

MAY 2022

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Endocrine news

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ENDO2022

INTERNATIONAL

Highlights from the Endocrine Society's First Ever Hybrid Annual Conference:

JCEM CASE REPORTS DEBUTS:

Editor-in-Chief William F. Young, Jr., MD,
discusses the Society's newest journal

LABORATORY NOTES Q&A:

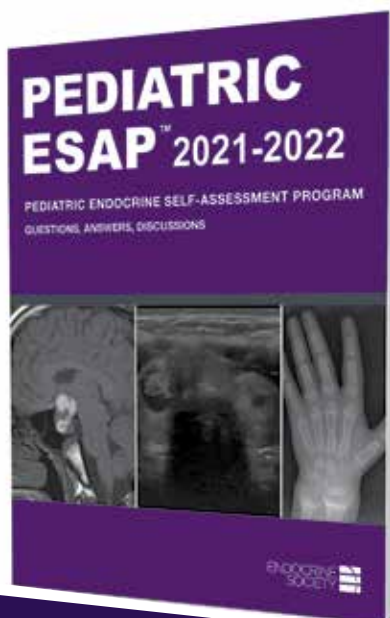
Brainstorming with Michael W. Schwartz, MD

- **ADRENAL YEAR IN REVIEW:** Gary Hammer, MD, PhD, gives *Endocrine News* the lowdown on what attendees can expect from his "Year in Adrenal Science" session.
- **BRIDGING THE GAP:** Gender-affirming hormone therapy for transgender adults.
- **RATING THE RISKS:** An ENDO 2022 Debate on whether to intervene or observe in patients with low-risk thyroid cancer.
- **CARE PACKAGE:** EndoCares, the Endocrine Society's patient engagement program, is on the scene in Atlanta during ENDO 2022.

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In anticipation of the Endocrine Society's new open access journal, *JCEM Case Reports*, its editor-in-chief, William F. Young, Jr., MD, talks to *Endocrine News* about how this new journal will have a place for both master clinicians and early-career physicians to present their cases, why it's important to hear the patient's perspective, as well as his own very first particularly challenging case.

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Endocrine News talks with Christine M. Burt Solorzano, MD, chair of the committee that helped launch the Endocrine Society's reinvigorated patient outreach program, EndoCares. With its flagship in-person event taking place in Atlanta during **ENDO 2022**, EndoCares is set to become an important bridge between the Endocrine Society's members and the patients they treat.

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COMPILED AND WRITTEN BY COURTNEY CARSON

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Advocacy season for NIH funding officially begins; and Check out advocacy events at **ENDO 2022**; Endocrine Society members advocate for insulin affordability, diabetes prevention, diabetes research.

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Ready to Reconnect: ENDO 2022 Offers New Opportunities to Interact with Endocrine Community

After three years, we are finally on the verge of reuniting face to face as a community. I cannot wait to see many of you in Atlanta next month for **ENDO 2022**.

While I am excited to catch up in person with those who travel to Atlanta June 11 – 14, we are committed to learning from and improving how we gather responsibly and inclusively as a result of the COVID-19 pandemic. Our reliance on virtual

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**Hear directly from leading professors
and clinicians as they delve into a
variety of topics across a robust
array of endocrine debates, career
development workshops, symposia,
and product theaters.**

”

technologies has helped us to bridge greater geographic distances and connect more frequently with each other worldwide. We will put that knowledge to work at **ENDO 2022** by offering our inaugural hybrid meeting, where you can select the experience that makes the most sense for your individual needs.

More than 100 sessions will be available on site and virtually, offering plenty of opportunities to access a variety of content that interests you. Those of you joining us on site in Atlanta will have access to an additional 70 sessions delivered to in-person participants. **ENDO 2022** will open with the

Presidential Plenary focusing on emerging type 1 diabetes research. Matthias Hebrok, PhD, will explore the possibilities of stem cell-generated beta cells, and Moshe Phillip, MD, will discuss his work on the artificial pancreas.

The event will kick off a stellar plenary line-up, including sessions on health equity, intersex and transgender athletes, cardiovascular health in women, cancer, and fertility and reproduction. I am eager to hear directly from noteworthy speakers including Nobel Prize winner Gregg Semenza, MD, PhD, who will be speaking about hypoxia regulation of metabolism and stem cell phenotypes in breast cancer.

Hear directly from leading professors and clinicians as they delve into a variety of topics across a robust array of endocrine debates, career development workshops, symposia, and product theaters.

ENDO 2022 will feature new opportunities to interact with the latest breakthroughs in our field.

Access digital posters and review recommended content at the touch of a button, whether you attend the meeting virtually or in person. Twelve digital poster pods in the ENDOExpo will be filled with monitors where you can access posters digitally using sophisticated search options. These pods also will play host to daily Rapid Fire Presentations from the authors of award-winning and top-scoring abstracts.

The Basic Science Pavilion will offer basic researchers a dedicated on-site space for learning and networking tailored specifically to their needs. The Pavilion will house a social lounge as well as the Basic Science Pathway sessions and will play host to two Basic Science Receptions on Saturday and Monday events, making it the ideal space to connect with others and discuss your passion for research.

Our ENDOExpo will once again offer you the opportunity to meet directly with exhibitors to discuss new products and technologies in the field. In addition to a variety of booths and product theaters, the ENDOExpo will host our new Communications & Career Center. The Triple C will provide

“

**After so many months of connecting
on computer screens, we can
reconnect with long-time friends and
meet new ones.**

”

resources to help you advance your career. Society leaders and volunteers will share the latest news about our initiatives and programs in the Triple C's presentation area.

For those joining us in Atlanta, I look forward to catching up with you at our brand-new All-Attendee Social on Sunday, June 12. Meeting attendees and exhibitors will be able to mix and mingle at this fun, happy hour-style affair. After so many months of connecting on computer screens, we can reconnect with long-time friends and meet new ones.

Whether you prefer to access our virtual platform or join us in-person in Atlanta, make sure you take advantage of all **ENDO 2022** has to offer. I look forward to greeting you at the seminal meeting in hormone health and science. ^{EN}

Carol H. Wysham, MD
President, Endocrine Society

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FROM THE **EDITOR**

Welcome to Atlanta and ENDO 2022!

When the throngs of attendees gather in the Georgia World Congress Center in Atlanta for **ENDO 2022**, they will be a part of history as we all get back into the swing of in-person meetings again.

Aside from being endocrinology's most prestigious gathering of clinicians and scientists from around the world, this year's **ENDO** is also the first Endocrine Society Annual Conference to be held in a hybrid format; attendees are not only converging in Atlanta, but they're also tuning in virtually.

As usual, there will be an extensive program featuring cutting-edge science, varied poster sessions, and a look at the newest products and technologies at the **ENDO** Expo show floor, not to mention the opportunity to connect with colleagues from around the world. For those of you attending **ENDO 2022** in person, there are several events taking place throughout the conference that will let you actually mix and mingle and greet your colleagues face to face:

- ▶ **All-SIG Reception** *Friday, June 10, 6:00 p.m. – 8:00 p.m.*
The inaugural Special Interest Group (SIG) Reception at **ENDO 2022** will be hosted at the College Football Hall of Fame. The Endocrine Society designed this by-invitation-only event to recognize and celebrate the work of our SIG members dedicated to advancing the Society's mission to accelerate scientific breakthroughs and improve health worldwide.
- ▶ **The ENDO 2022 Association of Endocrine Chiefs & Directors Reception** *Friday, June 10, 7:00 p.m. – 9:00 p.m., International Ballroom C, North Tower*
Join today's leaders in the field of endocrinology for an evening of learning and comradery. Open for registration to all **ENDO 2022** in-person attendees, guests have the chance to catch up with old

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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.



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colleagues and make new acquaintances during a lively, thought-provoking evening that will blend light bites, drinks, networking, and an engaging speaker.

► **Basic Science Reception** *Saturday, June 11, 5:45 p.m. – 6:45 p.m., and Monday, June 13, 5:15 p.m. – 6:15 p.m., Room B401*


Enjoy beer, wine, non-alcoholic beverages, and light appetizers while you mix and mingle with your basic science colleagues in the Basic Science Pavilion. No matter what your scientific focus, all are welcome at this basic science social event at **ENDO 2022**.

► **All-Attendee Social** *Sunday, June 12, 5:00 p.m. – 6:30 p.m., Halls A1/A2*

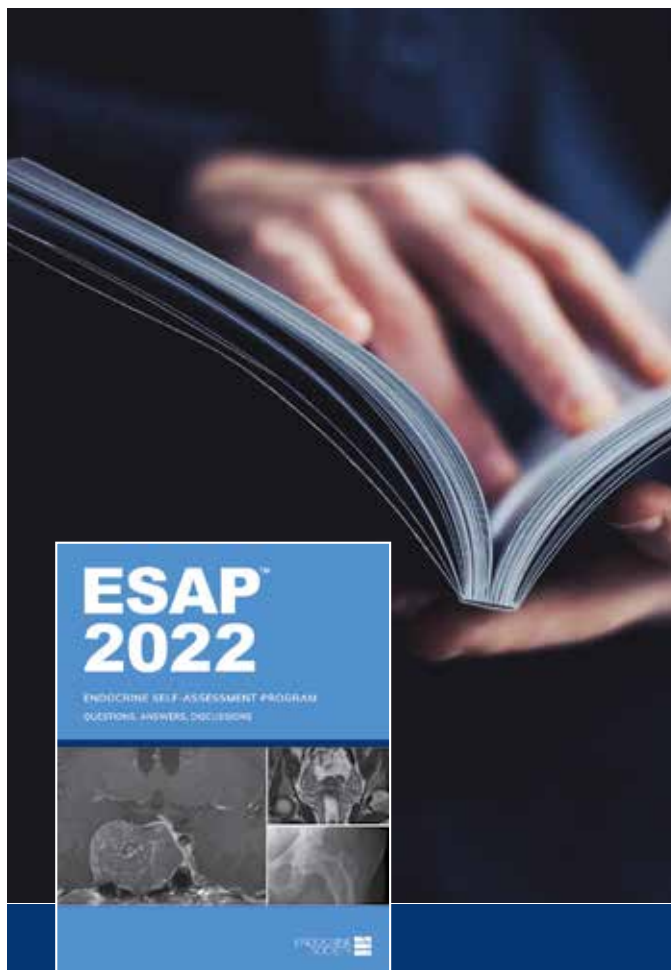
After more than two years of connecting onscreen, it is time to gather (safely) for the first-ever **ENDO** All-Attendee Social. During this spirited, happy hour-style affair, **ENDO 2022** attendees and exhibitors will have the chance to mix, mingle, and enjoy looking back and planning ahead in a fun, relaxed environment. Enjoy this cheerful social with old friends and make new ones and keep an eye out for a few fun surprises too!

Many of these events require an extra reservation so be sure to reserve your spot today!

As usual, senior editor Derek Bagley and I will be all over the place at **ENDO 2022**, so please feel free to suggest story ideas to us or tell us what you think of the magazine. Keep in mind that we get some of our best ideas from members like you.

If you're attending the conference virtually, be sure to follow us on Twitter (@**Endocrine_News**) since both Derek and I will be live tweeting from Atlanta throughout! You would be surprised at how many **ENDO** attendees in the past have ended up in the pages of *Endocrine News* via a social media connection. Maybe this year it will be you! 

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



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Extracellular Vesicles Offer New Insights into Treating Endocrine Disorders

Endocrine Society issues Scientific Statement to explain the endocrine roles of extracellular vesicles.

In a new Scientific Statement released earlier this month, the Endocrine Society describes the importance of extracellular vesicles as a new research target for understanding the causes of certain endocrine disorders such as cancer and diabetes and discovering new treatments for these disorders.

During the past decade, endocrine researchers have shown great interest in extracellular vesicles and their hormone-like role in cell-to-cell communication. The statement provides insight into the functions of extracellular vesicles, which are secreted from all cells into biological fluids and carry endocrine signals that allow interactions between cells and distant sites in the body.

“We’re really excited about this new area of research that can help us better understand how people develop common endocrine conditions such as diabetes, obesity, and cancer,” says Carlos Salomon PhD, DMedSc, MSc, BSc, associate professor at the University of Queensland in Brisbane, Australia. “The statement highlights the likely uses of extracellular vesicles in detecting and monitoring disease progression and their role as next-generation drug delivery vehicles.”

Extracellular vesicles can help researchers better understand how to diagnose endocrine-related conditions including cancer and predict its progression. The role of extracellular vesicles as a cancer biomarker may extend to predicting real-time response to therapy.

Extracellular vesicles are also involved in understanding the cause and treatment of diabetes, obesity, and heart disease. Recent studies have shown the potential of extracellular vesicles, particularly ones derived from stem cells, in treating diabetes. Research into the vesicles provides insights into the causes of insulin resistance and glucose intolerance in obesity.

Extracellular vesicles play an important role in the development of heart disease and could be useful for predicting risk. They also serve as biomarkers for high blood pressure and could have a therapeutic and blood pressure-lowering role.

“We hope this statement brings awareness to the significance of extracellular vesicles in endocrinology and encourages more research on their potential as biomarkers and therapeutics,” Salomon says.

Other authors of this statement are: Saumya Das of Massachusetts General Hospital and Harvard Medical School in Boston, Mass.; Uta Erdbrügger of the University of Virginia in Charlottesville, Va.; Raghu Kalluri of the University of Texas MD Anderson Cancer Center in Houston, Texas; Sai Kiang Lim of the Institute of Molecular and Cell Biology in Singapore; Jerrold M. Olefsky of the University of California-San Diego in La Jolla, Calif.; Gregory E. Rice of Inoviq Limited in Australia; Susmita Sahoo of the Icahn School of Medicine at Mount Sinai in New York, N.Y.; W. Andy Tao of Purdue University in West Lafayette, Ind.; Pieter Vader of Utrecht University and UMC Utrecht in Utrecht, the Netherlands; Qun Wang of Shandong University in Jinan, China; and Alissa M. Weaver of Vanderbilt University School of Medicine and Vanderbilt University Medical Center in Nashville, Tenn. Authors’ disclosures are listed in the manuscript.

The manuscript, “*Extracellular Vesicles and Their Emerging Roles as Cellular Messengers in Endocrinology: An Endocrine Society Scientific Statement*,” was published online in the Society’s journal *Endocrine Reviews*.

– Colleen William

Endocrine Society Applauds House for Taking Action to Improve Insulin Affordability

Underlying problem of rising insulin prices still needs to be addressed.

The Endocrine Society applauds the House of Representatives for hearing our call to improve insulin affordability for people with diabetes as it prepares to vote on the Affordable Insulin Now Act this week.

The bill would cap patients' out-of-pocket insulin costs to \$35 per month for people on Medicare and private insurance who rely on insulin to manage their diabetes. The Society supports an insulin co-pay cap and recommended this step in its position statement on insulin access and affordability.

While the Affordable Insulin Now Act is a promising step toward improving insulin affordability for some individuals, Congress must still address the underlying problem of soaring insulin prices, which tripled over a 15-year period, and continue to rise. Policies must be implemented to address the drivers of rising insulin prices, not just out-of-pocket costs.

An insulin co-pay cap is an important component to solving this problem. However, we caution against passing this as a standalone measure without including additional protections that address rising price, prevent premium increases, or result in a rising rate of uninsured Americans.

We look forward to continuing to work with Congress in a bipartisan manner to pass legislation that will lower healthcare costs and help the millions of Americans living with diabetes who rely on this lifesaving drug. The millions of people living with diabetes for whom insulin is a lifesaving medication cannot wait.



Photo: mark reinstein/Shutterstock.com

Endocrine Society Opposes Florida Department of Health Policy on Gender Dysphoria Treatment for Children and Adolescents



The Endocrine Society objects to the Florida Department of Health's bulletin on gender-affirming care for transgender and gender-diverse youth. The bulletin contradicts the U.S. Department of Health & Human Services' resources and the Society's own evidence-based Clinical Practice Guideline regarding gender-affirming care.

We call on the Florida Department of Health to rescind its bulletin and allow physicians to provide evidence-based care.

Transgender and gender-diverse youth need access to evidence-based care that is supported by major international medical groups — including the Endocrine Society, American Medical Association, the American Psychological Association, and the American Academy of Pediatrics — and Clinical Practice Guidelines.

Medical evidence, not politics, should inform treatment decisions. The bulletin cites only a handful of studies and is in contrast to formal medical guidelines that comply with the Institute of Medicine's standards. Our Clinical Practice Guideline adheres to these national standards and cites more than 260 scientific studies.

The Florida Department of Health's policy reflects widespread misinformation about gender-affirming care. Gender-affirming care benefits the health and psychological functioning of

Misinformation disregards science and restricts access to evidence-based care.

transgender and gender-diverse youth. When an individual's gender identity is not respected and the individual cannot access medical care, it can result in higher psychological problem scores and can raise the person's risk of committing suicide or other acts of self-harm.

The Florida Department of Health's message to eliminate access to puberty-delaying medication for transgender and gender-diverse teenagers contradicts accepted medical practice. Only reversible treatments to delay puberty are recommended for younger adolescents, according to our Clinical Practice Guideline and joint policy perspective issued with the Pediatric Endocrine Society. Puberty-delaying medication is a safe, reversible, and conservative approach that gives teenagers and their families more time to explore their options. The same treatment has been used for decades to treat precocious puberty.

While the Florida Department of Health policy expresses concern about surgery being offered to teens younger than 18, the reality is that gender-affirming surgery is generally limited to adults who meet medical and psychological requirements.

There is broad consensus within the medical community about the importance of gender-affirming care. Other major international medical and scientific organizations such as WPATH, the European Society of Endocrinology, the European Society for Pediatric Endocrinology, the Pediatric Endocrine Society, the American Medical Association, the American Psychological Association, and the American Academy of Pediatrics are in alignment with the Society on the importance of gender-affirming care.

Widespread misinformation about medical care recommended for transgender and gender-diverse adolescents is fueling efforts to limit access to needed care. Twenty states have proposed legislation to limit access to care this year, according to Freedom for All Americans. **EN**

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BY DEREK BAGLEY
Senior Editor

FDA Clears Investigational New Drug Application for Hypoparathyroidism Treatment

In March, the FDA cleared Amolyt Pharma's Investigational New Drug (IND) application for the ongoing AZP-3601 clinical proof-of-concept trial in patients with hypoparathyroidism. The trial is currently being conducted in several European countries.

Thierry Abribat, PhD, founder and chief executive officer of Amolyt Pharma, says that patients with hypoparathyroidism essentially have three important clinical needs, which they hope this drug, a PTH analog, will target. First, they require calcium supplementation, which can lead to the second problem — damaging the kidneys. “[The patients] take so much calcium, which is eliminated through the kidneys and accumulated to the urine, and this is a major contributing factor for kidney stones, and over one quarter of those patients have chronic kidney disease,” Abribat says.

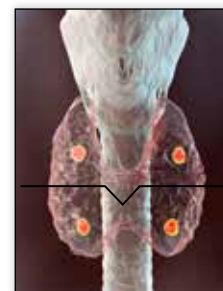
The third clinical target is bone health. There are about 80,000 patients with hypoparathyroidism in the U.S., and 80% of them are women. More than half of those are postmenopausal and close to 20% of that population have osteopenia or osteoporosis. “So, with a good PTH product, our objective is to have a product that has a strong and sustained effect on

serum calcium and a very strong impact on the kidney reabsorption of calcium, and number three, a very soft effect on the bone. You don't want to induce bone loss in those patients,” Abribat says.

And while the results have so far been encouraging and the FDA's clearance of the ongoing drug trial is a step in the right direction, Abribat is careful not to get too ahead of himself. He says that he hopes to start a large trial across the U.S. and Europe in early 2023, and the company will be sharing their findings at **ENDO 2022** in Atlanta. “We just want to be careful not to make promises, in case patients expect that they could be enrolled tomorrow morning in a clinical trial,” he tells *Endocrine News*. “I have too much respect for patients themselves.”



Human parathyroid hormone, molecular model, 3D illustration. Also called parathormone, parathyrin, is secreted by the parathyroid glands and takes part in bone remodeling.

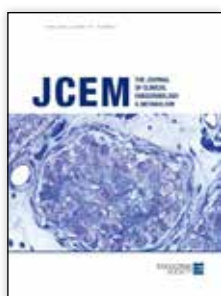


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We just want to be careful not to make promises, in case patients expect that they could be enrolled tomorrow morning in a clinical trial.

I have too much respect for patients themselves.

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Osilodrostat rapidly lowered cortisol excretion to normal in most patients with Cushing's disease and maintained normal levels throughout the core phase of the study. Importantly, this normalization was accompanied by improvements in cardiovascular and metabolic parameters, which increase morbidity and mortality in Cushing's disease.

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New Cushing's Disease Oral Therapy Shows Promise

Positive results from the Phase III LINC 4 study have confirmed the efficacy and safety of osilodrostat, an oral therapy for patients with Cushing's disease. The results were published in *The Journal of Clinical Endocrinology & Metabolism*. Recordati Rare Diseases is marketing the drug as ISTURISA®.



The LINC 4 study augments the efficacy and safety data for ISTURISA in patients with Cushing's disease, confirming the results from the Phase III LINC 3 study. This study in 73 adults, a Phase III study of a medical treatment in patients with Cushing's disease, included an upfront, randomized, double-blind, placebo-controlled period during which 48 patients received ISTURISA and 25 received placebo for the first 12 weeks, followed by an open-label period during which all patients received ISTURISA until week 48; thereafter, patients could enter an optional extension phase.

Key findings published in the manuscript entitled “Randomised trial of osilodrostat for the treatment of Cushing's disease” include:

► LINC 4 met the primary endpoint: ISTURISA was significantly superior to placebo at normalizing mUFC at the end of a 12-week randomized, double-blind period (77% vs 8%; $P < 0.0001$).

- Effects of ISTURISA were rapid. Over one-quarter of patients randomized to ISTURISA achieved normal mUFC as early as week 2, and 58% achieved control by week 5.
- The key secondary endpoint was also met, with 81% of all patients in the study having normal mUFC at week 36.
- Improvements in cardiovascular and other clinical signs of Cushing's disease, including blood pressure and blood glucose metabolism, were seen by week 12 and were maintained throughout the study.
- Physical features of hypercortisolism improved during ISTURISA treatment, including fat pads, facial rubor, striae, and muscle wasting. Improvements were observed by week 12, with continued improvement throughout the study to week 48.
- Patient-reported QoL scores (CushingQoL and Beck Depression Inventory) also improved during ISTURISA treatment.
- ISTURISA was well tolerated in the majority of patients, with no unexpected adverse events (AEs). The most common AEs overall were decreased appetite, arthralgia, fatigue, and nausea.

“These results show convincingly that osilodrostat is an effective treatment for Cushing's disease,” says Peter J. Snyder, MD, professor of medicine at the University of Pennsylvania. “Osilodrostat rapidly lowered cortisol excretion to normal in most patients with Cushing's disease and maintained normal levels throughout the core phase of the study. Importantly, this normalization was accompanied by improvements in cardiovascular and metabolic parameters, which increase morbidity and mortality in Cushing's disease.” **EN**



CLINICAL ENDOCRINOLOGY UPDATE 2021 SESSION RECORDINGS

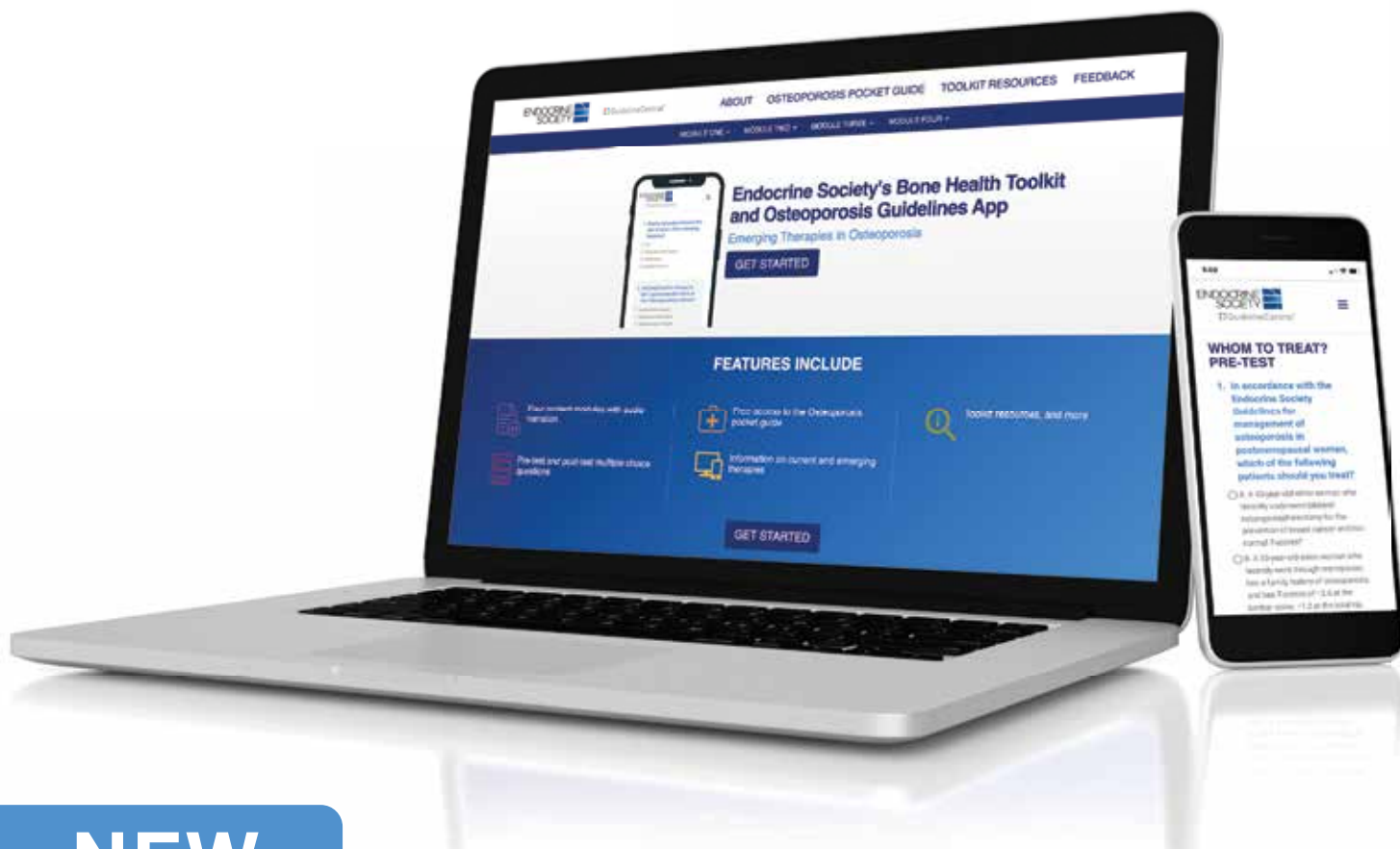
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MEMBER SPOTLIGHT Q&A

Kavita Seetharaman, MBBS



Kavita Seetharaman, MBBS, is an endocrinologist at Newton Wellesley Hospital of Mass General Brigham. She obtained her medical degree from Kasturba Medical College and was awarded the University Gold Medal for first rank in medical school. She completed an internship at the University of Illinois and internal medicine residency training at the University of Iowa.

Over the past eight years, Seetharaman has invested her efforts focusing on transition of care for young adults with diabetes, post-transplant diabetes care, caring for patients in the community setting, and improving diabetes care in the primary care setting. She was the director of the young adult clinic at Joslin Diabetes Center, and the lead endocrinologist for Project ECHO @Joslin, a tele-mentoring program for primary care physicians enabling them to provide expert diabetes care for patients in medical home. She has trained numerous medical students, residents, and fellows as instructor at Harvard Medical School and assistant professor, UMass Medical School. She is currently a clinical assistant professor at Tufts University School of Medicine.

What is your favorite Endocrine Society memory?

I was very excited to attend the Type 1 Diabetes Fellows series during my fellowship training. I attended several talks by experienced faculty during this meeting. As a fellow, it gave me an opportunity to learn further about ongoing research in treatment for type 1 diabetes, diabetes technology, understand the healthcare needs for young adults with type 1 diabetes, and how exercise influences glycemic control.

What experience led you to the study of the endocrine system?

I was a primary care physician for about 12 years before becoming an endocrinologist. As an internist, most of my clinical practice involved caring for patients with diabetes. I felt gaining in-depth knowledge in diabetes care would allow me to provide timely and expert care for patients with diabetes. In addition, I envisioned bringing advanced diabetes care to primary care settings through a medical home model. In 2013, I decided to pursue a fellowship in endocrinology at UMass Medical Center.

What is the best thing about what you are working on right now?

I enjoy my clinical practice and seeing patients in the clinic. I also enjoy sharing and learning medical knowledge with my colleagues in primary care through lunch and learn lecture series and e-consults.

Read more about your fellow Endocrine Society members at: www.endocrine.org/member-spotlight.



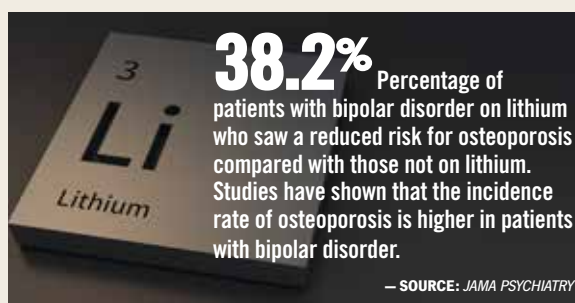
22% The percentage of pregnant women with detectable levels of cannabinoids in their body in a recent study. Exposure to cannabinoids during pregnancy may increase a child's future risk of obesity and high blood sugar.

— SOURCE: THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM



40% Number of retail pharmacists who feel fully comfortable discussing biosimilar insulin products with their customers with diabetes.

— SOURCE: CARDINAL HEALTH



38.2% Percentage of patients with bipolar disorder on lithium who saw a reduced risk for osteoporosis compared with those not on lithium. Studies have shown that the incidence rate of osteoporosis is higher in patients with bipolar disorder.

— SOURCE: JAMA PSYCHIATRY

More than **54,000** transitioning transgender youth ages 13 – 17 years are at risk of losing access to gender-affirming medical care, even in cases where doctors, therapists, and parents concur with the need for those treatments. In total, more than a third of the 150,000 transgender youth ages 13 – 17 in the U.S. live in the 15 states that have restricted access to gender-affirming care or are currently considering laws that would do so.

— SOURCE: WILLIAMS INSTITUTE AT UCLA SCHOOL OF LAW

**30%
to 50%**

A recent study in Canada found people living in low versus highly walkable areas had a 30% – 50% higher likelihood of getting diabetes within five years. — SOURCE: ENDOCRINE REVIEWS



ENDO 2022

June 11 – 14, 2022 • Atlanta, Georgia/Virtual Event

ADVANCE REGISTRATION:

Advanced: March 5, 2022 – May 18, 2022

Late/On Site: May 19, 2022 – June 14, 2022

HOUSING DEADLINE: May 20, 2022

ENDO 2022, taking place June 11 – 14, will be the Society's inaugural hybrid meeting; attendees can participate in Atlanta, online... or both! This increased flexibility will foster expanded connectivity, community, and knowledge sharing among the diverse, international endocrine community. Each format has intrinsic benefits, and when the time comes, attendees will have the option to select the best format that suits their desires and needs when June 2022 rolls around.

Attendees can expect top-flight education at **ENDO 2022**, as well as a new vibrancy and contemporary conference experience with expanded networking. Learners can expect a range of carefully curated sessions in a variety of delivery formats spanning the endocrinology journey from bench to bedside and back again. **ENDO 2022** attendees will have the opportunity to tailor their learning experience to fit their precise professional and personal development needs. The Society is also ramping up its investment in technology-forward learning enhancements to align the **ENDO** learning experience with the reality of day-to-day life in the 21st century.

www.endocrine.org/endo2022



The Growth Hormone (GH)/Prolactin (PRL) Family in Biology & Disease Conference

Athens, Ohio

May 15 – 19, 2022

The aim of this FASEB Science Research Conference (SRC) is to improve our understanding of the regulation and action of growth hormone (GH) and prolactin (PRL) and their specific receptors. The conference will present and integrate novel research advances in GH/PRL biology to raise the profile of the field and foster new national and international collaborative projects. A key aspect is to encourage and support

emerging investigators/trainees and the participation of underrepresented groups.

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

AAES 2022

**Cleveland, Ohio, and Virtual Event
May 22 – 24, 2022**

As the leading endocrine surgery association in North America, the American Association of Endocrine Surgeons (AAES) Annual Meeting is the premier event to connect with professionals and leaders across the globe in the field of endocrine surgery while receiving high-level education on the latest advancements in science and

research. The 2022 Annual Meeting will be a hybrid event taking place in Cleveland, Ohio, but with virtual opportunities. While in-person podium presentations are preferred, exceptions will be made, and the ability to travel to the meeting venue is not a prerequisite for abstract acceptance.

<https://www.endocrinesurgery.org/2022-annual-meeting>

American Diabetes Association's 82nd Scientific Sessions

**Hybrid – New Orleans, Louisiana
June 3 – 7, 2022**

We know many of you are eager to get

back to participating in person, networking with colleagues, hearing the latest scientific advances and groundbreaking research presentations, and experiencing the exhibit and poster halls. We encourage everyone to join us June 3 – 7, 2022, at the Ernest N. Morial Convention Center in New Orleans, La. The health and safety of our attendees remain our top priority, and we will follow COVID-19 safety practices. For those unable to join us in person, we are planning a virtual program to ensure as many people as possible can participate.

<https://professional.diabetes.org/scientific-sessions>

The Phospholipids Conference: Dynamic Lipid Signaling in Health and Disease

Jupiter, Florida

July 31 – August 4, 2022

Launched in 1988, this FASEB Science Research Conference (SRC) is one of the longest-running lipid research meetings. This year's SRC explores all aspects of the biology and biochemistry associated with lipid signaling, lipid metabolism, lipid-protein interactions, and lipids in health and disease. A special workshop will highlight lipids in aging. This conference brings together leading investigators in lipid metabolism and signaling and helps train the next generation of U.S. investigators to bring new advances to lipid and aging discovery.

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

ADCES22

Baltimore, Maryland

August 12 – 15, 2022

The Association of Diabetes Care & Education Specialists (ADCES) Annual Conference is the premier diabetes care and educational event of the year. More than 3,000 diabetes care and education specialists and other healthcare professionals are expected to participate at ADCES22 in Baltimore, Md. Connect, collaborate, and educate yourself and others on the latest in diabetes care and education in person for the first time in two years!

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

INTERNATIONAL ITINERARY

ECE 2022

Milan, Italy

May 21 – 24, 2022

The European Society of Endocrinology is extremely excited to be returning to a face-to-face congress for its 24th European Congress of Endocrinology. Attendees can attend this conference either in person, via the virtual ECE@Home platform. However you attend, ESE looks forward to seeing you at what is shaping up to be an excellent Congress. New for ECE 2022 are two unique registration types to ensure you have full access to the cutting-edge research in endocrine science and patient care being discussed. Visit the registration page for further information on attending in-person in Milan, Italy, or via ECE@Home.

<https://www.eese-hormones.org/>

6th International Symposium on Pheochromocytoma

Prague, Czech Republic

October 19 – 22, 2022

Leading international experts in basic, clinical, and translational pheochromocytoma research will present their latest discoveries, guidelines, clinical trials results, collaborative efforts, and future visions for studying this tumor. Four plenary sessions will focus on the latest discoveries and perspectives in genetics and epigenetics, biochemistry and metabologenomics, theranostics, and mitochondrial function. The symposium will have several sessions devoted to patient management, including unique case presentations and in-person discussions with expert physicians on their approach to the workup, diagnosis, and treatment of patients with this tumor. All healthcare professionals, scientists, students, patients, and allies are welcome to attend this symposium, which will undoubtedly outline new focuses and avenues for early diagnosis, treatment, and ultimately prevention of pheochromocytoma.

<http://www.isp2022prague.com/>

EndoBridge 2022

Antalya, Turkey

October 20 – 23, 2022

EndoBridge® is a unique initiative with the vision of bridging the world of endocrinology. The annual meeting of EndoBridge is co-hosted by the Endocrine Society and the European Society of Endocrinology in collaboration with the Society of Endocrinology and Metabolism of Turkey. EndoBridge will be held in English with simultaneous translation into Russian, Arabic, and Turkish. Accredited by the European Accreditation Council for Continuing Medical Education (EACCME), this three-day scientific program includes state-of-the-art lectures delivered by world-renowned faculty and interactive sessions covering all aspects of endocrinology. EndoBridge® provides a great opportunity for physicians and scientists from around the world to interact with each other, share their experience and perspectives, and participate in discussions with global leaders of endocrinology.

www.endobridge.org

A woman with long brown hair is lying down, looking up at the camera. A medical professional wearing blue gloves is holding a white medical probe against her neck. The background is a light blue patterned surface.

ENDO2022

Low-Risk
Thyroid
Cancer:
RATING
THE RISKS

BY ERIC SEABORG



“

You talk to the patient. You discuss the risks and benefits of different approaches and see what risk they are willing to accept for the benefit. **The patient is always queen or king. The patient should hear the arguments, and then make the right decision for them.**”

— JULIE ANN SOSA, MD, MA, PROFESSOR AND CHAIR OF THE DEPARTMENT OF SURGERY, UNIVERSITY OF CALIFORNIA SAN FRANCISCO

Observation versus intervention: A movement for less intervention has gained momentum in many forms of cancer when the disease is indolent and the patient's risk appears low.

Low-risk thyroid cancer is no exception — and a session at **ENDO 2022** will explore the issues involved in deciding between surgery and observation in what both participants promise will be a lively debate on today's state of the art.

The debaters will be Julie Ann Sosa, MD, MA, professor and chair of the Department of Surgery at the University of California San Francisco, and R. Michael Tuttle, MD, professor of medicine and chief of the Endocrinology Service at Memorial Sloan Kettering Cancer Center in New York City. Both served on the committee that wrote the 2015 American Thyroid Association guidelines on the management of adult patients with thyroid nodules and differentiated thyroid cancer. Sosa is co-chairing the committee that is in the process of updating the guidelines for differentiated thyroid cancer.

Both point to the 2015 guidelines as the basis for their approach. Sosa says that the guidelines “opened the door a

crack to do active surveillance on tiny tumors” of less than a centimeter. The question is, how big is this crack. “Surgery — thyroid lobectomy — should remain the prevailing treatment, and that is what the guidelines say,” she notes.

Tuttle says that “the team that wrote the section on thyroid nodules said, if it looks like papillary cancer on the ultrasound, and it is less than a centimeter, you don't have to biopsy it. We were trying to decrease overdiagnosis.” And if it doesn't need to be biopsied, it obviously doesn't need to be removed. “At that time there was emerging data that this was safe,” Tuttle says, and since then, the data has only gotten stronger on the viability of this approach in carefully selected patients.

Tumor Size and Location

Tuttle says that the first issues in considering a patient for observation are the characteristics of the tumor: “How big is it? Where is it located in the thyroid? Has it spread outside the thyroid?” Good candidates for observation are nodules “less than about a centimeter and a half, ideally less than a centimeter,” that are not on the edge of the thyroid where any

While certain thyroid cancer patients who have very small nodules well-located within the thyroid can be counseled rather than operated on, other patients might fare better undergoing surgery. At ENDO 2022, experts weigh in and debate when to operate and when to watch in patients with low-risk thyroid cancer in the session “Endocrine Debate: Low Risk Thyroid Cancer.”



“

Many patients who could watch choose surgery. They want that cancer out of their body, so they are willing to accept the few risks associated with thyroid surgery. **But it is also important for patients that choose surgery to understand that there is no guarantee that they will be cured with surgery.**”

— R. MICHAEL TUTTLE, MD, PROFESSOR OF MEDICINE AND CHIEF OF THE ENDOCRINOLOGY SERVICE AT MEMORIAL SLOAN KETTERING CANCER CENTER, NEW YORK, N.Y.

growth could impinge on the windpipe or larynx, and that have not spread to a lymph node.

He says that an important part of the diagnostic process is communicating clearly with a good ultrasonographer “to ensure that they understand the key ultrasonographic findings that you need to know in order to determine if a nodule is ideal, appropriate, or inappropriate for active surveillance. This includes not only the largest diameter of the nodule but

also a description of the position of the nodule within the thyroid, proximity to the thyroid capsule, evidence of invasion into the capsule, possible multifocality, and any suspicious cervical lymph nodes.”

Age and Health

Another key set of considerations are the patient’s age and health status. Sosa would not recommend surgery for “an 85-year-old patient with a 1-centimeter papillary thyroid cancer who has high blood pressure and diabetes. But for a patient who is 20 years old who has a 1-centimeter papillary thyroid cancer, who is perfectly healthy, why not do the surgery that cures the patient and allows the patient to move on? Does it make sense to watch that patient for decades? That is probably not cost-effective, and young patients tend to have more progressive disease.”

Transferrable Data?

Sosa says that question is at evidential equipoise, with more data needed on the long-term outcomes of observation. The initial data on observation were just emerging at the time of the guidelines, with the best data coming from a group led by Yasuhiro Ito in Japan, but those data are not necessarily transferrable to the U.S. “We need to get more data to support active surveillance, and data from the U.S., not just Japan. The healthcare system in the U.S. is not the same as Japan,” Sosa says.

Tuttle counters that since the last guideline was written “there have been many more publications that show that the Japanese data is correct that observation is safe. Their findings have now been reproduced in multiple countries around the world.”

ENDO2022

Endocrine Debate: Low-Risk Thyroid Cancer Monday, June 13, 2022

11:00 a.m. – 12:30 p.m., Hall A3

- **Moderator:** Bryan R. Haugen, MD, professor of medicine and pathology at the University of Colorado School of Medicine; head of the Division of Endocrinology, Metabolism & Diabetes, and director of the Thyroid Tumor Program
- **Low-Risk Thyroid Cancer – Intervention:** Julie Ann Sosa, MD, MA, professor and chair of the Department of Surgery at the University of California San Francisco
- **Low-Risk Thyroid Cancer – Observation:** R. Michael Tuttle, MD, professor of medicine and chief of the Endocrinology Service at Memorial Sloan Kettering Cancer Center in New York City

In person and livestreamed

Careful Observation

For the patients who choose to go with observation, Tuttle prescribes an ultrasound every six months for the first two years along with a yearly TSH test. If the tumor hasn't grown after two years, the ultrasounds can be done yearly. After five years, the ultrasounds can be spaced out to every other year.

"If the nodule gets bigger by more than 3 millimeters — because anything less than 3 millimeters is measurement variation that may not reflect a true increase in size — or if the volume grows by more than 75% – 100%, we can be confident the nodule is growing and should be considered for therapeutic intervention. Likewise, if the nodule is sitting on the edge of the thyroid and looks like it is starting to grow into the thyroid capsule, or if we identify metastatic thyroid cancer in cervical lymph nodes, that would take us to surgery," Tuttle says. He says that the safety of waiting and operating if a tumor begins to grow has been documented by many studies.

Sosa says that there are many nonmedical factors — being uninsured or underinsured, or a low socioeconomic or difficult job status — that can make the follow-up process impractical for many patients. "I have had patients who live in a rural community in poverty, who manage to get to a physician for consultation and say, 'It took everything for me to get here. I cannot come back.' That patient can't be followed. They cannot return every six months for tests. They should have surgery," Sosa says. Observation also puts a huge compliance requirement on the patient.

The Patient Is Queen

But Sosa and Tuttle agree that the most important considerations are the patient's attitude and tolerance for risk. "You talk to the patient," Sosa says. "You discuss the risks and benefits of different approaches, and see what risk they are willing to accept for the benefit. The patient is always queen or king. The patient should hear the arguments, and then make the right decision for them."

"In the patient that is ideal or appropriate for observation based on ultrasonographic criteria and medical team characteristics, I tell them that there are two right answers, observation or surgery," Tuttle says. "And then they always tell me they only have one right answer. The ones that want to watch have to accept the risk that it might grow. They have to accept the unknown and that we are going to be doing ultrasounds for a long time. Many patients who could watch choose surgery. They want that cancer out of their body, so they are willing to accept the few risks associated with thyroid surgery. But it is also important for patients that choose surgery to understand that there is no guarantee that they will be cured with surgery. They will still need ongoing oncologic follow-up since even after appropriate surgical intervention, the risk of recurrence in papillary thyroid microcarcinoma ranges from 2% to 6%." ^{EN}



AT A GLANCE

- ▶ American Thyroid Association guidelines allow observation rather than surgery in properly selected low-risk thyroid cancer patients.
- ▶ Certain patients who have very small nodules well-located within the thyroid can be counseled on the possibility of opting for observation rather than surgery.
- ▶ Patients given the pros and cons can make very different decisions based on their perception of the risks of each path.

— SEABORG IS A FREELANCE WRITER BASED IN CHARLOTTESVILLE, VA. IN THE MARCH ISSUE, HE WROTE ABOUT CORTISOL EXCESS AND WHETHER IT WAS SAFE REGARDLESS OF THE LEVEL.

ALL ABOUT ADRENAL:

Analyzing Two Years of Research

BY DEREK BAGLEY

When the **ENDO 2022** session “Clinical Year in Review: All Things Adrenal” gets underway, Gary Hammer, MD, PhD, will treat attendees to the series of advances that have been made in adrenal science and clinical practice over the past two years, from adrenal homeostasis, glucocorticoid biology, and adrenaline insufficiency to Cushing’s, tumors, pheochromocytoma, and more.



Gary Hammer, MD, PhD

The last time the annual meeting of the Endocrine Society was held in person was March 2019 in New Orleans, where the overall theme seemed to be collaboration — or more specifically, how big data sets could inform science and clinical care, and maybe, hopefully, one day go as far to cure all diseases.

It’s been more than three years since **ENDO** attendees gathered in the same convention center, and this meeting in Atlanta will feature a talk titled “Clinical Year in Review: All Things Adrenal” by Gary D. Hammer, MD, PhD, professor of Internal Medicine, Cell and Developmental Biology, and Molecular and Integrative Physiology at the University of Michigan in Ann Arbor, and past president of the Endocrine Society. (Hammer insists this isn’t his talk, but more on that later.)

The 45-minute session will cover some of the papers and studies on the adrenal gland that have come out in the past couple of years, covering pathophysiology, clinical questions, diagnosis, treatment, and more. Hammer says this talk is modeled on one Robert M. Carey, MD, gave at **ENDO** in 2011, when Carey was president of the Endocrine Society. Carey had asked 15 adrenal experts — including Hammer — to name their favorite papers from the past 18 months and then presented those. “I said, ‘We haven’t done this in 10 years. Let me go back at least five years and see what we’ve got,’” Hammer says.

There was plenty to choose from; in the past five years there have been more than 120,000 papers. And in the past two years especially, researchers and clinicians are discovering just how much big data is driving their work in the

“

We're using big data sets now to be able to realize that disease is more prevalent and more nuanced than we thought, whether it's adrenaline insufficiency, or hyperaldosteronism which is very complicated now. **Big data has defined how we diagnose and treat disease, as we understand the genetics.”**

— GARY D. HAMMER, MD, PHD, PROFESSOR OF INTERNAL MEDICINE, CELL AND DEVELOPMENTAL BIOLOGY, AND MOLECULAR AND INTEGRATIVE PHYSIOLOGY, UNIVERSITY OF MICHIGAN, ANN ARBOR; PAST PRESIDENT, ENDOCRINE SOCIETY

ENDO2022

**Clinical Year in Review:
All Things Adrenal**

Monday, June 13, 2022

3:45 p.m. — 4:30 p.m., Hall A3

Gary Hammer, MD, PhD, professor of internal medicine, cell & developmental Biology, Molecular & Integrative physiology at University of Michigan, Ann Arbor

In person and livestreamed

adrenal space. “This is an iterative process of discovery, and we're learning more and more that big data and science is determining care,” Hammer says. “With that as a backdrop, I feel that as we move into the genomic era, I must talk about how science has impacted care and how care has impacted science.”

New Implications for Human Disease

Hammer tells *Endocrine News* that new and emerging technologies in single-cell biology have informed the medical community more and more about the growth and development of the adrenal gland. For instance, he says his lab has been focused on the interplay of the endocrine and paracrine systems. All organs have intrinsic paracrine systems embedded in them to regulate homeostatic control of stem cell renewal, while the endocrine system interfaces with the same organ, and scientists are finding that that intersection is where disease happens.

And new technologies and research methods are starting to show it goes further than that. According to Hammer, biology studies using single-cell technologies have revealed the heterogeneity of even the fasciculata cortisol cells, where there's at least 12 different populations of fasciculata cortisol cells that do different things, and that has implications for disease that show some polymorphisms in new mouse-determined unique clusters of the fasciculata. “That has implications for human disease,” Hammer says.

Hammer points to a paper published in the *Journal of Clinical Investigation* by Gerard Karsenty, MD, PhD, et al., showing that the bone hormone osteocalcin regulates the adrenal gland. Karsenty and his team used a mouse model to reveal that the bone-derived embryonic hormone influences lifelong adrenal functions and organismal homeostasis.

Then there's the study led by Mitchell A. Lazar, MD, PhD, published in *Cell Metabolism* showing that glucocorticoid receptors vary by individual. Those variations are defined by polymorphisms, and those mutations affect how people respond to glucocorticoid therapy — using big data to again speak to the importance of personalized medicine.

“Knowledge of the genetic variants that predispose individuals to metabolic side effects allows for a precision medicine approach to the use of clinically relevant [glucocorticoids],” Lazar and his team conclude.

“We’re using big data sets now to be able to realize that disease is more prevalent and more nuanced than we thought, whether it’s adrenaline insufficiency, or hyperaldosteronism which is very complicated now,” Hammer says. “Big data has defined how we diagnose and treat disease, as we understand the genetics.”

There can be a lot going on at these annual meetings, and attendees have to be judicious about what they sit down or tune in for. Clinicians might forgo any basic science talk, and vice versa. But “Clinical Year in Review: All Things Adrenal” should have something for everyone. Hammer says he will cover adrenal homeostasis, glucocorticoid biology, adrenaline insufficiency, and then primary aldosteronism, Cushing’s, pheochromocytoma, and adrenal tumors, all from papers chosen by adrenal experts, which Hammer will then present. “I will be talking about basic science and how it impacts clinical care, and how the clinic has informed the scientific questions to ask over the last couple of years,” Hammer says.

Transformative Research

When Hammer took over as president of the Endocrine Society in 2020, the COVID-19 pandemic had just started to tighten its grip on the world, and he jokes that he was the “virtual president.” When **ENDO 2020** had to pivot to an all-virtual platform, Hammer remained optimistic, saying at the time: “We envision that the meeting in 2021 will be a culmination of two years of outstanding endocrine science development, endocrine innovation, and clinical care. We will celebrate.”

And while it didn’t quite turn out that way, Hammer says he’s enthusiastic about this upcoming hybrid meeting and the things the endocrine community has continued to accomplish during such odd and difficult times. “I’m very excited about the possibility for all of us to gather and share advances across the scientific and clinical space live,” he says. “What I hope to do in this review is to really show the advances of these last two or three years and really show how transformative the work has been despite the COVID epidemic.” **EN**



“I’m very excited about the possibility for all of us to gather and share advances across the scientific and clinical space live. **What I hope to do in this review is to really show the advances of these last two or three years and really show how transformative the work has been despite the COVID epidemic.**”

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— BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. IN THE APRIL ISSUE, HE WROTE ABOUT THE POSSIBILITY OF HOW STEM CELL TECHNOLOGY COULD POTENTIALLY LEAD TO A CURE FOR DIABETES.

As transgender medical care becomes unfairly politicized, presentations such as **ENDO 2022's** Meet the Professor session “Beginner’s Guide to Gender-Affirming Hormone Therapy for Transgender and Gender Diverse Adults” are more essential than ever. Attendees will be shown a variety of best practices in providing affirming care to transgender and gender diverse adults.

Bridging the Gap: *Gender-Affirming Care*

On the afternoon of Sunday, June 12, **ENDO 2022** will feature a Meet the Professor session titled, “Beginner’s Guide to Gender-Affirming Hormone Therapy for Transgender and Gender Diverse Adults.”

The fact that the title specifically references beginners is apt, since caring for transgender patients may still be something some endocrinologists have yet to experience, but if trends continue the way they are, they soon will.

A 2016 study by the Williams Institute at the UCLA School of Law found that 1.4 million adults identify as transgender. (The authors of that study noted that figure was nearly double the estimates from a decade earlier.) The 2015 U.S. Transgender Survey (USTS) had more than 27,000 respondents across the U.S., and the 2022 USTS is aiming for 40,000 respondents and will almost certainly show that more than 1.4 million adults now identify as transgender.

BY DEREK BAGLEY

As the population continues to grow, so too does the likelihood of endocrinologists taking them on as patients. Endocrinologists should of course be well versed in how to care for these patients and should especially be interested in providing these patients with safe and effective gender-affirming care. But studies continue to show that barriers to providing affirming care to transgender and gender diverse (TGD) patients include lack of knowledge and comfort among providers, making it difficult for these patients to find trained clinicians.

The 2015 USTS reported that 33% of respondents had been mistreated when seeking healthcare, whether it was being verbally harassed or simply denied care at all.

“Unfortunately, much of this is driven by insufficient education in medical schools and training programs, including endocrinology fellowships,” says Caroline Davidge-Pitts, MD, MBBCH, associate professor of medicine and associate chair of the Division of Endocrinology, Diabetes, and Nutrition at the Mayo Clinic, Rochester, Minn. She is also medical director of the Transgender and Intersex Specialty Clinic, and one of the two presenters of this Meet the Professor session. “Our session, ‘A Beginner’s Guide to

Gender-Affirming Hormone Therapy (GAHT) for TGD Adults,’ will be geared towards endocrinologists, and those interested in endocrinology who would like to become more active in providing GAHT for TGD people in their clinics.”

Indeed, study after study show that providing gender-affirming care, including GAHT when desired, improves health and well-being, even, and especially, mental health. A 2021 paper published in the *Journal of the Endocrine Society* by Baker, et al., reported: “Hormone therapy [in transgender patients] was associated with increased QOL, decreased depression, and decreased anxiety. Associations were similar across gender identity and age.”

More Studies Needed

But there seems to be a sea change coming. Interest in providing safe and effective gender-affirming care — including GAHT — is growing among clinicians and researchers. “We are thrilled to see increasing funding opportunities for researchers interested in identifying, characterizing, and reducing health disparities among sexual and gender minorities,” says Sean J. Iwamoto, MD, assistant professor of medicine at the University of Colorado School



“

We want clinicians to take away that being involved in transgender health saves lives, and that with the right resources and knowledge, **it is possible to be an affirming clinician, both in academics and private practice.**”

— CAROLINE DAVIDGE-PITTS, MD, MBBCH, ASSOCIATE PROFESSOR OF MEDICINE; ASSOCIATE CHAIR, DIVISION OF ENDOCRINOLOGY, DIABETES, AND NUTRITION; MEDICAL DIRECTOR, TRANSGENDER AND INTERSEX SPECIALTY CLINIC, MAYO CLINIC, ROCHESTER, MINN.



“

While we have valuable data from large longitudinal cohorts in Europe that have significantly informed our clinical practice guidelines, more rigorous large studies with diversity among TGD patients and GAHT routes of administration are needed **to better assess long-term health outcomes (especially cardiovascular disease and blood clots) and potential interventions to mitigate risk.**”

— SEAN J. IWAMOTO, MD, ASSISTANT PROFESSOR OF MEDICINE, UNIVERSITY OF COLORADO SCHOOL OF MEDICINE, ROCKY MOUNTAIN VA MEDICAL CENTER, AURORA, COLO.

ENDO2022

Meet the Professor:

Beginner's Guide to Gender-Affirming Hormone Therapy for Transgender and Gender Diverse Adults

Sunday, June 12, 2022

2:45 p.m. – 3:30 p.m.

- **Caroline Davidge-Pitts, MD, MBBCH**, associate professor of medicine; associate chair, Division of Endocrinology, Diabetes, and Nutrition; medical director, Transgender and Intersex Specialty Clinic, Mayo Clinic, Rochester, Minn.
- **Sean J. Iwamoto, MD**, assistant professor of medicine, University of Colorado School of Medicine, Rocky Mountain VA Medical Center, Aurora, Colo.

The learning objectives for this session include:

- Recognize that GAHT can be provided to TGD patients in safe and effective ways.
- Describe GAHT regimens and monitoring recommendations.
- Understand laboratory test interpretation in people taking GAHT.
- Review screening recommendations and special considerations in older TGD people.

In person and livestreamed

of medicine and Rocky Mountain VA Medical Center and the other presenter of the session.

One of the learning objectives of this **ENDO** session is to show that GAHT can be provided to TGD patients in safe and effective ways, but the presenters are careful to point out that more studies are needed to get a better picture of how this care affects patients over the course of their lives. “While we have valuable data from large longitudinal cohorts in Europe that have significantly informed our clinical practice guidelines, more rigorous large studies with diversity among TGD patients and GAHT routes of administration are needed to better assess long-term health outcomes (especially cardiovascular disease and blood clots) and potential interventions to mitigate risk,” Iwamoto says. “Research on GAHT effects on older TGD adults and long-term effects of puberty blockade on future adult health are also important topics to study that will complement existing data on the safety and efficacy of GAHT across much of the lifespan.”

Davidge-Pitts and Iwamoto tell *Endocrine News* that study recruitment may be a significant obstacle for TGD-related research, so it will be vital to involve TGD voices and experience in the study design. “This could include the principal investigator, study team members, families, clinicians, and other community stakeholders,” Iwamoto says.

Adjusting Reference Ranges

Another learning objective for “Beginner's Guide to Gender-Affirming Hormone Therapy for Transgender and Gender Diverse Adults” is understanding laboratory test interpretation in people taking GAHT. “GAHT is associated

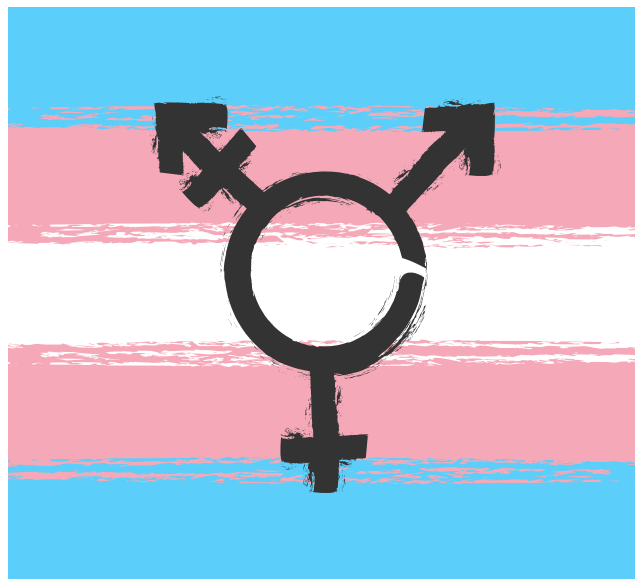
with change in laboratory measures, such as hematocrit and creatinine. For example, we know that testosterone is a driver of erythrocytosis — so testosterone therapy will cause a higher hematocrit and estradiol therapy (which lowers testosterone) will cause a decrease in hematocrit,” Davidge-Pitts says. “Similarly, we find changes in creatinine with hormone therapy.”

“When interpreting laboratory tests in TGD individuals, it is important to know what reference range the lab is using,” she continues. “Incorrect alerts to a result might occur, for example, if someone on estradiol therapy is flagged as anemic if the male reference range is used while on estradiol therapy.”

Politicizing the Process

Davidge-Pitts and Iwamoto are co-chairs of the Endocrine Society’s Transgender Research and Medicine Special Interest Group leadership team. In 2020, they co-authored a paper in *The Journal of Clinical Endocrinology & Metabolism* (JCEM) titled, “Proper Care of Transgender and Gender Diverse Persons in the Setting of Proposed Discrimination: A Policy Perspective.” The authors conclude that while they remain concerned about the ongoing attempted politicization of gender-affirming care for TGD patients, they write that the Endocrine Society and the Pediatric Endocrine Society remain dedicated to providing necessary gender-affirming medical care to TGD individuals; to advocating for increased funding for research to close the gaps in knowledge regarding the medical care of TGD individuals; and to sharing important knowledge learned to inform policy. “We remain steadfast in our belief that patient health management decisions should be evidence-based and doctor-patient determined, and health policy should be based in science with healthcare experts at the table as contributors,” they write.

The presenters acknowledge that controversies continue to swirl around this area, no matter how unfounded those controversies are, but Iwamoto points any interested readers or attendees to the JCEM Policy Perspective. Davidge-Pitts says that their presentation is specific to adult care, and there is a lot to cover in a short time. “We therefore plan to center



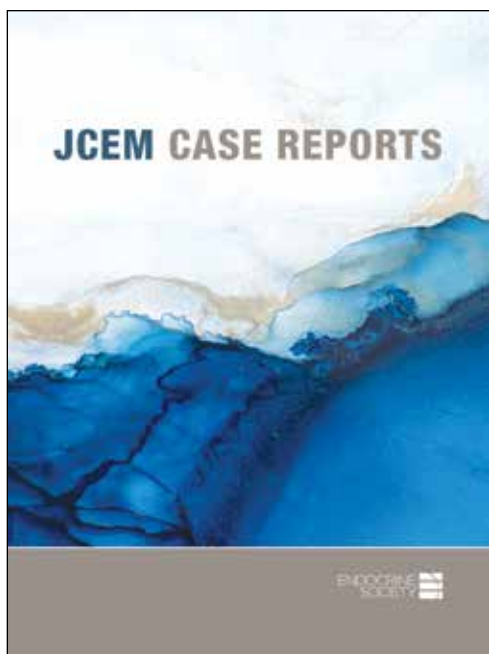
our conversations around providing affirming care to TGD adults and how we can support clinicians wanting to grow their practice in this area,” she says.

Providing a Bridge

Endocrinologists play a vital role in transgender healthcare, no matter their subspecialty. Davidge-Pitts says this area of endocrinology will continue to be incorporated into training programs, and she’s excited to know that our future endocrinologists will have more knowledge in this area. “However, there is a large group of clinicians who will not have had any training, and may want to be more affirming, but find the process overwhelming,” she says.

“We hope to provide a bridge for this group of clinicians, expanding their knowledge base, increasing their comfort, and helping them identify resources to find additional gender-affirming management considerations,” Iwamoto says.

The first rule of medicine is Do No Harm, and it’s becoming more and more clear that health disparities are harming these patients. “We want clinicians to take away that being involved in transgender health saves lives,” Davidge-Pitts says, “and that with the right resources and knowledge, it is possible to be an affirming clinician, both in academics and private practice.” ^{EN}



Q&A with
William F. Young, Jr., MD,
Editor-in-Chief of
JCEM Case Reports

clinical PEARLS

In anticipation of the Endocrine Society's new open-access journal, *JCEM Case Reports*, its editor-in-chief, William F. Young, Jr., MD, talks to *Endocrine News* about how this new journal will have a place for both master clinicians and early-career physicians to present their cases, why it's important to hear the patient's perspective, as well as his own very first particularly challenging case.

In March, the Endocrine Society announced that it will launch a new open-access, online-only journal called *JCEM Case Reports* that will feature reports on clinical cases and detail how to approach and solve complex clinical problems in endocrinology. *JCEM Case Reports* will be fully peer-reviewed and begin publishing issues in late 2022.

And the Society is pleased to further announce that past president William F. Young, Jr., MD, will serve a three-year term as the journal's inaugural editor-in-chief. Young is the Tyson Family Endocrinology Clinical Professor and professor of medicine in the Mayo Clinic College of Medicine and Science at the Mayo Clinic in Rochester, Minn.

"Case reports are a foundation of medicine, giving clinicians an opportunity to learn about novel situations and apply that knowledge to their own practices," Young says. "It is truly an honor to be the first to lead *JCEM Case*



William F. Young, Jr., MD

BY DEREK BAGLEY

Reports. The journal will help disseminate clinical pearls to busy clinicians worldwide.”

The journal will welcome educational or rare clinical cases that are well described, with clear learning points, and of special interest to early-career endocrinologists and members of endocrinology care teams. The journal is particularly interested in exploring ways to effectively diagnose and treat endocrine conditions in regions with limited clinical resources. These cases may have important implications for a wider audience.

Young says that the editors are looking for case reports on common endocrine disorders with unique — diagnostic, ethical, management — challenges; on rare endocrine disorders that present in a different way; recognition of a new association with an endocrine tumor; or other endocrine diagnosis. “Sometimes the unique findings in a case report are the nidus for broader prospective studies,” he says. “For example, a case report may show a potential link between two unusual findings. That observation may lead to a broader study to investigate a potential association. Sometimes, there are unexpected findings or responses to treatment that were not expected or anticipated. That would also be good substrate for a case report.”

Endocrine News caught up with Young to talk about his passion for patient care and medical education, his first publication that furthered his interest in endocrinology, and his vision for this new venture.

Endocrine News: How does it feel to be appointed editor-in-chief of JCEM Case Reports?

William F. Young, Jr., MD: It is a tremendous honor to be the inaugural editor-in-chief (EIC) of *JCEM Case Reports*. I am a clinician who enjoys medical editing, challenges, and building things from the ground up. So, how do I feel? I am thrilled and looking forward to taking on this role and charge!

“*JCEM Case Reports* will need to distinguish itself in this field. The journal will have an excellent start with the gravitas provided by the Endocrine Society and JCEM — **it simply does not get better than that!** However, active innovation will be necessary to make *JCEM Case Reports* a leader in this field.”

— WILLIAM F. YOUNG, JR., MD, TYSON FAMILY ENDOCRINOLOGY CLINICAL PROFESSOR, PROFESSOR OF MEDICINE, MAYO CLINIC COLLEGE OF MEDICINE AND SCIENCE, MAYO CLINIC, ROCHESTER, MINN.; EDITOR-IN-CHIEF, *JCEM CASE REPORTS*

“

Case reports can impart valuable insights and clinical nuances that cannot be found in large case series, clinical trials, or clinical practice guidelines. Many of my best teaching and learning opportunities have been based on the care of single patients with challenging clinical scenarios.”

— WILLIAM F. YOUNG, JR., MD, TYSON FAMILY ENDOCRINOLOGY CLINICAL PROFESSOR, PROFESSOR OF MEDICINE, MAYO CLINIC COLLEGE OF MEDICINE AND SCIENCE, MAYO CLINIC, ROCHESTER, MINN.; EDITOR-IN-CHIEF, *JCEM CASE REPORTS*

EN: Can you tell me a little about your path to endocrinology and some of your favorite moments or highlights from your career?

WFY: My interest in endocrinology started before entering medical school. My research project in graduate school was studying the effects of prostaglandins on the microvasculature. During my internal medicine residency, evaluating patients for potential endocrine disorders was an exercise in problem solving — something I enjoyed so much that I decided to pursue a career in clinical endocrinology. I was fortunate to be selected for the clinical endocrinology training program at Mayo Clinic in Rochester, Minnesota. Some of my career highlights have included joining the Mayo Clinic staff (1984), chairing our Division of Endocrinology at Mayo Clinic (2012 – 2019), and serving as president of the Endocrine Society (2012 – 2013). I have had the privilege of delivering more than 650 presentations at national and international meetings, and I have been invited as a visiting professor to more than 150 medical institutions.

EN: What attracted you to the role of EIC of *JCEM Case Reports*?

WFY: The EIC role at *JCEM Case Reports* is the perfect marriage between two of my passions — patient care and medical education. Case reports can impart valuable insights and clinical nuances that cannot be found in large case series, clinical trials, or clinical practice guidelines. Many of my best teaching and learning opportunities have been based on the care of single patients with challenging clinical scenarios. I have had a career-spanning interest in medical writing and editing. I have authored and co-authored six books. My most recent effort is the co-authored book, *Adrenal Disorders: 100 Cases from the Adrenal Clinic*, which is a perfect example of the value I place in clinical case reports. My interest and dedication to the peer-review process are evidenced by my associate editor roles at four different journals and as an author of 350 peer-reviewed publications. I am a board-certified editor (Board of Editors in the Life Sciences [ELS]) and a member of the Council of Science Editors.

EN: *JCEM Case Reports* is a brand-new journal. What's your hope for the journal as it launches?

WFY: My hope is that *JCEM Case Reports* will not only be the number one choice of endocrinologists to read, but also their preferred forum to share challenging cases. I am especially keen to encourage article submissions from endocrine trainees and early-career aspiring endocrinologists. When I was an internal medicine resident, my very first clinical publication was a case report on a patient with a pituitary gland disorder that was a diagnostic conundrum; caring for that patient and writing up the report helped ignite my interest in pursuing a career in endocrinology.

EN: Can you share a little about that case? What made it particularly challenging?

WFY: This was in 1979, and we didn't have MRI scans back then. Sellar polytomography was a commonly used x-ray technique to image the sella turcica. Our best imaging study of the pituitary was the newly invented head CT scan, which was pretty crude compared to today's standards.

A 32-year-old woman presented with vision loss due to bitemporal hemianopsia. Sellar polytomography demonstrated thinning of the floor of the sella turcica. However, the CT scan showed fluid density in the sella turcica rather than a tumor. So, the suspicion was that she had a large pituitary cyst or a cystic pituitary tumor that was compressing the optic chiasm and causing the vision loss. The other possibility was a condition called "empty sella" where the suprasellar subarachnoid space extends into the sella turcica and the optic chiasm can prolapse into the sella and thus causing the vision loss. Back then the most common way to distinguish between those two possibilities was a painful procedure where air was injected into the cerebrospinal fluid (pneumoencephalography).

With our neuroradiologist, we adapted a technique to put a water-soluble contrast agent (metrizamide) into her spinal column and by rotating the patient we could see if metrizamide filled up the sella turcica on a coronal CT scan — a finding that would confirm an empty sella. She proved to have primary empty sella syndrome and a surgical procedure was avoided. Back then, we thought that was a pretty slick way of figuring things out.

EN: Absolutely.

WFY: We published that case report in *JAMA*, that was back in the days when *Journal of the American Medical Association* was taking case reports. That was my first clinical publication.


EN: What's your vision for the future of this publication?

WFY: Recognizing that many article submissions will be from clinicians in training, our editorial team will work with authors to optimize their case reports for clarity and key learning points. I am also eager to encourage submission of case reports that highlight approaches to challenging clinical scenarios where resources are limited. We can learn a lot from clinicians who see patients where resources are limited. Sharing that experience provides some very practical perspectives on different ways to approach the diagnosis and treatment of endocrine disorders.

There will be an optional section for each article to offer the patient's perspective. What did the patient think about the diagnostic evaluation and treatment of their endocrine disorder? I suspect that in many cases the patient perspective comments will be enlightening and surprising. My hope would be a third to a half of the reported cases will have a patient perspective paragraph.

We will recruit master clinicians to write commentaries based on two to three case reports of variations on the same clinical theme. The commentaries will provide context and guidance on how the case reports inform the clinician on unique aspects of the clinical presentation, diagnosis, and treatment. In addition to case reports, the journal will encourage submissions of educational "Images in Endocrinology." Those are just some of the plans we have for *JCEM Case Reports*.

EN: What do you feel will set this journal apart from other peer-reviewed journals in this field?

WFY: *JCEM Case Reports* will need to distinguish itself in this field. The journal will have an excellent start with the gravitas provided by the Endocrine Society and JCEM — it simply does not get better than that! However, active innovation will be necessary to make *JCEM Case Reports* a leader in this field. Our plans include strategies to make *JCEM Case Reports* an engaging and educational resource for clinicians from around the world. We will start accepting articles for consideration of publication in late summer of 2022. 

— BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. IN THE APRIL ISSUE, HE WROTE ABOUT THE POSSIBILITY OF HOW STEM CELL TECHNOLOGY COULD POTENTIALLY LEAD TO A CURE FOR DIABETES.

Endocrine News talks with Christine M. Burt Solorzano, MD, chair of the committee that helped launch the Endocrine Society's reinvigorated patient outreach program, EndoCares. With a flagship in-person event taking place in Atlanta during **ENDO 2022**, EndoCares is set to become an important bridge between the Endocrine Society's members and the patients they treat.

Care Package

Christine M. Burt Solorzano, MD, Discusses the Endocrine Society's Newly Expanded Patient Engagement Program



Christine M. Burt Solorzano, MD

The Endocrine Society is expanding its in-person health education events to help more patients in underserved communities as well as concentrating its public health education efforts moving forward on diversity, equity, and inclusion.

As part of the revamped program, the Society has moved patient outreach under the Endocrine Society brand with a new web presence to emphasize that the organization develops these trusted materials. Since 1998, the Endocrine Society has offered patient and consumer health education materials through its patient education arm, the Hormone Health Network (HHN).

The new online content hub includes a redesigned version of the Menopause Map™, a free, interactive tool to help women learn about menopause and start important conversations with their healthcare providers and peers.

The Society's enhanced patient engagement program also includes four in-person EndoCares® health education events for underserved communities. The flagship event will take place in Atlanta in conjunction with **ENDO 2022**, the Society's annual meeting. The other events will be held in Seattle, Wash., Baltimore, Md., and Phoenix, Ariz.

"We are thrilled to be expanding our successful EndoCares® program to reach even more people with endocrine conditions and their caregivers," says Christine M. Burt Solorzano, MD, associate professor of pediatrics in the Division of Endocrinology at the University of Virginia School of Medicine, Charlottesville, Va., and chair of the Society's Patient Engagement Committee. "With twice as many events each year, we'll be able to deliver



valued health advice and screenings to new audiences in underserved communities.”

Solorzano shares her thoughts with *Endocrine News* about the goals of the patient outreach program, the importance of connecting with patients from underserved communities, and the benefits of the Menopause Map™.

Endocrine News: What was the main reason for launching the Society’s revamped patient outreach program — what drove the decision, and why now?

Christine Solorzano: We wanted to reach more patients in underserved communities and focus our public health education programming and resources moving forward on diversity, equity, and inclusion. We also wanted to expand our EndoCares® program and are really excited to offer twice as many events this year to provide more patients and their families with access to free screenings, medical advice, and education resources. Access to quality care can be a major roadblock for many patients, and it is a priority for the Society to address health disparities and make healthcare more accessible.

We also thought it was important to bring patient education under the Endocrine Society brand to show that we are the experts who are providing these resources. Patients can find information about the Society, our education materials, and EndoCares® all in one place on our website.

EN: What are your hopes for the impact of the program on patients with endocrine disorders?

CS: I hope the program will ultimately reduce the prevalence of diabetes, obesity, and other endocrine conditions, especially in underserved communities. We know that not everyone has an equal opportunity to receive quality care, and we want to help close this gap for our patients with our EndoCares®

program and other resources designed specifically to benefit minorities and underserved communities.

I also hope our easy-to-navigate content hub and multilingual educational materials will allow more patients and caregivers of different backgrounds and ethnicities to have access to the information they need to understand their endocrine disorders and better manage their health.

EN: How important is it for an organization like the Endocrine Society to connect with patients?

CS: It’s extremely important for the Society to share its expertise and resources with patients. We are a trusted source of information and have several resources to make managing endocrine disorders easier. We provide the most up-to-date

“ It’s extremely important for the Society to share its expertise and resources with patients. We are a trusted source of information and have several resources to make managing endocrine disorders easier. We provide the most up-to-date hormone health information and free tools to improve our patients’ quality of life.”

— CHRISTINE M. BURT SOLORZANO, MD, ASSOCIATE PROFESSOR, PEDIATRICS, DIVISION OF ENDOCRINOLOGY, UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE, CHARLOTTESVILLE, VA.; CHAIR, ENDOCRINE SOCIETY PATIENT ENGAGEMENT COMMITTEE

“ We are an organization of 18,000 of the top endocrinologists and scientists in the world, and there is no one more qualified than us to provide education to our patients. **Our goal is to translate complex hormone health information into digestible education for our patients.”**

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hormone health information and free tools to improve our patients' quality of life.

We are an organization of 18,000 of the top endocrinologists and scientists in the world, and there is no one more qualified than us to provide education to our patients. Our goal is to translate complex hormone health information into digestible education for our patients. The patient guides, fact sheets, and other education tools the Society creates are all great resources that are available for us to share with our patients.

EN: How have you seen patients benefit from free tools and resources like our menopause map? How will the interactive tool help patients who are going through menopause?

CS: Having free educational tools and resources on the Endocrine Society website means I can direct my patients to a trustworthy source of more information for them to review at their own pace at home. This way, my patients are less stressed during our visits and don't have to worry about forgetting some of the information we discuss. Because of COVID-19, not every

caregiver or family member can be in a clinic visit with their loved one, so it's helpful for them to have a place where they can also find information and confirm what they are hearing about endocrine diagnoses and treatment options.

The Menopause Map™ is a wonderful tool for women to find information tailored to their symptoms and stage of life. Menopause can seem mysterious, and women may feel reluctant to discuss it with their providers. The Menopause Map™ helps women figure out whether their symptoms are typical of natural menopause and when to seek medical advice. The Map provides helpful links to information about symptom alleviation strategies and medications. There are also downloadable Conversation Starter handouts for patients to take with them to appointments with tips on what to ask their healthcare providers. **EN**

ENDOCARES[®] at ENDO 2022

Throughout the year, EndoCares will be holding events in Seattle, Wash.; Baltimore, Md.; and Phoenix, Ariz., but the first event will kick off during **ENDO 2022**. On Saturday, June 11, from 9:30 a.m. to 2:30 p.m., EndoCares will hold its flagship event at the Clarkston Community Center (3701 College Ave.) in Clarkston, Ga.

Despite only being a little over one square mile in size, more than 60 languages are spoken in Clarkston, so this EndoCares event will focus specifically on the community's refugee population.

ENDO 2022

— WILLIAMS IS THE SENIOR COMMUNICATIONS MANAGER AT THE ENDOCRINE SOCIETY. SHE WROTE ABOUT THE NEW OFFERINGS AT **ENDO 2022** IN THE APRIL ISSUE.

EBR

ENDOCRINE BOARD REVIEW

2022



REGISTRATION IS NOW OPEN!

ENDOCRINE BOARD REVIEW

SEPTEMBER 16–18, 2022

ONLINE EVENT

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REGISTRATION IS NOW OPEN!

CLINICAL ENDOCRINOLOGY UPDATE

SEPTEMBER 8-10, 2022

MIAMI, FLORIDA AND ONLINE

DISCOVER THE LATEST DEVELOPMENTS IN HORMONE CARE

[ENDOCRINE.ORG/CEU](https://endocrine.org/ceu)

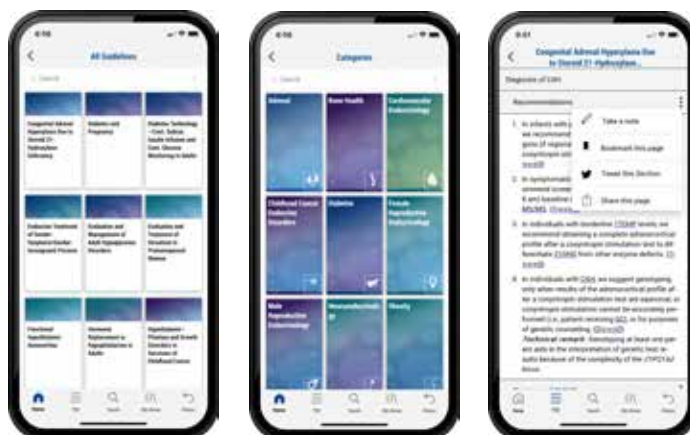
Tools of the Trade

From evidence-based guidelines to toolkits created for endocrinology patients, the Endocrine Society's educational resources are developed using the clinical and scientific expertise of our members.

COMPILED AND WRITTEN BY COURTNEY CARSON

The ultimate goal of the Endocrine Society is to accelerate scientific breakthroughs while improving patient health and well-being. We aspire to the highest standard of scientific rigor, integrity, data-driven decision making, and clinical care as we aim to equip endocrinologists with the tools needed to stay up to date and continually improve practices.

Here, we look at toolkits and resources available to our members — from evidence-based recommendations in the diagnosis, treatment, and management of endocrine-related conditions to educational tools to share with patients covering the diagnosis, symptoms, risk factors, treatments, and therapies for hormone-related diseases and conditions.



▲ Clinical Practice Guidelines

The Endocrine Society's Clinical Practice Guidelines (CPG) offer timely, evidence-based recommendations for clinical care and practice. These guidelines are continually developed and updated to reflect evolving clinical science and meet the needs of practicing physicians. There are 35 guidelines available across 12 topic areas — each created by a writing committee of topic-related experts in the field.

The newly updated CPG Mobile App features these 35 guidelines in an interactive format. Each of the topics features an executive summary that offers access to a list of each guideline's recommendations, tables, and figures for each guideline, links to point-of-care tools and patient resources, links to online clinician education modules and live program sessions — some with MOC and CME credits, and a link to the full published guideline. Clinical Practice Guidelines Pocket Cards are also available for purchase for practical quick-reference tools to help you make accurate clinical decisions at the point of care.

www.endocrine.org/store/clinical-practice-guidelines





► Endocrine Society's Bone Health Toolkit and Osteoporosis Guidelines App

In partnership with Guideline Central, the Endocrine Society created this toolkit to improve knowledge and competencies for assessment, management, and treatment, especially with new therapies, for postmenopausal osteoporosis, and how to optimally use these guidelines in clinical practice. In

addition, these guidelines aim to provide increased knowledge to endocrinologists and allied providers managing patients with postmenopausal osteoporosis, in an engaging manner. These guidelines also seek to provide knowledge to clinicians who do not treat high-risk patients on a regular basis, but nonetheless benefit from insights gained because of this digital toolkit on emerging therapies. These guidelines take steps toward improving outcomes for patients who suffer from postmenopausal osteoporosis.

<https://bonehealthtoolkit.com>



► Menopause Map

The Endocrine Society's newly redesigned Menopause Map is an interactive platform focused on supporting women going through the menopause journey. This resource for patients answers some of the tough questions while guiding the patient through the stages, symptoms, and treatment options available to help better understand the process. The Menopause Map includes the latest education, peer-to-peer support resources, and a new symptom tracker. The "My Personal Path" portion of the Map features downloadable resources including questions for healthcare providers, medication tracker, relaxation techniques, and more. Healthcare providers also have the option to order free copies of the *Menopause Map – My Personal Path* patient resource guide.

<https://www.endocrine.org/menopausemap/index.html>





◀ Endocrine Library


The Endocrine Society recently launched a new online content hub. The Endocrine Library features educational resources covering the diagnosis, symptoms, risk factors, treatments, and therapies for hormone-related diseases and conditions. Our library, a resource for endocrinologists to share with patients, provides endocrine-related

patient guides, Q&A fact sheets, and tracking logs. The goal of the Endocrine Library is to translate complex hormone health information into simplified educational snapshots that support patients' wellness journeys.

<https://www.endocrine.org/patient-engagement/endocrine-library>



The Endocrine Society is continually developing educational resources for our members and their patients as we work together to promote optimal health by embracing advances in endocrine science, education,

and care. We are committed to equipping our members with the tools needed to provide the highest-quality care for individuals with endocrine conditions and to support research that will produce the cures of tomorrow. 

ENDO Shopping Spree

*Aside from these cutting-edge educational materials, you can shop for a variety of Endocrine Society products at **ENDO 2022** in Atlanta, June 11 – 14.*

ENDO2022

Aside from T-shirts heralding the event, there will be a number of other publications, coffee mugs, face masks, notebooks, an orchidometer, board review study guides, and even gland-specific keychains, lapel pins, and socks.

The **ENDO** Store is always a popular, packed spot at the conference. At **ENDO 2022**, the store will be located in the **ENDO Expo** Saturday through Monday, with a smaller version near the registration booth on Tuesday.

However, if you're attending **ENDO 2022** virtually, you can still fill your shopping cart at: <https://www.endocrine.org/store>.





Michael W. Schwartz, MD

Brainstorming

Q&A with Michael W. Schwartz, MD

Endocrine News talks to Michael W. Schwartz, MD, the 2022 Laureate recipient of the Roy O. Greep Award for Outstanding Research about his life and career in academic research that all started with a fascination with how the brain controls behavior.

BY GLENDA FAUNTLEROY SHAW

With his significant contributions in uncovering how our brain regulates energy balance and glucose metabolism, Michael W. Schwartz, MD, is credited for helping to develop novel solutions in the battle against obesity and diabetes. As recipient of the Robert H. Williams Endowed Chair in Medicine, Schwartz was the founding director of the University of Washington Medicine Diabetes and Obesity Center of Excellence and guided the transition of this program into the UW Medicine Diabetes Institute, Seattle, Wash., which he currently co-directs.

The Endocrine Society has honored Schwartz as this year's recipient of the Roy O. Greep Laureate Award for Outstanding Research. In his lab of 15 to 20 team members, Schwartz is currently working to unravel the mystery of how fibroblast growth factor (FGF) family members, including FGF19, FGF21, and FGF1, improve glucose metabolism through actions in the brain.

Endocrine News spoke with him to learn more about his life's path to his research work and what he hopes might be the next scientific breakthrough that could change the lives of patients living with type 2 diabetes.

Endocrine News: The Laureate award is named in honor of Roy O. Greep, PhD, the Endocrine Society's 45th president and a renowned researcher. What did news of the recognition mean to you?

Michael W. Schwartz, MD: I am humbled and honored to receive this recognition. Dr. Greep was among the great pioneering leaders in endocrine research, and he also served as president of the Endocrine Society during its formative years. At that time, the Society had distinguished itself from other medical organizations — and still does — by its unwavering commitment to science and to an evidence-based understanding of how the body works, and how that information can be translated to effective, mechanism-based treatment of human disease. That same commitment has guided me throughout my career.

EN: Was there a defining moment early in your career that sparked the trajectory into diabetes and obesity research?

MWS: I first became interested in how the brain controls behavior during my undergraduate years at the University of Colorado, a fascination that persisted throughout my years in medical school and medical residency. The fundamental question that motivated me was, “how can a collection of neurons or neurocircuits provide an individual with perceptions, motivations, and awareness?”

As I began my fellowship training in endocrinology, I realized that this type of question can be pursued in very mechanistic terms by trying to understand how the brain links changes in nutritional state to adaptive changes in the drive to eat. That question was at the heart of my decision to pursue a career in academic research at the beginning of my fellowship.


EN: What research goals are you targeting for the next five to 10 years? Is there one specific therapeutic breakthrough you hope type 2 diabetes patients can experience in the next decade by your peer researchers across the globe?

MWS: In terms of my hopes for the future, growing evidence from our group and others suggests that the brain works in partnership with pancreatic islets and other peripheral tissues to orchestrate adaptive changes in how glucose is used in the

“ In terms of my hopes for the future, growing evidence from our group and others suggests that the brain works in partnership with pancreatic islets and other peripheral tissues to orchestrate adaptive changes in how glucose is used in the body, and in so doing, helps to maintain the blood glucose level within a normal physiological range”

— MICHAEL W. SCHWARTZ, MD, ROBERT H. WILLIAMS ENDOWED CHAIR IN MEDICINE;
CO-DIRECTOR, UW MEDICINE DIABETES INSTITUTE, SEATTLE, WASH.

body, and in so doing, helps to maintain the blood glucose level within a normal physiological range. I suspect we will eventually learn that a critical component of this regulatory system involves the brain's capacity to sense the circulating glucose level, and to then transduce this afferent information into adaptive responses that promote metabolic homeostasis.

I also anticipate that we will discover that defects in this sensing process are fairly common, and that when they occur, they can raise the defended blood glucose level into the diabetic range, thereby playing a key role in the pathogenesis of type 2 diabetes. Perhaps one day, therapeutic strategies aimed at reversing such defects can be used to restore the defended blood glucose level to normal in these patients (rather than simply lowering the glucose level, as might be achieved by insulin injection, for example). Indeed, we have already shown that this is possible in rodent models of type 2 diabetes. 

ENDO 2022

On Monday, June 13, 2022, Michael W. Schwartz, MD, will be presented the 2022 Roy O. Greep Laureate Award for Outstanding Research at the plenary session, “Intersex, Transgender, Exercise in Endocrinology,” taking place from 8 a.m. to 9 a.m. in Hall A3. This plenary will also be livestreamed.

— FAUNTLEROY SHAW IS A FREELANCE WRITER BASED IN CARMEL, IND. SHE IS A REGULAR CONTRIBUTOR TO *ENDOCRINE NEWS*.




Advocacy Season for NIH Funding Officially Begins

While 2022 is only a few months old, on Capitol Hill the appropriations cycle for fiscal year (FY) 2023 is well and truly underway and the Endocrine Society has quickly shifted gears and developed our 2023 funding requests for the NIH and other critical public health agencies.

In March, the Biden administration kicked off the process by releasing its annual budget request to Congress. While the request is independent of congressional appropriations committees that make the final funding decisions and stands little chance of becoming law as written, it gives important indications of the administration's priorities for the coming year. This year, the budget proposed to deliver approximately \$49 billion of discretionary funds to the NIH in FY 2023, which would be very close to the Endocrine Society's recommendation of \$50 billion in funding. However, the administration request includes \$1.09 billion for specific initiatives associated with the 21st Century Cures Act and \$5 billion for the new Advanced Research Projects Agency for Health (ARPA-H). After accounting for the ARPA-H funding within the total NIH budget, the rest of the Institutes and Centers (ICs) at the NIH would be essentially flat funded for the entire year, with some institutes potentially receiving a cut if this proposal were accepted.

The Endocrine Society is concerned that the allocation of significant amounts of funding within the NIH budget to targeted projects may compromise the trajectory of steady, sustainable increases in funding for investigator-initiated research across the NIH that we and others have worked hard to achieve in recent years. To ensure that all ICs at the NIH continue to see funding increases that positively impact the pay line for grants, the Endocrine Society's key request for the upcoming year will remain that the NIH should receive a \$50 billion appropriation in FY 2023, independent of any funds for ARPA-H, with at least a 7.7% increase in funding for each of the ICs. This ask was submitted as part of our annual appropriations testimony to the House and Senate Labor, Health, and Human

Services (LHHS) Subcommittee and discussed during our meetings with congressional offices during our April Hill Day.

As always, we encourage members to contact their elected representatives via our advocacy website (www.endocrine.org/takeaction) to ensure that Congress appreciates the value of investigator-initiated research and secures necessary across-the-board increases for the NIH. 

ENDO2022

Advocacy Events at ENDO 2022

ENDO 2022 will take place June 11 – 14 in Atlanta, Ga. This will be our first in-person annual meeting in more than two years, and we hope to see you there. There will be several events and opportunities to learn more about the Endocrine Society's advocacy accomplishments and our members who helped us achieve our advocacy goals:

- ▶ Visit the Endocrine Society Booth on the Exhibit Floor to see our interactive "Advocacy Walk of Fame" – What have we accomplished and our member champions;
- ▶ Join us at various times at the Career and Community Center on the Exhibit Floor to learn more about how you can participate in Endocrine Society Advocacy; and
- ▶ Visit the Advocacy Booth at the Special Interest Group Reception to learn more about what advocacy and policy issues the Endocrine Society is working on and how you can get involved.

Endocrine Society Members Advocate for Insulin Affordability, Diabetes Prevention, Diabetes Research

The Endocrine Society conducted a Hill Day over April 26, 27, and 28, where we brought together nearly 55 member clinicians, clinical researchers, and basic scientists from 25 states to meet with their congressional representatives and discuss issues related to diabetes treatment, prevention, and research. Continuing security restrictions on Capitol Hill required that our meetings occur remotely through Zoom and other video technologies rather than in person, but, as always, our members were exceptional endocrine advocates and we have already begun to see the impact of our Hill Day.

During these meetings, Society members urged Congress to pass legislation that would make insulin more affordable. Over the past couple of months, we've been successful in getting Congress's attention about this issue. In March, the House voted on legislation that would cap patients' out-of-pocket insulin costs at \$35 per month for people on Medicare and private insurance. Senate leadership indicated that the Senate would consider legislation to address insulin affordability in May, making our Hill Day particularly timely and effective. Our clinician members shared stories with congressional offices about their patients who have had to forgo or ration their prescribed insulin due to cost and, consequently, jeopardized their health and safety. Our members urged Congress to pass



insulin affordability legislation that addresses the drivers of rising insulin prices and lowers out-of-pocket costs for people who rely on insulin to manage their diabetes.

In addition to discussing insulin affordability, our members made funding requests for the fiscal year 2023 (FY 2023) related to diabetes prevention and research. Our members asked Congress to fully fund the Centers for Disease Control and Prevention's (CDC) National Center for Chronic Disease

Prevention and Health Promotion (NCCDPHP), the Division of Diabetes Translation (DDT), and the National Diabetes Prevention Program (National DPP). The NCCDPHP funds science-based programs that prevent chronic diseases,

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Our members urged Congress to pass insulin affordability legislation that addresses the drivers of rising insulin prices and lowers out-of-pocket costs for people who rely on insulin to manage their diabetes.

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including the DDT and National DPP, which are two successful programs that help prevent type 2 diabetes.

On the research front, Society members called on Congress to continue the recent trajectory of steady, sustainable increases in funding for the National Institutes of Health (NIH) by providing the NIH with at least \$50 billion in FY 2023. Our NIH-funded members discussed the importance of increased funding for the NIH, and the positive impact that federal funding has on research discoveries in their own districts and states. They also stressed the importance of supporting investigator-initiated research (ROIs) at the NIH.

The Endocrine Society will continue to urge Congress to address insulin affordability and fund diabetes prevention and research in FY 2023.

Society members who were unable to participate in our virtual Hill Day but still want to support insulin affordability, diabetes prevention, and diabetes research can do so by joining our online campaigns at: www.endocrine.org/takeaction. 



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