate to contact me at: [mnewman@endocrine.org](mailto:mnewman@endocrine.org). Also, if you’re working on a presentation for ENDO 2025 in San Francisco in July or have had exciting new research published, we’d love to hear about it! 

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

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MEMBERS  
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NEWS

## Grossman wins 2025 Transatlantic Alliance Award in Endocrinology



Ashley Grossman, FMedSci

The Endocrine Society and the European Society of Endocrinology (ESE) are delighted to announce Professor Ashley Grossman, FMedSci, as the winner of the 2025 Transatlantic Alliance Award.

Grossman is emeritus professor of endocrinology at the University of Oxford and a senior research fellow at Green Templeton College in Oxford, U.K. He also is a consultant endocrinologist at the Royal Free London and a professor of neuroendocrinology at Queen Mary University of London in London, U.K.

The Transatlantic Alliance Award, which was launched in 2021, recognizes an international leader who has made significant advancements in endocrine research on both sides of the Atlantic — in the United States and Europe.

Grossman received this prestigious award in recognition of his global leadership in endocrinology and his international research collaborations to advance our understanding of neuroendocrine tumors and pituitary disorders.

“Professor Grossman has shown exemplary global leadership in the field of endocrinology, fostering relationships and research collaboration between endocrinologists in both Europe and the United States,” says Endocrine Society President John Newell-Price, MD, PhD, FRCP. “He is most deserving of this award as he is a fantastic physician-scientist, educator, and mentor dedicated to advancing endocrine research worldwide.”

Grossman has held leadership roles at endocrine societies in the United States and Europe and has promoted collaborative efforts resulting in international consensus and guidelines. He has served as an editor for top transatlantic endocrine journals and is currently the editor-in-chief of the Endocrine Society’s journal *Endocrine Reviews*.

He also is an excellent global educator and has mentored and taught endocrinologists from around the world. He

won the Endocrine Society’s 2020 Outstanding Mentor Laureate Award for these efforts.

ESE’s President Jérôme Bertherat says, “I am extremely pleased that Ashley Grossman is our 2025 award winner. He is not only an extremely highly regarded clinician scientist but also a valued mentor to many in our field. His contribution to shaping endocrinology across the globe has helped improve patient care and the development of endocrinology as a whole.”

Grossman’s research interests revolve around the development of endocrine tumors, including adrenal, pituitary, and neuroendocrine tumors. His contributions to endocrine research are reflected in his authoring over 550 peer-reviewed journal articles and 450 book chapters and invited reviews.

He is currently collaborating with endocrinologists in Washington, D.C., and Germany on research on the diagnosis, management, and molecular analysis of pheochromocytomas and paragangliomas, two types of rare neuroendocrine tumors.

“I am honored to receive this award for my transatlantic contributions to the field of endocrinology,” Grossman says. “I am passionate about fostering more collaboration between endocrinologists across the Atlantic and look forward to continuing my work in the space.”

Grossman will present his award lecture at the Endocrine Society’s annual meeting, **ENDO 2025**, which will take place July 12 – 15 in San Francisco, Calif.

Nominations for the 2026 Transatlantic Alliance Award will open March 1, 2025.





Matthew T. Drake, MD, PhD

## HSS Names Matthew T. Drake, MD, PhD, Chief of Endocrinology and Metabolic Bone Service

**H**ospital for Special Surgery (HSS) announced the appointment of Matthew T. Drake, MD, PhD, as chief of the Division of Endocrinology and director of the Metabolic Bone Service.

Drake has been a consultant in the Division of Endocrinology, Diabetes, Metabolism, and Nutrition at the Mayo Clinic in Rochester, Minn., since 2007. He assumed a dual role as a consultant in the Mayo Clinic's Division of Hematology in 2017. He has been an associate professor of medicine at the Mayo Clinic College of Medicine and Science since 2015.

Drake will ensure the continued excellence of the clinical, educational, and investigative programs in the Division of Endocrinology and the Metabolic Bone Service. He will work with HSS physicians and staff to optimize quality, the patient experience, and outcomes. His role will include collaboration with internists and orthopedic surgeons at HSS, particularly those focused on joint replacement, sports medicine, and spine, to identify and address risk factors related to bone health that could affect surgical outcomes.

“With its outstanding reputation for providing the highest standards of care, passion for excellence and innovation, and strong commitment to improving the lives of patients everywhere, it is an honor and a privilege to join HSS,” says Drake. “I look forward to working closely with the clinical

and research staff and collaborating with a highly motivated team of specialized faculty to achieve our best musculoskeletal health outcomes.”

In 2022, Drake served as a co-chair with Ghada El-Hajj Fuleihan, MD, MPH, of the guideline development panel that created the “Treatment of Hypercalcemia of Malignancy in Adults: An Endocrine Society Clinical Practice Guideline.” He also serves on the editorial board of the Society's *JCEM Case Reports* and is a past member of the Clinical Endocrinology Update and Annual Meeting Steering Committees, as well as serving on the Endocrine Facts and Figures Working Group and Advisory Panel.

Drake's own research has focused on the underlying mechanisms and skeletal changes related to age-related bone loss. He has also sought to better understand how cancer affects bone health. Drake believes that unraveling the mysteries of how normal aging or the presence of malignancies leads to the softening or destruction of bone mass could ultimately lead to new or improved methods to prevent and treat bone loss.

His research has been featured in 125 peer-reviewed articles, and he has written 11 book chapters on topics that include the pathogenesis of osteoporosis, myeloma bone disease, and disorders of calcium and bone metabolism.

## Marc Y. Donath, MD, Appointed to Olatec's Clinical Advisory Board

**M**arc Y. Donath, MD, medical director of the Diabetes Centre at the University Hospital Montreal, Canada, and chief physician in Endocrinology, Diabetes, and Metabolism at the University of Basel, Switzerland, has joined Olatec Therapeutics, Inc.'s Clinical Advisory Board (CAB).



Marc Y. Donath, MD

Donath, a past editorial board member, for the Endocrine Society journal *Endocrinology*, is an immuno-endocrinologist, globally recognized for his pioneering contributions to immunometabolism, particularly his discovery of the inflammatory process underlying type 2 diabetes. In addition, he has made numerous contributions to the concept that the innate immune system is an integral component in the regulation of metabolism, also known as immunometabolism.

"I am honored to join Olatec's CAB and expand my long-time collaboration with the company," Donath says. "Their cutting-edge clinical research with their

specific NLRP3 inhibitor, dapansutrile, has the potential to address a large unmet need for an effective and convenient oral treatment of type 2 diabetes that goes beyond glycemic control by addressing the underlying inflammatory component of the disease and its cardiometabolic complications."

Donath's scientific and clinical conviction is that the modulation of the innate immune system with an anti-inflammatory, such as dapansutrile, has the potential to improve overall metabolic health and reduce cardiovascular risk in patients with type 2 diabetes. Beginning with his input on the design of Olatec's heart failure trial, Olatec captured the first ever clinical data showing that targeting NLRP3 with dapansutrile resulted in significant reductions in fasting glucose in patients with type 2 diabetes. This ground-breaking human data led to the selection of dapansutrile to be studied in the current clinical trial called DAPAN-DIA, as well as obtaining funding from the INTERCEPT-T2D initiative by the European Union under their Horizon Europe Programme (GA No 101095433), as well as by the Swiss Government.

DAPAN-DIA is a Phase 2 randomized targeting to enroll up to 300 patients with type 2 diabetes and diabetes-related complications. DAPAN-DIA aims to evaluate dapansutrile's ability to improve glycemic control, reduce systemic inflammation, and lower cardiometabolic risks, including weight loss. It represents the first type 2 diabetes clinical trial of a selective NLRP3 inhibitor. <sup>EN</sup>



BY DEREK BAGLEY  
Senior Editor

## Positive Topline Results Announced From Phase 2 Trial of Atumelnant in CAH

Last month saw positive topline results from an open-label, Phase 2 congenital adrenal hyperplasia (CAH) study of investigational atumelnant, a novel, once-daily oral adrenocorticotrophic hormone (ACTH) receptor antagonist candidate being developed by Crinetics Pharmaceuticals for the treatment of classic CAH and ACTH-dependent Cushing's syndrome.

The TouCAHn trial is an open-label, global, Phase 2 study designed to evaluate the efficacy, safety, and pharmacokinetics of atumelnant when administered for 12 weeks in people with CAH caused by 21-hydroxylase deficiency. The study enrolled 28 patients across three dose cohorts with classic CAH on a stable dose of glucocorticoid replacement.

"There has been a long-standing interest in using a potent, selective antagonist of the ACTH receptor for the treatment of CAH and other diseases of ACTH excess, leading to the design of atumelnant by Crinetics scientists," says Alan Krasner, MD, chief endocrinologist of Crinetics. "This Phase 2 study demonstrated that atumelnant was well-tolerated and resulted in a reduction of adrenal androgen levels so rapid and robust that it allowed patients to realize meaningful improvements in long-term, pre-existing medical challenges, even within the short 12-week treatment period of this study."

Primary endpoints included change from baseline in morning serum androstenedione (A4) levels and incidence of treatment-emergent adverse events. Change from baseline in morning serum 17-hydroxyprogesterone (17-OHP) was also evaluated as a secondary endpoint. For all doses, treatment with atumelnant resulted in rapid, substantial, and sustained statistically

significant reduction in A4 levels, the key biomarker for disease control.

Additionally, rapid, substantial, and sustained statistically significant reductions in 17-OHP, a confirmatory secondary biomarker of disease control, were achieved across doses. Treatment with atumelnant also had a significant impact on CAH signs and symptoms.

Atumelnant has been generally well-tolerated with no treatment-related severe or serious adverse events to date, irrespective of disease severity or dose level. No participants required dose reduction or discontinued from the trial. All adverse events to date have been mild to moderate and generally transient. No consistent clinically important trends were observed across key safety parameters, including clinical safety laboratory values, physical examination, electrocardiogram, or vital signs. The most common treatment-emergent adverse events included headache (7/28) and fatigue (5/28).

"These exciting results show atumelnant not only lowered key biomarkers but also had a significant impact on the signs and symptoms of CAH that are important to the overall health of people living with this condition," says Scott Struthers, PhD, founder and chief executive officer of Crinetics. "We are eager to move forward with a global Phase 3 pivotal trial for adults in CAH, as we simultaneously prepare to start a Phase 2b/3 trial in pediatric patients this year. Our internally discovered pipeline now has two drug candidates with positive later-stage data, and we look forward to submitting INDs for four additional candidates now in first-in-human enabling studies, as we continue our strategy for building the premier global endocrine company."



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**These exciting results show atumelnant not only lowered key biomarkers but also had a significant impact on the signs and symptoms of CAH that are important to the overall health of people living with this condition.**

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## CB1 Inhibitor Yields Weight Loss in Preclinical Study

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We believe the mechanism of action of nimacimab is complementary to that of incretin mimetics such as GLP-1 receptor agonists.  
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**P**reliminary data were recently announced from a diet-induced obesity (DIO) model in mice. The CB1-inhibiting antibody, nimacimab, achieved significant dose-dependent weight loss of up to 16% compared to vehicle, highlighting a novel peripherally driven mechanism for inducing weight loss and other metabolic benefits. Skye Bioscience is developing the drug.

Researchers developed a DIO model using a transgenic mouse expressing the human CB1 receptor (hCB1R). After establishing this model, the goal was to assess the effects of its peripherally targeting CB1 inhibitor on weight loss and other metabolic parameters. Five groups of mice were treated for 35 days with vehicle, 10 nmol/kg semaglutide, or nimacimab at 7.5 mg/kg, 24 mg/kg, or 75 mg/kg, respectively. Key initial findings include:

- ▶ Dose-dependent weight loss with nimacimab of 4.5%, 11.4%, and 16.0% compared to vehicle;
- ▶ Significant fat mass loss with lean mass preservation; and
- ▶ Dose-dependent improvement in glucose tolerance.

“It is evident from the clinical studies of small molecule CB1 inhibitors that even modest exposure to the brain can cause concerning neuropsychiatric adverse events,” says Puneet Arora, MD, chief medical officer of Skye. “We believe that the promising data from these experiments combined with our Phase 1 data, which showed no significant neuropsychiatric adverse events, places nimacimab as the most promising candidate to realize the therapeutic potential of CB1 inhibition.

We believe the mechanism of action of nimacimab is complementary to that of incretin mimetics such as GLP-1 receptor agonists. In addition, nimacimab offers the potential of a safe and well-tolerated alternative to the currently approved weight loss drugs.”



## Study Launched to Tackle Type 2 Diabetes in Youth

**T**he University of Oklahoma College of Medicine recently launched a study that seeks to better understand the factors driving type 2 diabetes in youth and determine who is at highest risk for developing the disease.

The OU College of Medicine was awarded a six-year, \$3.1 million grant from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) for the study, which is led by associate professor of pediatrics and OU Health pediatric endocrinologist Jeanie Tryggestad, MD, who is also a research member of the OU Health Harold Hamm Diabetes Center.

“It is important that we are a part of this study because Oklahoma is particularly burdened by type 2 diabetes. If we can predict who will develop the condition, then we can intervene early and hopefully improve overall health in Oklahoma,” Tryggestad says.

The research builds on a previous NIDDK-funded study, Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY), showing that youth-onset type 2 diabetes is more challenging to treat and progresses more aggressively compared to adult-onset type 2 diabetes. In youths with type 2 diabetes, good blood glucose control is harder to achieve, and the ability of the pancreas to secrete insulin declines much more rapidly. In many young people with type 2 diabetes, the condition cannot be controlled solely with metformin, the drug most used as the first-line treatment for diabetes in adults. In addition, youth-onset type 2 diabetes is associated with earlier development of diabetes-related complications, such as damage to the eyes, kidneys, and nerves.

The OU College of Medicine is among 15 study sites nationwide. Collectively, the sites will recruit 3,600 participants, ages 9 to 14, who are considered at risk for developing type 2 diabetes. They must have started puberty, be considered overweight or obese, and have high-normal to above-normal hemoglobin A1c (HbA1c) levels but not high enough for a diagnosis of diabetes. The participants will reflect the U.S. population of youth with type 2 diabetes, including people from diverse racial and ethnic, socioeconomically disadvantaged, and underserved rural populations.

In addition to looking at biological factors, the study team will gather comprehensive data from participants and their families to understand what social and environmental factors may be adversely contributing to health disparities and poor outcomes among youth with type 2 diabetes.

“Most children we currently consider ‘at risk’ for developing type 2 diabetes will not actually do so, so we need to better understand what factors define who is at risk and would benefit from targeted prevention strategies,” says Barbara Linder, MD, PhD, the NIDDK program director who is overseeing the study. “These efforts are critical to lessen the immense burden, not just on young people and their families, but also the U.S. healthcare system, arising from the growing numbers of youth living with this disease and its debilitating complications.” <sup>EN</sup>



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**Most children we currently consider ‘at risk’ for developing type 2 diabetes will not actually do so, so we need to better understand what factors define who is at risk and would benefit from targeted prevention strategies.**

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“

The disparities that I have observed in clinical practice have inspired me to focus on understanding and solving these challenges at a population level. **Committing to a research-oriented career has been challenging but extremely rewarding, as it has enabled me to contribute to tangible change in healthcare delivery while staying connected to the real-world needs of patients through my clinical work.”**

**Estelle M. Everett, MD, MHS**, assistant professor-in-residence, Medicine, Geffen School of Medicine at the University of California, Los Angeles, Los Angeles, Calif., when asked about a pivotal moment in her career in **“Lift Every Voice”** on page 28.



Approximately 1/3 of eligible beneficiaries of the Medicare Diabetes Prevention Program lack full access due to not having a computer or internet connection.

— SOURCE: AMERICAN JOURNAL OF PREVENTATIVE MEDICINE

**1/3**



**70%**

The percentage of U.S. counties lacking an endocrinologist, leaving 50 million Americans without access to specialists for critical conditions such as diabetes, thyroid disorders, and more. — SOURCE: GOODRX

**\$7.9 billion**

The forecasted value of the global human growth hormone market by 2032.

— SOURCE: MARKET.US

**\$413 billion**

The annual amount of medical costs and lost work and wages for people diagnosed with diabetes.

— SOURCE: U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION



**<20%**

Despite advancements in the treatment of osteoporosis, fewer than 20% of patients who experience fragility fractures receive the recommended pharmacologic treatments to strengthen bone and prevent further fractures.

— SOURCE: NEW ENGLAND JOURNAL OF MEDICINE



**Less than 1 in 1,000**

The number of adolescents with commercial insurance who received gender-affirming medication over a five-year period.

— SOURCE: JAMA PEDIATRICS



The percentage of adults with pre-diabetes who were obese or overweight and remained diabetes free after treatment with tirzepatide.

— SOURCE: REUTERS

# ENDO 2025



We hope to see you at **ENDO 2025**, taking place July 12 – 15, 2025, in San Francisco, Calif. With more than 7,000 attendees, nearly 2,000 abstracts, and more than 200 other sessions, **ENDO** is the top global meeting on endocrinology research and clinical care. **ENDO** provides the opportunity to collaborate with an unparalleled list of endocrinologists, healthcare practitioners, and leading scientists from around the world. Through sharing our experience, advice on patient care, and new advances in research, we move the needle forward in hormone health and science.

Our outstanding slate of world-renowned speakers will showcase the most cutting-edge advances in research and medicine, with presentations spanning the spectrum of science, clinical care, and social implications.

<https://www.endocrine.org/meetings-and-events/endo-2025>

## BPS 2025

**Los Angeles, California**  
**February 15 – 19, 2025**

As science becomes increasingly interdisciplinary, the Biophysical Society (BPS) Annual Meeting continues its long-held reputation for bringing together leading scientists from all over the world who work at the interface of the life, physical, and computational sciences. The dynamic five-day meeting provides attendees with opportunities to share their latest unpublished findings and learn the newest emerging techniques and applications. Despite its nearly 5,000 attendees, the meeting is noted for maintaining its “small meeting” feel beginning with the Saturday Subgroup symposia, which allow attendees to meet within their scientific communities. It is also known for its vitality, demonstrated by the over 600 highly interactive daily poster presentations; the more than 500 speakers selected from submitted abstracts; the many career development programs for those working in academia, industry, and agencies throughout the world; and its

advocacy and education programs.  
<https://www.biophysics.org/2025meeting#/>



Photo: The Bold Bureau/Shutterstock.com

## ACLA Annual Meeting 2025

**Washington, D.C.**  
**February 27, 2025**

The American Clinical Laboratory Association (ACLA) will bring together the nation’s leading clinical laboratories with healthcare policy experts and regulators, along with inside-the-beltway political observers, for our 2025 Annual Meeting in Washington, D.C. Join us to hear from a slate of expert speakers and panelists who will cover a range of emerging topics relevant to the clinical laboratory industry, including the latest regulatory and

legislative developments, reimbursement issues, trends in diagnostic innovation, post-election politics and insights from Capitol Hill, and more.

<https://www.acla.com/>

## Clinical Endocrinology 2025

**Live Streaming**  
**March 26 – 30, 2025**

For 50 years, the endocrinology faculty from Harvard Medical School and Massachusetts General Hospital have offered the CME course Clinical Endocrinology – the acclaimed annual update of current endocrine diagnostic and management strategies. If you provide care to patients with endocrine disorders, this course will be invaluable to your medical decision making and patient care.

<https://endocrinology.hmscme.com/>

## Lab Manager Leadership Summit

**Denver, Colorado**  
**April 29 – May 1, 2025**



The program's expert speakers will provide you with the tools you need to reach higher levels of engagement and efficiency among your lab teams. Topics will include dealing with burnout, incorporating automation into your lab, lab operations, effective communication, and much more. An interactive Q&A will follow each session. Attendees will also be able to participate in hands-on workshops and roundtable discussions where they will receive focused advice and learn from real-life examples of leadership success. This event will also feature a special track focused on lab safety, as well as a track geared toward those who work in the clinical lab.

<https://www.labmanager.com/lab-manager-leadership-summit-30946>

### **PES 2025 Annual Meeting** **National Harbor, Maryland**

**May 15 – 18, 2025**

The Pediatric Endocrine Society's (PES's) Annual Meeting brings together a diverse international community of over 1,000 clinicians, researchers, and trainees to share the excitement of new ideas, establish new friendships, and learn the latest insights covering the wide scope of this diverse field.

<https://pedsendo.org/>

### **AAES 2025 Annual Meeting** **Milwaukee, Wisconsin**

**May 17 – 19, 2025**

American Association of Endocrine Surgeons (AAES) 2025 Annual Meeting attendees can look forward to dynamic speakers, presentations of innovative research, opportunities to connect with colleagues, and informative panel discussions. The AAES Annual Meeting is dedicated to the advancement of the science and art of endocrine surgery through exchange of knowledge and fostering collaboration. The upcoming 2025 event promises to deliver innovative programming that will enrich attendees' clinical practices, provide networking opportunities, and facilitate scholarly pursuits. We cordially invite you to join us in Milwaukee for this exciting event. It will be an excellent opportunity to dive into new topics, share expertise, and connect with peers who share similar interests.

<https://www.endocrinesurgery.org/2025-annual-meeting>

## INTERNATIONAL ITINERARY

### **Obesity and Adipose Tissue**

**Banff, Alberta, Canada**

**February 23 – 26, 2025**

Obesity is a major risk factor for type 2 diabetes, nonalcoholic fatty liver disease, cardiovascular disease, and many types of cancer. Collectively, these associated diseases are the leading causes of morbidity and mortality worldwide. A deeper understanding of the biology of adipose tissue and pathophysiology of obesity will be critical to address this major threat to human health. This conference will be held jointly with the Keystone Symposium on MASH Pathogenesis and Therapeutic Approaches to encourage cross-disciplinary insights and collaborations toward understanding underlying mechanisms of how obesity leads to liver disease.

<https://www.keystonesymposia.org/conferences/conference-listing/meeting?eventid=7106>

### **SfE BES 2025**

**Harrogate, United Kingdom**

**March 10 – 12, 2025**

SfE BES is the annual conference of the Society for Endocrinology, bringing together the best of basic science, translational research, clinical investigation, and clinical practice over a three-day program.

<https://www.endocrinology.org/events/sfe-bes-conference/sfe-bes-2025/>

### **ATTD 2025**

**Amsterdam, The Netherlands**

**March 19 – 22, 2025**

ATTD is the ultimate meeting to discover the latest worldwide research, devices, and developments in the diabetes field. Join the community of experts, clinicians, researchers, and industry professionals to stay up to date with the latest advancements in our field. Together, we can continue driving revolutionary changes and making a positive impact on those battling diabetes.

<https://attd.kenes.com/>

### **Adipose Biology Conference**

**Montreal, Quebec, Canada**

**August 19 – 20, 2025**

The Adipose Biology Conference is a dynamic platform that unites scientists at all career stages, fostering collaboration, knowledge exchange, and mentorship to propel groundbreaking advancements in mechanisms of adipose tissue biology.

<https://www.adiposebiology.com/>



# *high* **TIME**

*Addressing Research  
Gaps in Opioid-Associated  
Endocrine Conditions*

BY DEREK BAGLEY

**Endocrine News speaks with Niki Karavitaki, MSc, PhD, FRCP, of the University of Birmingham, Birmingham Health Partners, and the University Hospitals Birmingham National Health Service Foundation Trust in Birmingham, U.K., chair of the Endocrine Society’s recent Scientific Statement on opioids’ impact on the endocrine system. She discusses gaps in research, as well as why healthcare professionals should be aware of opioid-induced endocrinopathies.**

Last October, the Endocrine Society published a Scientific Statement highlighting research gaps associated with the effects of opioid use on the endocrine system. The paper, “Exogenous Opioids and the Human Endocrine System: An Endocrine Society Scientific Statement,” published in *Endocrine Reviews*, examines data related to the use and misuse of opioids and the effects of these drugs on the endocrine system. It also discusses recent research on the clinical consequences of opioids, especially on the hypothalamic-pituitary system and bone health.

Opioids still seem to command as many headlines as new blockbuster drugs like GLP-1 agonists, but for different reasons — these drugs can and do lead to addiction and even death. The authors of the Statement point out that United States opioid prescribing “catapulted” in the late 1990s and early 2000s, followed by a significant increase of opioid-related overdose deaths.

“Three distinct waves of opioid mortality have been described in the current overdose crisis; the first began with increased prescribing of opioid pain relievers (natural and semisynthetic opioids and methadone) in the 1990s, the second started in 2010 and was dominated by heroin, whereas the third started in 2013 and was driven predominantly by illicitly manufactured fentanyl and related analogs,” the authors write. “In recent years, co-use of stimulants with opioids has risen, leading to what some experts are now calling the fourth, polysubstance wave of the overdose crisis.”

Since then, guidelines have been revised, legislation has been passed, and healthcare system policies have seen dramatic shifts, often limiting overall doses of opioids that could be used for chronic noncancer pain and emphasizing the need to utilize other modalities to treat pain. Still, opioid prescribing rates remain high, especially in North America, the region with the highest consumption of opioids for pain management in the world. Vicodin remains one of the most prescribed drugs in the United States.

The above is not really a secret to anyone in a healthcare profession or even just a casual consumer of health news. And endocrinologists don’t typically prescribe opioids, at least not as much as providers in other specialties. But more research is implicating opioid use in endocrine health consequences.

“Prescription opioids are used to manage chronic or acute pain by millions of people,” says lead Statement author Niki Karavitaki, MSc, PhD, FRCP, of the University of Birmingham, Birmingham Health Partners, and the University Hospitals Birmingham National Health Service Foundation Trust in Birmingham, U.K. “Furthermore, the risks of prescription misuse, opioid use disorder, and overdose have been a growing concern globally. The endocrine effects of opioids can have negative health sequelae, and this Scientific Statement is needed not only to enhance the awareness of various healthcare professionals on these sequelae but also to highlight current gaps in knowledge on this field that will open perspectives for exciting and impactful future research.”



**NIKI KARAVITAKI,  
MSC, PHD, FRCP**

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*“We address the many research gaps associated with the effects and clinical consequences of opioids on the endocrine system within this Scientific Statement.*

*We hope bringing attention to recent research in the space, including opioid use’s impact on gonadal, bone, and adrenal conditions, will improve the endocrine health of people using or misusing opioids worldwide.”*

## Walk the Line

Opioids do have their place in successfully treating pain. No one is denying their potential benefit for patients who need them. The Statement authors recognize this, writing that the United States and the world are still trying to find the best way to maintain the balance of “dealing with the worst overdose crisis in the history of humankind and still considering that opioids may be necessary, and therapeutically appropriate, to treat different types of pain.”

“One of the most important ways to help ‘walk the pain management line’ is to enhance one’s understanding of opioid pharmacology and physiochemical characteristics, and how they relate to analgesic and potential adverse effects,” the authors continue.

And again, this Statement is designed to do just that: enhance endocrinologists’ understanding of these drugs because more patients may present with opioid-induced endocrine disorders. “Endocrinologists should be aware of how these drugs can impact the endocrine system,” Karavitaki says. “This will facilitate their involvement in the optimal holistic care of

*Aside from Karavitaki, the other authors of the Statement are: Jeffrey Bettinger of Saratoga Hospital Medical Group in Saratoga Springs, N.Y.; Nienke Biermasz of Leiden University Medical Center in Leiden, The Netherlands; Mirjam Christ-Crain of the University Hospital Basel and the University of Basel in Basel, Switzerland; Monica Gadelha of the Universidade Federal do Rio de Janeiro in Rio de Janeiro, Brazil; Warrick Inder of Princess Alexandra Hospital, Brisbane, and the University of Queensland, Brisbane, in Queensland, Australia; Elena Tsourdi of Technische Universität Dresden in Dresden, Germany; Sarah Wakeman of Massachusetts General Hospital, Mass General Brigham and Harvard Medical School in Boston, Mass.; and Maria Zatelli of the University of Ferrara in Ferrara, Italy.*

# RESEARCH GAPS

While the new Scientific Statement is thorough, Karavitaki tells *Endocrine News* that some research gaps still exist:

- ▶ Data on type, route of administration, and regimens of opioids associated with higher risk of hypogonadism in both males and females derived from studies adjusting for confounding factors would be highly valuable.
- ▶ Data are needed on the benefits and risks of gonadal hormone replacement in premenopausal females and in males with hypogonadism attributed to opioids from prospective adequately powered and of appropriate duration randomized trials.
- ▶ Studies looking at standardization and validation of diagnostic tests and criteria for opioid-induced adrenal insufficiency are called for, as well as studies clarifying the prevalence of hypoadrenalism with different opioids, doses, and routes of administration.
- ▶ Patients at risk of developing adrenal insufficiency while on opioids need to be identified and clarified if there is individual susceptibility to the inhibitory effects of opioids.
- ▶ Further research is needed to elucidate the clinical significance and optimal management approach of opioid-induced adrenal insufficiency.
- ▶ The clinical significance of compromised growth hormone axis in patients on opioids for cancer or noncancer pain and in people with opioid use disorder needs to be further elucidated.
- ▶ The impact of different opioids on arginine vasopressin release after adjusting for confounding factors and considering hydration status of the patients should be a priority.
- ▶ The differential effects of various opioid agonists on bone homeostasis and factors related to them need to be further clarified.

“Exogenous Opioids and the Human Endocrine System: An Endocrine Society Scientific Statement,” was published online in the Society’s journal, *Endocrine Reviews*.

patients on opioids along with the specialists prescribing opioids or the specialists looking after people who misuse opioids or have been diagnosed with opioid use disorder.”

## Mind the Gap

The Statement reviews research related to the impact of opioids on gonadal and adrenal function, and bone health. The authors report hypogonadism as a well-recognized side effect of opioids and provide more clarity around the drug’s lesser-known effects on the hypothalamic-pituitary system and bone health. They discuss the link between opioids and the development of hyperprolactinemia and how more research is needed to understand their effect on secondary adrenal insufficiency.

“We address the many research gaps associated with the effects and clinical consequences of opioids on the endocrine system within this Scientific Statement,” Karavitaki says. “We hope bringing attention to recent research in the space, including opioid use’s impact on gonadal, bone, and adrenal conditions, will improve the endocrine health of people using or misusing opioids worldwide.”

The Statement authors also reviewed research into opioid’s actions on bone metabolism and their negative impact on bone mineral density and risk of fracture. According to Karavitaki, opioids can suppress the hypothalamo/pituitary/gonadal system and in the long term, can reduce bone mineral density. These drugs also suppress the hypothalamo/pituitary/adrenal system and reduce glucocorticoid secretion.

“In my opinion, gaps that relate with the effects of opioids of the hypothalamic-pituitary-gonadal axis, the hypothalamic-pituitary-adrenal axis, and the bone need to be prioritized,” Karavitaki continues.

## Moving Forward

In 2018, Karavitaki gave a Meet-the-Professor talk at ENDO in Chicago on opioid-induced endocrinopathies, mentioning that she sees patients in her clinic on various types of opioids

The Statement authors reviewed research on opioid's negative impact on bone metabolism, bone mineral density, and increased fracture risk. Bone health is one of the endocrine side effects that is often not fully appreciated by practitioners who prescribe opioids.



**“The endocrine effects of opioids can have negative health sequelae, and this Scientific Statement is needed not only to enhance the awareness of various healthcare professionals on these sequelae but also to highlight current gaps in knowledge on this field that will open perspectives for exciting and impactful future research.”**

— NIKI KARAVITAKI, MSC, PHD, FRCP, UNIVERSITY OF BIRMINGHAM, BIRMINGHAM HEALTH PARTNERS, UNIVERSITY HOSPITALS BIRMINGHAM NATIONAL HEALTH SERVICE FOUNDATION TRUST, BIRMINGHAM, U.K.

presenting with hypogonadism. In 2025, she says she still sees cases like these, and pain specialists now often contact endocrinologists in her clinic for advice, which seems like a step in the correct multidisciplinary direction. “I think the awareness of the endocrinologists on this topic has increased, and I hope that this has had an impact in clinical practice,” Karavitaki says. “Research though on this topic has not progressed as much as we would have liked to see.”

And while physicians and legislators are still trying to stay on the tightrope with things like drug monitoring programs, endocrinologists may be uniquely positioned to offer solutions. For example, patients who find out opioids reduce libido and cause hypogonadism may opt for alternative pain management treatments. “Patients who are well informed of side effects of opioids may be more open for other management options that would be considered appropriate by the relevant specialists,” Karavitaki says. “Having said that, patients with complicated issues require treatment with opioids.”

The Scientific Statement is a call to action, identifying areas of further research that, as the authors write, will enhance endocrinologists’ understanding of the consequences of the available opioids and will provide evidence guiding the optimal diagnostic approach and management of their endocrine adverse sequelae. “These are additionally mandated by the opioid pandemic we are witnessing and will open perspectives for exciting and impactful future research,” they write.

“Exogenous opioids have various effects on the human endocrine system, and some of these are associated with negative sequelae,” Karavitaki says. “Nonetheless, we still need to fill in gaps in our knowledge on this topic with methodologically robust studies that will enhance our understanding on the actions of opioids, their potential consequences, and the optimal endocrine care of people using these agents.” <sup>EN</sup>

— BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. HE WROTE ABOUT THE IMPACT OF THYROID-DISRUPTING CHEMICALS ON PREGNANT WOMEN IN A LOWER SOCIOECONOMIC CLASS IN THE JANUARY ISSUE.



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## Despite Advancements in the Treatment Landscape for Type 1 Diabetes,

Endocrine Society member Tina Gupta, MD, spent many years managing her patients' type 1 diabetes when she was in a clinical setting. Now that she's associate medical director on the Type 1 Diabetes Medical Affairs team at Vertex Pharmaceuticals, she's even more determined to find solutions to help these patients.

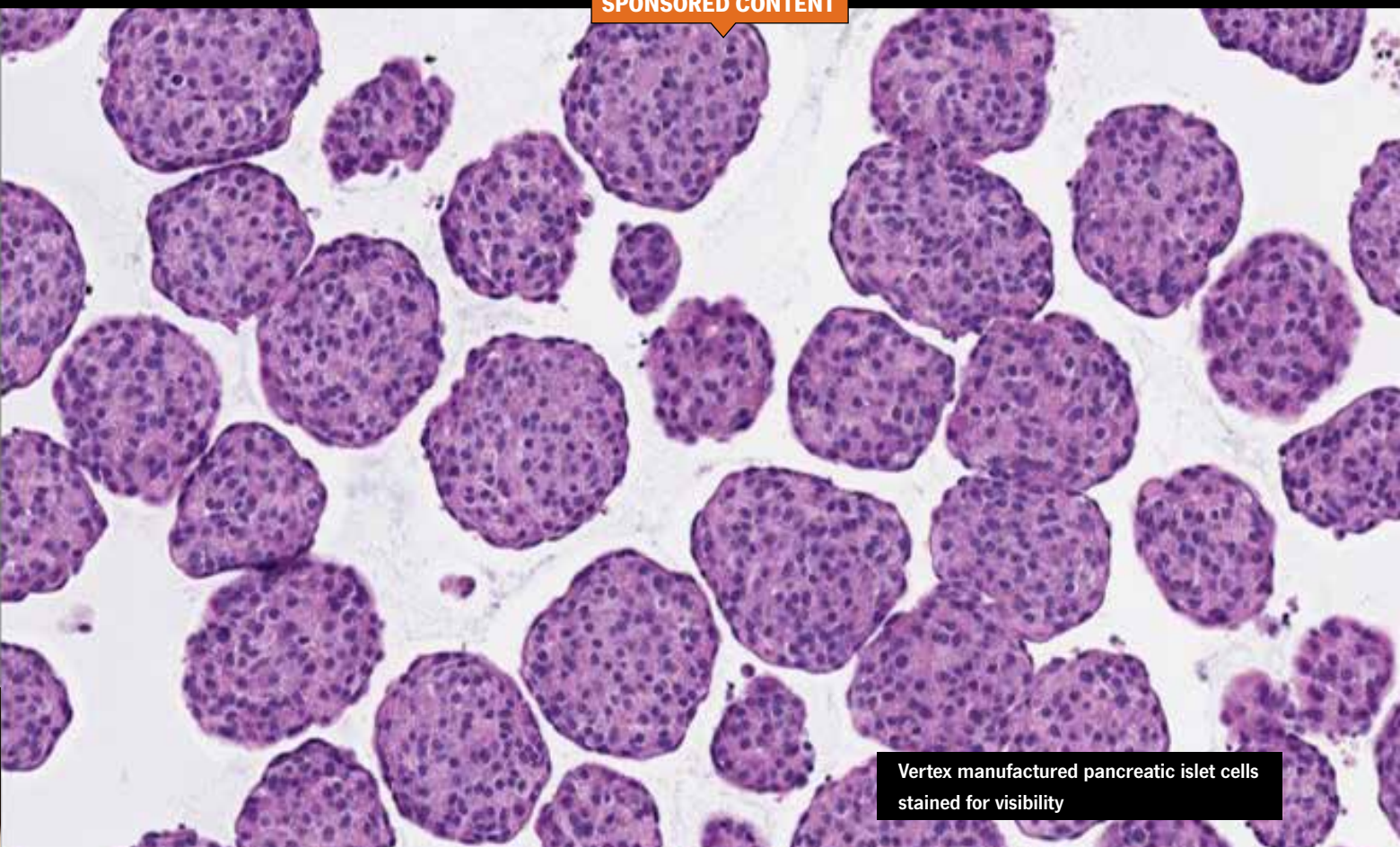
# There Is a Significant Need for Innovation

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BY TINA GUPTA, MD





Vertex manufactured pancreatic islet cells stained for visibility

**A**s an endocrinologist, my goal is to help people living with type 1 diabetes maintain glycemic control, to avoid dangerous hypoglycemia, as well as reduce hyperglycemia that can lead to serious complications and to do so with minimal compromise to their quality of life.

There have been many advancements in type 1 diabetes over recent years such as ultra rapid-acting insulins, continuous glucose monitors (CGMs), and automated insulin delivery (AID) systems, yet many patients still struggle to meet glycemic targets and continue to experience severe hypoglycemic events (SHEs) and impaired awareness of hypoglycemia (IAH).

In a retrospective, observational study by Jennifer Sherr, MD, PhD, et al., survey data from over 2,000 adults with type 1 diabetes in the U.S. were used to assess the impact of advanced diabetes technologies, including CGMs and AID, on glycemic metrics and prevalence of SHEs and IAH.

In a population with high utilization of diabetes technologies, with over 90% of participants on CGMs and roughly half using AID, the study authors found that only about 57% of participants reported a hemoglobin A1c <7%, the generally recommended glycemic target for nonpregnant adults according to the American Diabetes Association (ADA) and European Association for the Study of Diabetes (EASD) guidelines. Furthermore, irrespective of technology use, ~20% of respondents reported experiencing at least one SHE within the prior 12 months, and approximately one-third reported IAH as assessed by questionnaire at the time of the survey.



“ As a former provider, I know that the clinical picture I would have assembled during an appointment is often incomplete, and, in my experience, this particularly applies to the incidence of severe hypoglycemia. **Just like each patient is different, there are innumerable reasons for why hypoglycemic events are often not reported to clinicians.**”

— TINA GUPTA, MD, ASSOCIATE MEDICAL DIRECTOR, TYPE 1 DIABETES MEDICAL AFFAIRS TEAM, VERTEX PHARMACEUTICALS

These data illustrate that even with use of the most recent available therapies, reaching glycemic targets and avoiding dangerous hypoglycemia remains a significant struggle for some people with type 1 diabetes. In addition, demonstration of these findings within this cohort of highly engaged and well-resourced T1D Exchange community suggest that unmet need may be even greater among a population with more limited access to care.

According to Sherr, et al., these findings further support the call to action for research and development of additional therapeutic options and strategies, such as bi-hormonal AID systems and  $\beta$ -cell replacement, to help enable more people living with type 1 diabetes to meet their clinical goals.

### Hypoglycemic Events: Underreported and Undetected

As a former provider, I know that the clinical picture I would have assembled during an appointment is often incomplete, and, in my experience, this particularly applies to the incidence of severe hypoglycemia. Just like each patient is different, there are innumerable reasons for why hypoglycemic events are often not reported to clinicians. Many people with type 1 diabetes live with IAH and are likely experiencing more hypoglycemia than they recognize, a problem that we know persists despite CGM use as evidenced by the Sherr, et al., data previously mentioned.

Furthermore, patients may have differing perceptions of what constitutes a “severe” event and may not consider all hypoglycemia occurrences as worthy of reporting. This can be especially common if they have a long-standing history with type 1 diabetes and have resigned themselves to hypoglycemia being a burdensome, yet inevitable, part of the disease. Similarly, they may feel as if their provider is not interested in hearing about their lows unless a threshold of care, such as hospitalization, is reached.

Even worse, they may fear that they will be judged or even penalized (for example, license suspension, work restrictions) after reporting hypoglycemia. In a disease that relies

so heavily on the patient for relentless and ever-shifting decision making, any perturbations from “optimal control” can be perceived as a failure.

## Patients are Waiting for Additional Treatment Options

The discovery of insulin has been life changing for people living with type 1 diabetes. However, insulin has a narrow therapeutic range with potentially dangerous consequences if levels are insufficient or excessive in relation to glucose levels. Keeping blood sugars in target range requires a delicate balancing act that can be impacted by just about every aspect of daily life — diet, exercise, sleep, stress, menstrual cycles, illness, and more. People living with type 1 diabetes must manage their disease 24 hours a day, seven days a week, for their entire lives. From a clinical perspective, we appreciate the importance of achieving and maintaining target glycemic metrics; however, acknowledging and addressing the monumental disease burden and decision-making responsibilities for a person with type 1 diabetes must also be prioritized.

Keeping these different aspects of care in mind can help us form more complete clinical pictures of our patients. In my former practice, I used to care for a young woman living with type 1 diabetes who was an experienced healthcare professional. As a result of her education, training, and personality, she was incredibly health literate, up to date on the latest therapeutic advances in type 1 diabetes, and

## New ICD-10-CM Codes for Hypoglycemia

As an update from the previous classifications of “mild,” “moderate,” and “severe,” the U.S. Centers for Disease Control and Prevention (CDC) issued new ICD-10-CM codes for hypoglycemia, which went into effect October 1, 2024:

- ▶ E16.A1 (*Hypoglycemia level 1*),
- ▶ E16.A2 (*Hypoglycemia level 2*), and
- ▶ E16.A3 (*Hypoglycemia level 3*).



By allowing for more specific and objective reporting of low blood sugar events, the hope is that this update will better capture and characterize the scope of and severity of hypoglycemic events in one’s clinical practice.

Unlike the variable information from clinician notes or the earlier, more subjective classification system, these standardized codes may also be more easily operationalized for real-world and clinical research studies.

“The progress made in developing new management tools for type 1 diabetes are numerous and for many have led to improvements in glycemic control and reduced risk of hypoglycemia. However, the gap between these solutions and physiology remains, and living with type 1 diabetes can still be complex and burdensome.”

– TINA GUPTA, MD, ASSOCIATE MEDICAL DIRECTOR, TYPE 1 DIABETES MEDICAL AFFAIRS TEAM, VERTEX PHARMACEUTICALS



The Jeffrey Leiden Center for Biologics, Cell, & Genetic Therapies is comprised of two buildings dedicated to bring transformative therapies using cutting-edge genetic and cell-based technologies.

rigorous with her insulin dosing, diet, and overall management of her disease. Regardless, whenever she deviated from her very limited rotation of meals, she experienced significant hyperglycemia, and even minimal adjustments to her insulin regimen to preempt the next episode resulted in severe hypoglycemia.

After much discussion of glycemic targets and risk reduction, and weighing this against her personal priorities, she made a conscious decision to accept these glycemic excursions without modifying her insulin regimen to avoid the more disruptive hypoglycemia while allowing herself a break from the misery of her monotonous diet. This was what made sense to her based on her individualized risk-benefit assessment.

## A Complex and Burdensome Issue

The progress made in developing new management tools for type 1 diabetes are numerous and for many have led to improvements in glycemic control and reduced risk of hypoglycemia. However, the gap between these solutions and physiology remains, and living with type 1 diabetes can still be complex and burdensome.

When discussing the findings of their observational study, Sherr, et al., described some of the limitations of current available treatments that may account for the SHE and IAH outcomes reported. Despite advances in drug formulations, exogenous insulin is limited by different pharmacodynamic properties from endogenous insulin with protracted time of action from administration. Subcutaneously injected insulin also bypasses the portal circulation, precluding the insulin gradient created

with pancreatic insulin secretion responsible for regulating hepatic glucose production.

These factors all can contribute to the occurrence of hypoglycemia, a risk further compounded by the loss of one's glucagon "buffer" due to the progressive alpha-cell dysfunction seen in type 1 diabetes. Diabetes technologies aim to mitigate, but do not eliminate, this problem. CGMs are still subject to a glucose-sensing lag compared to physiologic mechanisms of native beta cells, and, while AID systems continue to advance, many users resort to manual management in pursuit of tighter glucose control than they believe the device algorithm permits. These overrides can potentially result in insulin stacking, and, consequently, hypoglycemia.

## Vertex Hopes to Transform the Treatment Landscape for Type 1 Diabetes

The underlying pathophysiology of type 1 diabetes is well described and understood — there is autoimmune destruction of pancreatic beta cells leading to insulin deficiency. Currently, the standard of care for treating type 1 diabetes is lifelong administration of exogenous insulin therapy. At Vertex, we have ongoing clinical trials investigating cell therapies aimed at replacing the destroyed beta cells with functional islets to potentially restore insulin production to people living with type 1 diabetes.

As research in this field continues to progress, I have hope that we are approaching a time when the daily struggles, burden, and fear affecting the lives of people with type 1 diabetes can be significantly reduced or even eliminated. <sup>EN</sup>

– Gupta is an associate medical director on the Type 1 Diabetes Medical Affairs team at Vertex Pharmaceuticals. She received her Bachelor of Arts (BA) and Doctor of Medicine (MD) degrees from the University of Tennessee. Her medical education continued at Boston Medical Center where she completed her internal medicine residency, followed by a fellowship for endocrinology, diabetes, and metabolism at Brigham and Women's Hospital. Prior to joining Vertex, she worked as a clinical endocrinologist at Massachusetts General Hospital, specializing in diabetes, bone metabolism, and adrenal disorders.

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**ENDOCRINE NEWS CELEBRATES BLACK HISTORY MONTH**



To commemorate Black History Month, *Endocrine News* reached out to several of the Endocrine Society's Black members to get their insights into their career accomplishments, goals, and even their challenges as well as advice they have for any young Black endocrinologists just beginning their careers.

BY GLENDA FAUNTLEROY SHAW

**F**or nearly five decades, the month of February has been designated as Black History Month — an essential time to celebrate and reflect on the history, culture, and significant contributions of Blacks in the United States and abroad.

Black History Month originated from an idea of renowned historian Carter G. Woodson who announced in 1926 that the second week of February would be “Negro History Week,” as it coincided with the birthdays of Abraham Lincoln and Frederick Douglass. The event was later expanded to a month-long observation in 1970 and recognized by President Gerald Ford in 1976.

The month marks a specific time, for instance, to honor the groundbreaking advancements made by Black scientists, innovators, and intellectuals throughout history who have shaped our understanding of the world and improved countless lives. Physicians such as Charles R. Drew, MD, who developed ways to use and preserve blood plasma that became the model used for blood banks, and Patricia Bath, MD, an ophthalmologist who developed the laser technology used in treating cataracts. And most recently, scientists like

Kizzmekia Corbett, PhD, a key researcher in the development of the Moderna COVID-19 vaccine in 2020.

To celebrate the momentous contributions of Blacks to the field of endocrinology, *Endocrine News* spoke with five Black members of the Endocrine Society who follow the footsteps of great physicians and scientists. We offer a glimpse of their proudest career moments, the challenges they've faced and conquered, as well how their own cultural backgrounds play a role in their research or patient care.

We spoke with **Dequina Nicholas, PhD**, assistant professor, Molecular Biology and Biochemistry, at University of California, Irvine; **Antentor O. Hinton, Jr., PhD**, assistant professor, molecular physiology and biophysics at Vanderbilt School of Medicine; **Estelle M. Everett, MD, MHS**, assistant professor-in-residence, medicine at the Geffen School of Medicine at the University of California, Los Angeles; **Barbara M. Onumah, MD**, physician, at The Diabetes & Endocrine Wellness Center in Upper Marlboro, MD; and **Stanley Andrisse, PhD, MBA**, assistant professor, Physiology and Biophysics, at Howard University College of Medicine.



**Dequina Nicholas, PhD,**

Assistant Professor, Molecular Biology and Biochemistry,  
University of California Irvine, Irvine, California

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I was looking for research opportunities in type 2 diabetes and in graduate school found a lab that studied immunology in the context of diabetes. I thought of myself as an immunologist until I realized in my second postdoc that no, I'm actually in the field of endocrinology, and am a scientist who approaches problems through the lens of an immunologist.

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**Endocrine News: What made you choose the field of endocrinology?**

**DEQUINA NICHOLAS, PHD:** To be honest, I didn't know that endocrinology was a field when I got started. I was looking for research opportunities in type 2 diabetes and in graduate school found a lab that studied immunology in the context of diabetes. I thought of myself as an immunologist until I realized in my second postdoc that no, I'm actually in the field of endocrinology, and am a scientist who approaches problems through the lens of an immunologist.

**ANTENTOR O. HINTON, JR., PHD:** Endocrinology has always seemed like a natural field of study for me, as my family has been deeply affected by various endocrine disorders and hormone-related diseases, leading to complications such as metabolic, cardiovascular, diabetic, and cancer-related issues. These challenges inspired me to pursue biomedical sciences, aiming to uncover solutions that could benefit individuals from all backgrounds. My undergraduate experiences further solidified my motivation to continue in this field. They led me to pursue a graduate degree at Baylor College of Medicine under the mentorship of Dr. Yong Xu, where I expanded my knowledge and skills in endocrinology. Following this, I had the privilege of conducting postdoctoral training with Dr. E. Dale Abel, focusing on metabolic disorders, and secondary training in electron microscopy techniques under the guidance of Drs. Abel and Jeffrey Salisbury.

These experiences have propelled my career in endocrinology, providing me with the tools and vision to explore innovative questions that are often overlooked. At Vanderbilt University, I have found an environment that supports my unique research approach and sustains my passion for addressing complex questions in this field. Currently, my lab utilizes aging as a model to investigate mitochondrial structure and function, particularly focusing on the frequency and roles of the eight morphological shapes of mitochondria across different tissues. This approach allows us to connect structural insights with functional outcomes, contributing to a deeper understanding of the fundamental mechanisms underlying endocrine and metabolic disorders.

**ESTELLE M. EVERETT, MD, MHS:** I chose the field of endocrinology because I was very captivated by our intricate hormonal systems and how they influenced nearly every aspect of the body. My introduction to endocrinology, however, began long before I had medical knowledge —





Estelle Everett, MD, MHS, at ENDO 2023 in Chicago, Ill., where she engaged with the presenters at the Health Disparities Poster Session in the ENDO Expo.

through my sister who has lived with type 1 diabetes since childhood. Witnessing her challenges firsthand gave me a unique, personal understanding of the daily struggles faced by individuals with diabetes. Her journey deeply inspired my clinical and research focus on improving care and outcomes for patients managing this complex condition.

**BARBARA M. ONUMAH, MD:** I chose endocrinology because after rotating through various internal medicine subspecialties during residency, endocrinology made the most sense for me and was the one specialty that I could see myself practicing. I liked internal medicine, but I wanted to be an “expert,” and endocrinology afforded me the chance to be able to do just that. A very intellectually stimulating multi-system specialty, with a broad range of conditions that allows the chance to see a wide variety of patients. Additionally, due to the chronic nature of most endocrine conditions, it affords the opportunity to build long-term physician-patient relationships — a very gratifying aspect of practicing medicine for me.

**STANLEY ANDRISSE, PHD, MBA:** Endocrinology fascinates me because it intertwines complex biological systems and holds immense potential to improve lives. My passion stemmed from seeing the disproportionate burden

of metabolic diseases, such as diabetes, in underserved communities and wanting to make a difference. This field allows me to merge science with advocacy for health equity.

As some of your readers may be familiar with, I am a formerly incarcerated person turned endocrine scientist. During the first two years of my incarceration, my dad’s health plummeted. He had a number of hospitalizations and surgeries. Piece by piece, they amputated his lower limbs up to his torso. He fell into a coma and ended up losing his battle with type 2 diabetes. This was emotionally devastating, but I used that devastation as inspiration. I read my first scientific article on diabetes while I was locked in a cage. Many of your readers are likely familiar with scientific articles and how every other word is something you’ve never heard of before. I didn’t have Google or WebMD or Chat GPT. It took me weeks to months to read through one article. But I plowed through dozens becoming a jailhouse expert on endocrinology. This enabled me to escape prison. Although my body was locked in a physical prison cell, my mind was freely roaming around the human cell. This helped me reshape the perspective of who I was. (You can learn more about my journey in his book that was a #1 New Release in Educator Biographies, *From Prison Cells to PhD: It is Never Too Late to Do Good.*)



**Antentor O. Hinton, Jr., PhD,**

Assistant Professor, Molecular Physiology and Biophysics,  
Vanderbilt School of Medicine, Nashville, Tennessee

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Surround yourself with  
an outstanding team.  
While you are strong on  
your own, you become even  
greater when you have a  
reliable and supportive  
team to collaborate with.  
Some challenges cannot be  
faced alone, and having  
the right people around you  
will make all the difference  
in your journey.

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**EN: What has been one of your biggest notable successes that has defined your professional role?**

**NICHOLAS:** My biggest success was being awarded the NIH New Innovator’s Award. For 10 years, I have mulled over a hypothesis and research direction that seemed far-fetched and that didn’t seem to gain any traction when I would share it. When I finally got my own lab, I had supportive mentors and colleagues who helped me develop the idea, and now my dream project is reality. I get to study how the immune system responds to lipids in type 2 diabetes.

**HINTON:** I wouldn’t say there’s just one success that defines my career — it’s been a series of milestones at different stages of my journey. As a graduate student, a major achievement was my first-author paper on hypertension and my co-authored *Journal of Clinical Investigation* publication on estrogen receptors in the amygdala. These studies laid a strong foundation for my work in neuroendocrinology and hypertension research.

During my postdoctoral training, my success came in the form of a series of co-senior and corresponding author papers on TEM (transmission electron microscopy) and fixation procedures. These discoveries not only advanced our understanding of these techniques but also helped position both my fields — endocrinology and mitochondrial research — on stronger methodological footing.

At the faculty level, I am most proud of obtaining a Chan Zuckerberg Initiative grant, which has allowed me to conduct cutting-edge 3D electron microscopy research on mitochondria’s eight unique structures. These structures are crucial for understanding mitochondrial function, and the findings have been fascinating. We’ve already published some of this work in *Aging Cell*, and I’m proud to have several other manuscripts currently in revision. This research has been a significant step forward in mitochondrial biology, and I look forward to sharing these discoveries with the broader endocrinology community.

Each of these accomplishments reflects my dedication to advancing both research and methodology in my fields, and they continue to shape my professional role and aspirations.

**EVERETT:** One of my most notable successes has been leading research to address disparities in diabetes technology access for underserved populations. This work is deeply personal to me and



Stanley Andrisse, PhD, MBA, in his laboratory at Howard University in Washington, D.C.

has shaped my career as a health services researcher. Through my studies, I've been able to highlight significant gaps and drivers in disparities in the utilization of insulin pumps and continuous glucose monitors (CGMs) among racial-ethnic minorities and low-income groups. Receiving the Harold Amos Medical Faculty Development Award to develop a CGM-based intervention aimed at addressing type 1 diabetes disparities has been a pivotal milestone in my journey. I am hopeful that my ongoing and future work will address these inequities and improve outcomes for patients who are most vulnerable to poor diabetes outcomes.

**ONUMAH:** Along the way in my professional journey, I have had both small and big successes all preparing me for the next stage of my professional life. My professional path has taken me down many different roads including being faculty at an academic institution where I had the chance to interact with and teach students, residents, and fellows on a regular basis. I have also been the medical director for diabetes and endocrinology at a regional medical center where I learned a lot about the business aspect of practicing medicine. One of the things that I am proud and grateful to have been able to accomplish is the establishment and running of a private ambulatory diabetes and endocrine practice in a community with a large portion of patients who

look like me and thus creating access to excellent care.

**ANDRISSE:** One of my most notable successes is founding From Prison Cells to PhD ([www.fromprisoncellstophd.org](http://www.fromprisoncellstophd.org)), a nonprofit that empowers justice-impacted individuals to achieve their academic and professional goals. It represents a fusion of my professional expertise in endocrinology and my personal mission to address systemic inequities.

Another one of my most notable successes that has significantly defined my professional role was receiving the news of my NIH R01 grant approval. It was a moment that beautifully blended my personal and professional life. I was in my office at Howard University, holding my six-month-old son, when the email notification popped up on my screen. The weight of the journey — the late nights, the rejections, the perseverance — culminated in that single moment. As I held my son, I felt a profound sense of accomplishment, knowing that this grant would not only advance my research in endocrinology but also symbolize the possibilities for those who face systemic barriers. It was a reminder that success is a blend of passion, persistence, and purpose, and sharing it with my son made it even more special.



**Barbara M. Onumah, MD,**

Physician, The Diabetes & Endocrine Wellness Center,  
Upper Marlboro, Maryland

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**I wanted to be an ‘expert,’ and endocrinology afforded me the chance to be able to do just that because it’s a very intellectually stimulating multi-system specialty, with a broad range of conditions that allows the chance to see a wide variety of patients. Additionally, due to the chronic nature of most endocrine conditions, it affords the opportunity to build long-term physician-patient relationships — a very gratifying aspect of practicing medicine for me.**

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**EN: Can you describe a pivotal moment in your scientific career in which you overcame a major obstacle?**

**NICHOLAS:** My goal was always to have my own lab, so when I applied for faculty positions in 2018 and didn’t even receive one invitation to interview, I was crushed. That application cycle left me with a nagging feeling that I wasn’t wanted in science because every place I applied to had no minority scientists. I didn’t overcome that feeling until I joined the Future Leaders Advancing Research in Endocrinology (FLARE) program through the Endocrine Society. Multiple faculty instilled in me the confidence that not only did I belong, but that many departments would want me, and that I would find a place that would support my scientific and DEI goals. The Department of Molecular Biology Biochemistry at the University of California, Irvine in the Dunlop School of Biological Sciences is that place.

**HINTON:** A pivotal moment in my scientific career occurred when I transitioned from being a postdoc to becoming a faculty member. Coming out of an excellent postdoctoral training experience, I thought I was fully prepared for the challenges ahead. However, I quickly realized that each university operates within its own unique system, with distinct cultures, expectations, and standards. Vanderbilt University, in particular, pushed me to elevate my creativity as a scientist and to constantly strive for more, even when I felt I had already done well.

One of the most valuable lessons I learned was the importance of adapting and growing as a leader. With the guidance of career coaching, I’ve relearned how to navigate complex scenarios, foster collegial relationships, and refine my leadership style. A key challenge for me has been learning to say “no” — an essential skill when you’re a visible figure in science. While visibility is often a privilege, it can bring an overwhelming influx of opportunities and discerning when to take a step back is crucial.

My mentoring committee has been instrumental in shaping my growth during these challenges. I owe a deep debt of gratitude to the late Dave Wasserman, who profoundly influenced my thinking, and Dr. Roger Colbran, whose guidance has been transformative for me. Their mentorship has pushed me to improve my science, encouraging me to focus not only on generating publications but on achieving a deeper understanding of mechanisms.

I'm grateful for the inspiration and support from colleagues across Vanderbilt, particularly in the Department of Molecular Physiology and Biophysics. I would especially like to acknowledge Matt Tyska and Vivian Gama, who have helped me reevaluate how I mentor, manage my lab, and approach my research. While I have come a long way, I know there is still much to learn as I continue to grow as a scientist and leader.

**EVERETT:** A pivotal moment in my career was deciding between a career path focused solely on clinical care or one centered on research. While I have always loved patient care, I realized that research offered a unique opportunity to address systemic issues and make a broader impact on the lives of patients with diabetes. The disparities that I have observed in clinical practice have inspired me to focus on understanding and solving these challenges at a population level. Committing to a research-oriented career has been challenging but extremely rewarding, as it has enabled me to contribute to tangible change in healthcare delivery while staying connected to the real-world needs of patients through my clinical work.

**ONUMAH:** In 2014, while I was getting ready to transition to a new job, my mother — who has been one of my biggest cheerleaders throughout my scientific career — suffered a major illness that she never fully recovered from. This significantly affected the dynamics of our entire family. Balancing professional work, married life, and managing two young children while helping with taking care of my mom was very daunting. By God's grace and with the help of my family and friends, I was able to manage this difficult challenge. Thankfully, my mom is still with us, and this past December we got to celebrate her 80th birthday.

**ANDRISSE:** During my postdoctoral studies at Johns Hopkins Medicine, I faced skepticism from peers and mentors because of my unconventional path as a formerly incarcerated person. The pivotal moment came when I used that skepticism to fuel my determination, culminating in publishing groundbreaking research on glucose metabolism and insulin signaling, which opened doors to meaningful collaborations and mentorship roles.



Antentor O. Hinton, Jr., MD, working in E. Dale Abel's laboratory during his postdoc period at the University of Iowa.

**EN: Do you incorporate your cultural background into your research approach?**

**NICHOLAS:** Yes. I am aware of the health disparities in type 2 diabetes and polycystic ovary syndrome, and even though I am a basic scientist and not a population scientist, I take any opportunity I get to collaborate and contribute understanding to how molecular pathways may contribute to health disparities. This approach often reveals disease-specific pathways that we model and test in the lab. This is only possible because I am mindful of diversity in the cohorts we analyze.

**HINTON:** As we refine our approach, it's clear that initiatives focused on professional development for all — regardless



Both Andrisse (center row, second from left) and Onumah (center row, third from right) are currently serving on the Endocrine Society's Board of Directors. The rest of the Board is: Top row (l to r): Kate Fryer, Endocrine Society CEO; David Moore, PhD; W. Lee Kraus, PhD; Ricardo Azziz, MD, MBA, MPH; and Lauren Fishbein, MD, PhD. Center row (l to r): Bu Yeap, MBBS, FRACP, PhD; Andrisse; Andrea Gore, PhD; Onumah; Maria Fleseriu, MD; and Bruno Ferraz-de-Souza, MD, PhD. Bottom row: John Newell-Price, MD, PhD, FRCP, president; Stephen R. Hammes, MD, PhD, immediate past president; Karen S. L. Lam, MBBS, MD, DSc; Jeffrey Boord, MD, MPH, secretary/treasurer; and Kristy Brown, PhD, secretary/treasurer-elect.

of background — can have a profound and lasting impact. Leadership, mentoring, and career coaching are not only tools for individual success but also essential for creating thriving communities of practice where everyone feels empowered to excel.

By prioritizing these efforts, we foster environments where individuals can feel safe, supported, and inspired to reach their full potential. These initiatives strengthen the entire community, driving progress and innovation while ensuring that everyone has a place in shaping the future. Thus, I implement not just my own cultural background but the background of everyone in their laboratory to have a collaborative and supportive environment for all.

**EVERETT:** Absolutely. As a Black woman and the daughter of Haitian immigrants, my cultural background informs my approach to both research and patient care. I understand firsthand the impact of systemic inequities and the importance of culturally sensitive care. This perspective drives me to design research studies that address the unique needs of marginalized populations and incorporate patient-centered approaches.

For example, my research often focuses on understanding barriers to diabetes technology access in communities of color and developing interventions that are culturally relevant and practical. By integrating my lived experiences and cultural awareness, I strive to create solutions that resonate with the populations most affected by health disparities.

**ONUMAH:** Yes, I do incorporate my cultural background into my daily practice, but I am also intentional about acknowledging and being respectful of other cultures. I believe this is well appreciated and valued by patients.

**ANDRISSE:** Absolutely. My lived experiences and cultural background inform my approach to research and mentorship. I strive to address health disparities in underserved populations and advocate for greater inclusion of justice-impacted individuals in STEM fields, recognizing the intersectionality of systemic barriers.

**EN:** Both the academic and corporate worlds have seen many recent attacks on diversity, equity, and inclusion (DEI) initiatives. What are your thoughts

## on the importance of increasing diversity within the scientific community?

**NICHOLAS:** I think it's more important now than ever. My goal is to get creative in how we support the development of a diverse and equitable workforce through approaches that don't trigger the falsely perceived unfairness of supporting students from disadvantaged backgrounds. Building programs that focus on first-generation college students, transfer students, and socioeconomically disadvantaged are ways to still capture students who wouldn't otherwise have support or opportunity. The mission doesn't change, just the logistics. It's why I founded 1stGenInSTEM, a nonprofit organization dedicated to empowering first-generation students to succeed in STEM fields.

**HINTON:** The conversation around DEI has evolved, and it's important to focus on strategies that benefit everyone by prioritizing career development, mentoring, leadership training, and career coaching. Career development programs ensure that individuals have the tools, resources, and guidance necessary to navigate their professional journeys with confidence. Leadership training equips people to take on key roles in their organizations, fostering a culture of innovation, collaboration, and excellence. Career coaching provides tailored support to help individuals achieve their goals, overcome challenges, and unlock their potential. Mentorship programs are especially powerful, as they not only guide individuals in their growth but also foster meaningful, long-term connections that benefit both mentors and mentees. These programs create a ripple effect, spreading knowledge, expertise, and encouragement throughout the professional community.

**EVERETT:** Diversity, equity, and inclusion are essential for advancing science and improving healthcare outcomes. A diverse scientific community brings a wider range of perspectives, which leads to more innovative solutions and equitable outcomes. It's deeply concerning to see DEI initiatives under attack, as they play a critical role in addressing historical inequities and fostering an inclusive environment where everyone can thrive. As a researcher and mentor, I am committed to advocating for DEI initiatives and ensuring that the next generation of scientists and physicians reflects the diversity of the populations we serve.

**ONUMAH:** Increasing diversity in the scientific community is necessary for a bigger overall impact, and it also levels the playing field to ensure that the benefits of a scientific development are not skewed toward only one or just a few groups.



**Stanley Andrisse, PhD, MBA,**  
Assistant Professor, Physiology and Biophysics,  
Howard University College of Medicine, Washington, D.C.

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**Endocrinology fascinates me because it intertwines complex biological systems and holds immense potential to improve lives. My passion stemmed from seeing the disproportionate burden of metabolic diseases, such as diabetes, in underserved communities and wanting to make a difference. This field allows me to merge science with advocacy for health equity.**

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**ANDRISSE:** Diversity is not just a moral imperative but a driver of scientific innovation. A diverse scientific community ensures broader perspectives, fosters creativity, and addresses the unique health challenges of all populations. Despite recent setbacks, we must remain resolute in advancing DEI efforts to create a more equitable and impactful scientific ecosystem.

**EN: How has the Endocrine Society played a role in your professional growth?**

**NICHOLAS:** The Endocrine Society has made me feel accepted and that I belong in science. Through the FLARE program and seeing the commitment to supporting trainees of every recent Endocrine Society president, I had found a professional home. The Society has become a platform for me to grow as a leader through service on committees, to share and receive feedback on my science, and for my now extensive professional network that supports me in navigating the politics of academia.

**HINTON:** The Endocrine Society, particularly the FLARE program, has been instrumental in shaping my professional growth. My recruitment to FLARE made me feel seen and valued, especially during the challenging transition from graduate

school to a postdoctoral position. Without Dr. E. Dale Abel's encouragement and support, I'm not sure how I would have navigated that pivotal stage of my career. The program didn't just provide accolades and funding, it completely transformed the way I approach my environment, how I manage my work, and how I envision my future. I would strongly encourage others to embark on the FLARE journey because it is truly life changing. Beyond the workshops and mentoring you receive, the program emphasizes building meaningful, long-term relationships.

These relationships have become the foundation of a supportive network that continually pushes for excellence and fosters collaboration within the scientific community. The partnerships and collaborations that have emerged from these connections have been remarkable, and I'm genuinely grateful for how FLARE has shaped my career and my approach to mentorship and leadership.

**EVERETT:** The Endocrine Society has been instrumental in my professional development, offering invaluable opportunities for networking, collaboration, and mentorship. My participation in the FLARE program was particularly transformative, providing the support and infrastructure necessary for my success while



While at ENDO 2022 in Atlanta, Ga., Dequina Nicholas, PhD, made sure that folks on social media knew she was in her “happy place.”





**Estelle M. Everett, MD, MHS,**

Assistant Professor-in-Residence, Medicine, Geffen School of Medicine at the University of California, Los Angeles, Los Angeles, California

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**Don't be afraid to advocate for yourself and pursue opportunities that align with your passions. Endocrinology is a dynamic and rewarding field that offers endless opportunities to make a difference in patients' lives. Stay resilient, stay curious, and remember that the sky is the limit.**

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establishing the Society as my academic home. The Society's dedication to supporting early-career investigators has been especially impactful. I have greatly benefited from its programs, resources, and the mentorship of its many members, who have generously shared their expertise and guidance to help me grow both personally and professionally.

**ONUMAH:** The Endocrine Society has been my main scientific society since 2005. I have had the opportunity to participate in various committees. I have been able to network and develop amazing professional and personal relationships. The Endocrine Society has also been my number one resource for staying abreast of the constantly evolving scientific discoveries with many educational and learning options. I have served as a member of the Board of Directors for the Society since 2022, and it has been an honor serving in this capacity and representing my colleagues and members of the Society.

**ANDRISSE:** The Endocrine Society has been instrumental in my career, providing platforms for advocacy, mentorship, and collaboration. Programs like FLARE have connected me with a network of inspiring professionals and resources that have shaped both my scientific contributions and outreach efforts.

**EN: What advice would you give to young Black medical students aspiring to pursue a career in endocrinology?**

**NICHOLAS:** Endocrinologists make great colleagues. Get involved with the Endocrine Society as soon as possible through their programs such as FLARE, ExCel (Excellence in Clinical Endocrinology Leadership), REGMS (Research Experiences for Graduate and Medical Students), online modules, and Special Interest Groups. Besides all of the professional benefits, the best part of the Endocrine Society is the supportive community, so take the initiative to join it.

**HINTON:** My first piece of advice is to press forward and never doubt your ability to succeed. Seek out mentors who look like you — they can offer invaluable perspectives and guidance — but also remain open to mentors from all backgrounds who are genuinely invested in your success.

Be patient, as becoming a scientist and physician requires time, dedication, and persistence. Avoid burning bridges, even when challenges arise. If you make mistakes, acknowledge them, apologize, and use the experience to learn and grow. It's okay to evolve and improve with the help of others. I also encourage


you to participate in translational or basic research. Engaging in research can deepen your understanding of endocrinology, contribute to the field, and open doors to impactful collaborations.

Finally, surround yourself with an outstanding team. While you are strong on your own, you become even greater when you have a reliable and supportive team to collaborate with. Some challenges cannot be faced alone, and having the right people around you will make all the difference in your journey.

**EVERETT:** My advice is to embrace your unique perspective as a strength and remain confident in your abilities. While imposter syndrome is real, know that you belong and have the skills to succeed. Seek out mentors who understand your journey and can provide guidance and support. Don't be afraid to advocate for yourself and pursue opportunities that align with your passions. Endocrinology is a dynamic and rewarding field that offers endless opportunities to make a

difference in patients' lives. Stay resilient, stay curious, and remember that the sky is the limit.

**ONUMAH:** There are so many career paths from basic science to clinical scientist to clinical practitioner and lots in between. Join the Endocrine Society and get actively involved. Ask questions, find a mentor if you do not already have one, and be a mentor to someone else. This is an exciting time to be an endocrine scientist. If you are thinking about it, just do it.

**ANDRISSE:** Never let anyone define your limits or underestimate the value of your unique perspective. Seek out mentors, build a strong network, and remain focused on your passion for improving health outcomes. You belong in this field, and your journey can inspire others to follow. 



Onumah (left) is pictured here with Alina West, MD, PhD, at the Excellence in Endocrinology reception at ENDO 2024 in Boston last June.

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

# COMPREHENSIVE CARE FOR PERSONS WITH DIABETES: A CERTIFICATE PROGRAM



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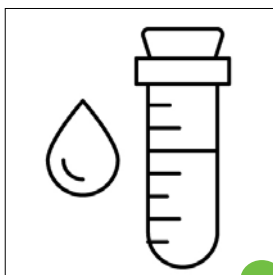
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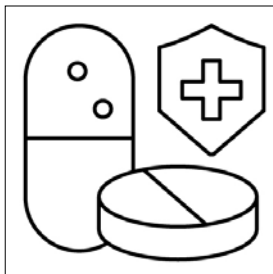
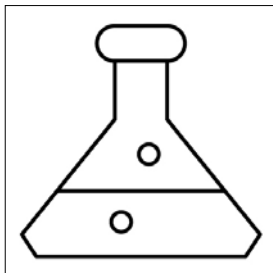
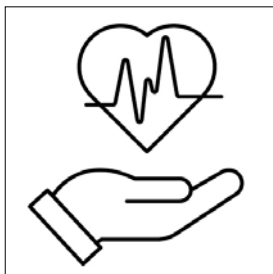
FOR MORE INFORMATION AND TO REGISTER, PLEASE VISIT [ENDOCRINE.ORG/CCPD](https://endocrine.org/ccpd).



# going



# with the flow



## Medical School Engagement Program Is Off to a Strong Start

When the Endocrine Society launched its Medical School Engagement Program in 2024, it was an effort to increase the flow of endocrinologists into the workforce. Now, less than a year later, *Endocrine News* gets an exclusive update from some of the universities that have taken an active role in keeping endocrinology a viable career option for future generations.

**I**n recent years, the field of endocrinology has faced significant challenges, with workforce shortages and declining competitiveness in recruitment. A 2014 paper by Vigersky, et al., highlighted insufficient numbers of endocrinologists to meet demand and called for proactive strategies.

Subsequent studies in 2020 by Romeo, et al., and Tsai, et al., underscored the inadequate growth of the workforce and its implications, with only about 8,000 active endocrinologists serving the U.S. population. Once the most competitive internal medicine fellowship in 2010, endocrinology now struggles to attract and retain talent, emphasizing the need for bold, systemic changes to revitalize the field. Recent news reports highlight the need for more endocrinologists across the country. In fact, one study by GoodRx from December 2024 found that 70% of U.S. counties do not have a single endocrinologist despite the increasing numbers of diabetes and obesity.

The Endocrine Society continues to build on our strong commitment to offering programs that make a meaningful impact in addressing these challenges. The Medical School Engagement Program (MSEP) was launched in 2024 to address the lack of exposure to the endocrinology specialty during medical school. Since students are not required to rotate through endocrinology outpatient clinics, where most endocrine care occurs, they need alternative options to learn about and experience clinical endocrinology in practice.

MSEP offers an award to each medical school to provide interesting and interactive events,

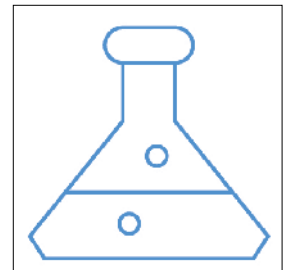
two student travel awards to attend **ENDO 2025** in San Francisco, Calif., in July, and a growing community of programs across the country. Ten medical schools were awarded in 2024, look here for more information about the current awardees: [www.endocrine.org/our-community/advancing-endocrinology-and-public-health/medical-school-engagement-program/msep-2024-awardees](http://www.endocrine.org/our-community/advancing-endocrinology-and-public-health/medical-school-engagement-program/msep-2024-awardees).

We reached out to some of the participating schools to learn more about their programs and activities and how these events were received by the potential endocrinologists of tomorrow:

## University of New Mexico



MSEP Program Leads Christina Lovato, MD, and Teodor Duro, MD, (second and third from top left) are joined by the students at their Endocrinology Interest Group session.



**T**he University of New Mexico has been hosting monthly Endocrinology Interest Group (EIG) meetings since August with first- through third-year medical students, endocrinology fellows, and internal medicine residents attending.

Topics discussed include clinic shadowing opportunities, potential research/scholarly projects, and interesting endocrine cases. They have also discussed the favorite glands of the endocrinology faculty!

– *Christina Lovato, MD, University of New Mexico MSEP Program Lead*

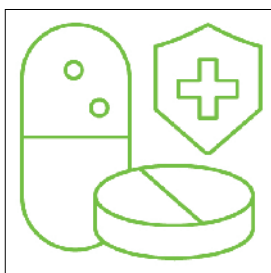
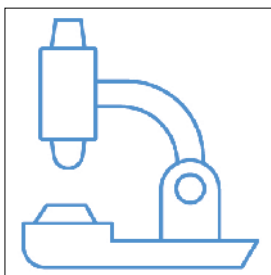
Far right: The University of Cincinnati’s MSEP event was promoted through the use of this colorful handout and enticed attendees with a catered meal from Chipotle, along with free CGMs (below), as well as mentoring opportunities!



**B**uilding on the success of our well-established Internal Medicine interest group at the University of Cincinnati, we (UC) conducted strategic planning sessions with stakeholders at all levels, from students to educational leaders in the dean’s office, and launched an endocrinology-focused student interest group. Our inaugural event, “Guac, Glucose & Great Vibes,” drew 24 enthusiastic medical students, primarily first- and second-years, and featured a mix of engaging and informative activities.



The students were proud to learn that UC was one of 10 institutions nationally selected to receive a grant aimed at engaging students in the field of endocrinology. Attendees enjoyed a catered meal and received continuous glucose monitors, while hearing from physicians at various stages of training about their personal journeys into endocrinology. The event also included an overview of what endocrinologists do, the benefits of the MSEP program for selected institutions, and plans for future group activities. The strong turnout and positive feedback from this event reflect a growing interest in endocrinology among our students and set the stage for continued success. – Mercedes Falciglia and Aleona Zuzek, *University of Cincinnati Medical School Program Leads*

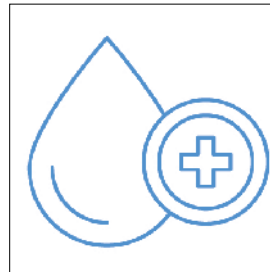


A day in the life of an endocrinologist was the highlight of the MSEP event at the University of Cincinnati.

## University of Virginia

**A**t the University of Virginia, attendance to the Endocrinology Interest Group has been delightfully robust, growing, and enthusiastic. Events in the fall included dinner and engagement with faculty discussing “Why Endocrinology?” and “Academic versus Private Practice Opportunities.” We also created a near-peer group so that students can meet informally with our endocrine fellows to explore career options.

Spring programs will cover hot topics such as “The Use of Technology in Endocrinology,” “Hormone Administration, Public Policy and the Law,” “Professional Athletes and Doping,” as well as a fun endocrine trivia night. Since any interest by students must be maintained throughout residency, we plan to connect graduating students with endocrinology fellowship program directors at their matched institutions. – *Loyal Esper, MD, University of Virginia MSEP Program Lead*



The MSEP event at the University of Virginia drew quite the crowd of interested students who discussed with faculty the myriad reasons they chose endocrinology. With such a large number of interested students (below), there are already more events planned throughout the spring.



In November, students at the University of Minnesota learned about CGMs and even got to try out their own devices to wear for real-life experience with diabetes technology.



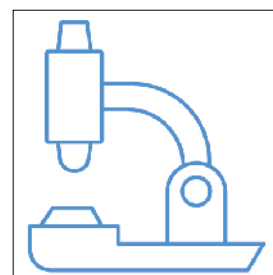
With under four months of active programming behind us, we see promising trends and have learned important lessons for future success. At the University of Minnesota in October, the Endocrine Society joined their event featuring hands-on diabetes device training. With approximately 30 students in attendance, adult and pediatric endocrinologists, physician assistants/physician associates, and certified diabetes care and education specialists guided the students through an interactive workshop to learn more about diabetes technology and delivery systems.

The students rotated through stations helping them experience insulin pens and syringes, GLP-1 pens, glucagon, glucometers, and each participant was able to receive a continuous glucose monitor to wear. This collaborative event allowed students to visualize the monitoring and treatment modalities available for those with diabetes.

– Megan Kristan, MD, University of Minnesota MSEP Program Lead



Amber Chiu, RD, CDCES, is teaching the University of Minnesota MSEP participants how to check their blood sugar using a fingerstick meter after a hearty meal was served.





# Stanford University



**A**t Stanford University, the MSEP kicked off with great enthusiasm, beginning with an event in September that brought together faculty, endocrinology fellows, and medical students for an engaging discussion about career pathways in endocrinology. Attendees shared personal insights on why they chose the field and at what stage of their careers they made this decision, highlighting the diversity of opportunities within endocrinology. This event also featured a journal club format where participants reviewed a recent publication.

The second event focused on the evolution of type 1 diabetes treatment, featuring a dynamic faculty speaker who detailed advances from early insulin therapies to modern automated insulin delivery systems, as well as challenges related to health equity and disparities in diabetes care. Inspired by this session, students posed thoughtful questions and left eager to make an impact in the field. Stanford's growing Endocrinology Interest Group now includes a committed cohort of students, one of whom is already preparing an abstract submission for ENDO 2025.

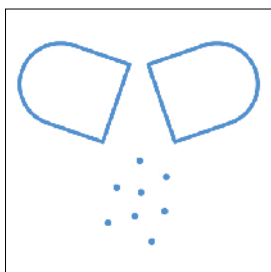
The program's next event in January featured a faculty meet-and-greet showcasing research opportunities in basic, clinical, and translational endocrinology, helping students connect with mentors for summer and year-long research projects. With these diverse events, Stanford is fostering a strong interest and engagement in the field of endocrinology among medical students.  
– *Dimpi Desai, MD, and Neil Gesundheit, MD, Stanford University MSEP Program Leads*



**Top: Dimpi Desai, MD; Joy Wu, MD, PhD; and Neil Gesundheit, MD, with students from Stanford Endocrinology Interest Group.**

**Bottom: Stanford University's MSEP program had two events. The first one focused on the reasons why attendees chose a career in endocrinology. The continuing evolution of type 1 diabetes treatment highlighted the second event that included a robust question and answer session.**

## Albert Einstein College of Medicine



**A**t the Albert Einstein College of Medicine, the Endocrine Interest Group had its inaugural meeting with about 25 students hearing what life is like for an academic clinical endocrinologist (who also happens to run the Endocrine Systems course at the college). The EIG student directors, collaborating with the pediatric and adult endocrine clinical teams, have begun to place over 40 students (and growing) into clinical shadowing experiences, research collaborations, and sent invitations to interested students for multidisciplinary endocrine-related tumor boards, thyroid being the most popular with over 10 requests.



Einstein also hosted an EIG meeting introducing students to physician scientists working on clinical and translation research related to endocrine and aging. The next meeting will introduce the medical students to fellowship training for adult and pediatric endocrinology, with program directors and current fellows sharing their experience. All events include an endocrine swag raffle, and I continue to entice students to attend by sharing endocrine clinical pearls for the USMLE (United States Medical Licensing Examination) step I exam.

– *Eric Epstein, MD, Albert Einstein College of Medicine MSEP Program Lead*


### References

Romeo GR, Hirsch IB, Lash RW, Gabbay RA. Trends in the Endocrinology Fellowship Recruitment: Reasons for Concern and Possible Interventions. *The Journal of Clinical Endocrinology & Metabolism*. 2020;105(6):1701-1706.

Tsai K., et al. Driving Factors to Pursue Endocrinology Training Fellowship: Empirical Survey Data and Future Strategies. *The Journal of Clinical Endocrinology & Metabolism*. 2022;107(6): e2459–e2463.

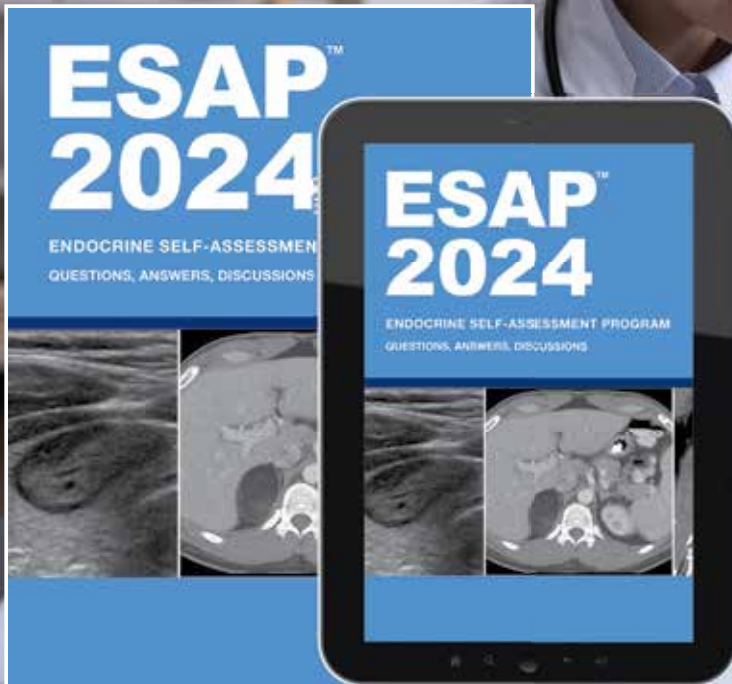
Ault, A. Dec. 24, 2024. “70% of US Counties Have No Endocrinologist, New Study Finds.” Medscape: [https://www.medscape.com/viewarticle/us-counties-have-no-endocrinologist-new-study-finds-2024a1000p3j?&null&icd=login\\_success\\_email\\_match\\_fpf&form=fpf](https://www.medscape.com/viewarticle/us-counties-have-no-endocrinologist-new-study-finds-2024a1000p3j?&null&icd=login_success_email_match_fpf&form=fpf)

To learn more about the MSEP or to apply, go to: <https://www.endocrine.org/our-community/advancing-endocrinology-and-public-health/medical-school-engagement-program>

The examples here provide a glimpse into the exciting work of the Medical School Engagement Program and experience of six of our first ten awardees. The application for our 2025 MSEP will be open Feb 3 – March 3, 2025. Don't miss out on your chance to participate in this important work. 



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## Short-Term Extension of SDP and Telehealth Waivers Signed into Law



**O**n December 21, 2024, President Joe Biden signed into law a slimmed-down, temporary government spending bill to avoid a government shutdown.

The legislation that funds the government through March 14, 2025, also included a short-term extension of the Special Diabetes Program (SDP) and an extension of the Medicare telehealth waivers until March 31. This short-term agreement, reached just a few days before Christmas, means that government funding and many health priorities still will need to be addressed before the March deadlines during the first months of President Donald Trump's new term.

Earlier in December, congressional leaders had reached bipartisan agreement on a broad package of health legislation that they had tied to the FY 2025 funding bill. The package included Endocrine Society policy priorities: a two-year extension of SDP, increasing funding for the program to \$200 million per program per year; and a two-year extension of telehealth waivers and language to avert a 2.8% physician payment cut. However, as Congress was readying for a vote, President-Elect Trump argued against it. While the short-term bill that passed protected the country from a government shutdown at Christmas, it meant that these health priorities will still need to be addressed.

The Endocrine Society continues to advocate for these issues with the new Congress. Visit our website at [www.endocrine.org/advocacy](http://www.endocrine.org/advocacy) for updates.

## European Commission Bans BPA in FCMs

**O**n December 19, 2024, the European Commission announced a ban on bisphenol-A (BPA) and other bisphenols in food contact materials (FCMs).

This action follows the revised assessment from the European Food Safety Agency, indicating substantial harm from BPA at extremely low levels of exposure. As a consequence of the ban, BPA “will not be allowed in products that come into contact with food or drink, such as the coating on metal cans, reusable plastic drink bottles, water distribution coolers, and other kitchenware.”

The Endocrine Society welcomes this science-based regulation as an important step in reducing exposure to BPA and other bisphenols that are known to be endocrine-disrupting chemicals (EDCs). However, because the ban does not comprehensively address all bisphenols, we remain concerned about regrettable substitutions with uncertain safety profiles for endocrine effects, and we need stronger data requirements for chemicals in FCMs to enable efficient regulatory action. Furthermore, because this ban only addresses a specific sector of the economy, a comprehensive revision of EU chemicals legislation remains necessary to better protect consumers from other sources of exposure to EDCs.




## NIH Funding in Jeopardy

Funding for the National Institutes of Health (NIH) is at a standstill. Congress passed a temporary spending bill in December called a continuing resolution (CR) to fund the government through March 14, 2025, meaning that the NIH and other agencies are operating under the previous year's budget at this time. CRs are disruptive to research as they hinder scientific progress by delaying the distribution of grants and may lead to inadequate support of scientific talent.

The Endocrine Society will continue to urge Congress to complete the Fiscal Year (FY) 2025 appropriations process and to protect and increase funding for the NIH in FY 2026. To make the case for NIH funding, the Society will bring endocrine scientists to Washington, D.C., for a research-focused Hill Day in March and will also participate in the Federation of American Societies for Experimental Biology (FASEB) Capitol Hill Day to deliver a similar message.

As traditionally expected with a new presidential administration, Monica Bertagnolli, MD, submitted her resignation as the director of the NIH in January. Jay Bhattacharya, MD, PhD, a professor of health policy at Stanford University, is President Trump's nominee to replace Bertagnolli as the NIH director. Presidentially appointed nominees must undergo a Senate confirmation process, and at the time this article was written, a date had not been selected for Bhattacharya's hearing.

Last summer, chair of the House Energy and Commerce Committee, Cathy McMorris Rodgers (R-WA), introduced a proposed framework for reforming the NIH that included the consolidation of the 27 institutes and centers down to 15, raising many questions about funding for the institutes. The proposed framework was included in the House FY 2025 Appropriations bill to start a conversation about NIH reform. While there has not been any further movement from Congress on NIH reform, we expect the conversation to restart as the new session of Congress begins.

Meanwhile, the NIH has reestablished the Scientific Management Review Board (SMRB) to conduct a thorough review of the NIH and to provide recommendations to the NIH director and secretary of Health and Human Services. Endocrine Society staff are closely monitoring SMRB and Congress for information on NIH reform and are engaging with members to develop the Society's recommendations for improvements for biomedical research at the NIH. 



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While there has not been any further movement from Congress on NIH reform, we expect the conversation to restart as the new session of Congress begins.

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# At Arm's Length

A look at a new mealtime, injection-free insulin patch

Priyanka Majety, MD, discusses a new, FDA-approved wearable insulin-delivery patch that could potentially improve patients' insulin adherence as well as their quality of life.

COMPILED AND WRITTEN BY DEREK BAGLEY



## ◀ Wearable Patch

Last summer, a wearable patch designed for mealtime insulin delivery (in lieu of traditional injections) received clearance from the U.S. Food and Drug Administration, extending the patch's wear time from three to four days, potentially eliminating 12 mealtime insulin injections.

The CeQur Simplicity is an insulin patch that weighs only about 10 grams and can hold up to 200 units of short-acting insulin, using a flexible cannula that administers insulin and allows for on-demand dosing with each click, delivering two units of insulin.

Priyanka Majety, MD, assistant professor in the Division of Endocrinology, Diabetes, and Metabolism at Virginia Commonwealth University in Richmond, says that while she doesn't offer this option to all her patients with diabetes she sees in her clinic, she believes there is a specific niche of patients who could greatly benefit from this device, especially those with needle phobia, who forget to carry the insulin pens to work, or individuals who wish for a more discreet way to give themselves insulin. "For example, I have a kindergarten teacher who does this so that her students are not exposed to needles," she says.

Majety goes on to say that the patients she offered the patch to were excited to use something other than multiple daily injections. "These were patients who did not want to inject insulin several times a day for various reasons," she says. "We teach them

how to load it with insulin, how to change it, and at the beginning address concerns regarding switching from familiar methods like syringes and pens. When I introduce this patch in my clinic, I emphasize its ease of use and the potential for better adherence to insulin therapy."

Majety tells *Endocrine News* that she recently had a patient diagnosed with diabetes after a total pancreatectomy and autologous islet cell transplant, who found managing injections and daily glucose checks overwhelming and gradually stopped adhering to her regimen. "When she came to the clinic, motivated but frustrated with carrying pens and needles, we introduced her to the CeQur patch," Majety says. "She was excited to learn about a less burdensome option. After some initial learning, she started using the patch and is now taking more mealtime insulin doses than before."

And that improvement in compliance leads to better outcomes. Many patients, Majety says, especially those with injection-related anxiety or those who forget to dose on time, find the simplicity and convenience of the patch appealing. By making mealtime insulin delivery as easy as a click, it promotes more consistent insulin administration.

## Improving Patient Adherence and Quality of Life

Majety points to a 2019 study by Bergenstal, et al., in *Diabetes Technology & Therapeutics*, which was a multicenter,

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randomized controlled trial that compared the efficacy and safety of bolus insulin delivery using a wearable insulin patch versus an insulin pen in adults with type 2 diabetes who were inadequately controlled on basal insulin.

A total of 278 participants were followed for 44 weeks. The primary endpoint was a reduction in HbA1c, which improved by 1.7% in the patch group and 1.6% in the pen group, demonstrating non-inferiority. Glycemic control was maintained at 44 weeks. Both groups had similar rates of adverse events, with the patch showing a slight advantage in reducing blood glucose variability. “Importantly, patient and healthcare provider satisfaction were significantly higher with the patch, particularly for ease of use and social convenience,” Majety says.


By week 48, a greater percentage of patients who used the patch expressed a preference for it over the pen. Safety profiles were similar, with no significant differences in severe hypoglycemia or weight gain between the two groups. “The study highlighted the patch’s potential to improve adherence and quality of life for patients managing mealtime insulin,” Majety says.

### Increasing Accessibility

What’s more is this patch has the potential to be a game-changer for equity and accessibility, Majety says, especially for patients who may struggle with traditional insulin delivery methods due to factors like dexterity issues, injection anxiety, or differently abled.

Majety is careful here, though, saying that it’s important to raise awareness that this patch isn’t some sort of panacea; patients must still take their once-daily basal insulin to maintain comprehensive glucose control. The patch can improve adherence and quality of life, but education around its use in combination with basal insulin is critical for achieving optimal diabetes outcomes.

Majety goes on to say that more data is needed to understand the patch’s true impact, and that it would include longer-term studies to evaluate the patch’s sustainability and long-term impact on glycemic control and patient outcomes, as well as research on the patch’s use in diverse populations, including pediatric and elderly patients, could broaden its clinical application. Exploring the cost-effectiveness of the patch compared to other insulin delivery methods will also be crucial. Studies that assess the psychological benefits, such as reducing injection-related anxiety and improving quality of life, could further support its widespread adoption.

“[The patch’s] simplicity and reduced need for multiple daily injections make it more accessible for a broader range of patients,” Majety says. “Although it is early, in my clinic, I’ve seen how this innovation can empower patients who may have previously been inconsistent with insulin therapy, ultimately contributing to better diabetes management outcomes.” 

– BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. IN THE JANUARY ISSUE, HE WROTE ABOUT THE LINK BETWEEN THYROID CANCER AND ENDOCRINE-DISRUPTING CHEMICALS IN PREGNANT WOMEN OF LOWER SOCIOECONOMIC STATUS.