

MAY 2026

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Endocrine news

boning up for ENDO2026

To commemorate National Osteoporosis Awareness and Prevention Month while also previewing ENDO 2026, *Endocrine News* focuses on the latest research on bone health and its complications to be presented in Chicago, Ill.

YEAR IN BONE: The most influential and cutting-edge publications from the past year are discussed in a session that covers all the bases from basic science discoveries, translational advances, and key updates in clinical research.

UNPAUSING THE CONVERSATION: Women's bone health takes center stage in Chicago for the symposium, "'Hot and Flashy' Topics in Menopause."

BREAKING POINT: "Weight Loss: Friend or Foe for Bone & Muscle?" examines a variety of weight loss therapies and their impacts on musculoskeletal health.

GUIDING CURIOSITY: Q&A with 2026 Outstanding Mentor Award Laureate, Patricia Lee Brubaker, PhD

LAB ACCURACY: New technology to increase precision at the bench

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BY GLENDA FAUNTLEROY SHAW

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Advances in lab technology are helping endocrinology researchers improve accuracy, efficiency, and confidence in their work.

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Looking Back on Presidential Term: Highlights Include Support for Research Members, Progress on Obesity, and Advocacy Fronts

As my presidential term winds down, I look back with pride and admiration at the sheer amount of exemplary programming that the Society provides for its members each year. I'd like to recount some highlights from the past 12 months as we prepare to change leadership at **ENDO 2026**, June 13 – 16, in Chicago, Ill.

One of the initiatives of which I'm particularly proud is the one-year expansion of our **ENDO**

“
It has been my honor to serve as your president. We should all be proud to belong to such an outstanding organization as the Endocrine Society.
”

2026 travel grant programs for early-career researchers.

The expansion was designed to address cuts in National Institutes of Health (NIH) grant funding, which directly affected many of our research members. Researchers represent a significant part of our **ENDO** attendance each year, and many were considering not coming this year due to budget shortfalls. As such, we decided to:

- ▶ Increase the amount to \$1,500 per award recipient for Early Investigator Awards, Outstanding Abstract Awards, and Early Career Forum; and

- ▶ Provide up to 200 additional grants of \$1,500 per award recipient for the Outstanding Abstract Awards. (\$1,750 per award for international recipients.)

I'm pleased to say this effort paid off. Notably, we received 2,435 total abstracts submitted by the regular submission deadline (excluding late-breaking abstracts), which was the highest number of submissions since **ENDO 2013**.

By way of breakdown, this year we received 1,283 clinical abstract submissions, versus 913 in 2025, resulting in a 40.5% increase. We also received 241 basic science abstract submissions this year, versus 155 in 2025, resulting in a 55.4% increase.

These increases are a direct result of our additional support for researchers.

Obesity: Upcoming Scientific Statement and Clinical Practice Guideline

As you know, obesity is a key area of focus for the Society. I'm proud to note that we are making significant progress on several important projects for both our research and clinical members.

We sent out for member comment a draft Scientific Statement on obesity in April. This statement, developed by a writing group led by Daniel J. Drucker, MD, and Ania M. Jastreboff, MD, PhD, has already undergone several stages of a rigorous review process.

The final statement is scheduled for release later this summer. Like others, this one will provide an authoritative review on the current state of research and provide recommendations for additional areas of study in this rapidly changing field.

For clinicians, we're also making progress on a new Clinical Practice Guideline (CPG) on the

pharmacological management of obesity. This highly anticipated CPG is expected to be published in late 2026 and will replace our 2016 CPG on this topic.

In preparation for the new CPG, we invited a group of patient partners — i.e., people who have experience living with obesity — to share their perspectives, ideas, and values around treatment options. More than 80 people took part in one of two listening sessions held by trained facilitators over four days in late January.

The updated CPG will reflect the latest best practices in treatment and current research, together with the patient's perspectives. The recommendations will help international healthcare professionals and patients make informed decisions about obesity care.

These resources will be part of the Society's new Center on Obesity, which is slated to launch later this year. Leveraging our members' expertise, this initiative will seek to advance our scientific understanding of obesity and treatments for the one in eight people worldwide who has obesity.

Education & Meetings: ENDO 2026 Offers New and Enhanced Features

Our educational offerings have always been a top feature of the Society. We hold multiple educational meetings throughout the year. And last fall, we saw record attendance at the Endocrine Board Review (EBR) and Clinical Endocrinology Update (CEU) 2025.

And, of course, **ENDO** remains the largest gathering of endocrinology researchers and clinicians in the world.

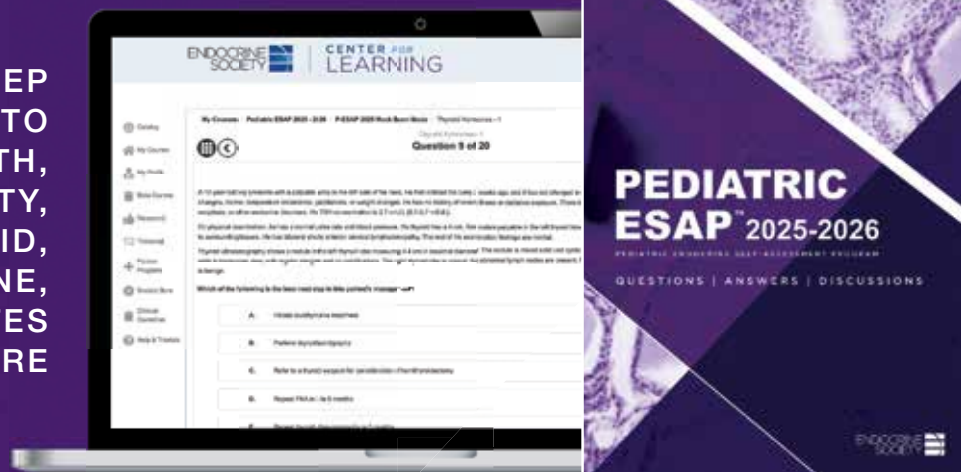
I'm delighted to report that **ENDO 2026** in Chicago, Ill., June 13 – 16, will provide more convenience, more presentations, more science, and more opportunities for networking. Among other things, **ENDO 2026** will:

- ▶ **Provide more presentation opportunities for early-career investigators** by scheduling oral and rapid-fire presentations throughout the day.

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- ▶ Offer more **Meet the Professor (MTP) sessions**, with time slots each day throughout the meeting.
- ▶ Enhance the **Meet the Scientist (MTS) sessions and basic science networking space**, with an extended basic science reception.
- ▶ Add more **engagement opportunities for attendees** and exhibitors on the **ENDOExpo** floor.
- ▶ Provide more **corporate-supported presentations** outside the exhibit hall.
- ▶ Extend **registration hours and offer a satellite badge pick-up location** at the Palmer House on Friday to ensure lines are not overly long.

I am deeply grateful to the Annual Meeting Steering Committee Chairs and committee members who designed such an exciting **ENDO 2026** program.

Outside of **ENDO**, we always are looking for new educational opportunities to meet the needs of our diverse membership. To this end, we recently launched the **Rare Endocrine Disease (RED) Fellows Program**, developed by the Society with support from the National Organization for Rare Disorders (NORD).

The program addresses critical gaps in awareness, diagnosis, and care of rare endocrine diseases. It also aims to equip fellows with the knowledge and practical skills needed to improve patient outcomes. A total of 50 U.S. fellows participated in the in-person component, April 17– 18, at the Society headquarters in downtown Washington, D.C.

We are excited to announce that the Society will host a **Science Summit** on nuclear receptors in age-related diseases in Málaga, Spain, this September. I am also looking forward to the Society holding additional basic research events in 2027 that will build on the success of our **International Conference on Steroid Hormones and Receptors**.

Advocacy: Making a Difference

During the past year, funding for the National Institutes of Health (NIH) was in jeopardy with calls from the White House to cut funding by 40%, cap indirect cost rates, and restructure the NIH in ways that would disrupt endocrine research.

Thankfully, the Society's advocacy arm is second to none, and our efforts have resulted in significant wins. Chief among them, Congress recently passed a fiscal year 2026 funding bill for the NIH that includes an increase of roughly \$415 million for the NIH, along with a \$10 million increase for diabetes research.

The bill also includes language that we had advocated for to protect the NIH by limiting a budget maneuver called multiyear funding, prohibiting arbitrary caps to indirect cost rates, requiring grants to be paid within five business days, as well as reclaiming congressional authority over spending.

Our Advocacy team didn't rest on these victories. The Society continued to advocate for the introduction of the **Improving Needed Safeguards for Users of Lifesaving Insulin Now (INSULIN) Act**, a bipartisan bill to address insulin affordability.

The Society endorsed the legislation that was introduced in March. We will fight hard for its passage, as the bill aligns with recommendations in the Society's **Insulin Access and Affordability Position Statement**. We call for lowering the price of insulin through rebate reform and limiting copayments to no more than \$35 per month.

Thank You and Please Stay Engaged!

There is much, much more that the Society does on a daily basis for its members. I would like to offer my sincere thanks to the current board of directors and officers, as well as the Society staff, particularly CEO Kate Fryer and the senior leadership team. I'd also like to acknowledge incoming President Nanette Santoro, MD, and President-Elect Joy Wu, MD, PhD, who will take over the reins this summer at **ENDO 2026**.

It has been my honor to serve as your president. I am truly grateful for this amazing opportunity and to have served all our members. We should all be proud to belong to such an outstanding organization as the Endocrine Society.

Carol A. Lange, PhD
President, Endocrine Society



FROM THE **EDITOR**

MAY 2026

Endocrine news

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

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Boning Up for ENDO 2026

Each May in the U.S. is National Osteoporosis Awareness and Prevention Month, which is observed to raise awareness about osteoporosis as well as promote prevention and early detection. Bone health is one of the cornerstones of endocrine science and practice, so we felt that this was the perfect issue to highlight some of the recent research focusing on bone health and potential treatment breakthroughs from bone-specific sessions at **ENDO 2026** taking place next month in Chicago, Ill.

In “Unpausing the Conversation: Menopause Is Having a Moment at ENDO 2026” on page 20, Kelly Horvath takes a closer look at women’s bone health as it takes center stage in Chicago during the symposium “Hot and Flashy’ Topics in Menopause,” on Saturday June 13. From catching endocrinologists up regarding menopause care and past regulatory missteps to estrogen’s impact on bone health and the many non-hormonal options, this **ENDO 2026** symposium will definitely give attendees something to talk about! The session chair, Gina Woods, MD, MSCP, clinical professor of medicine and chief of the Division of Endocrinology and Metabolism at the University of California, San Diego, thinks that the reason this topic is now being featured is due to the “reevaluation of safety and the U.S. Food and Drug Administration’s removal of the black box warning for menopausal hormone therapy, the ongoing social media buzz, the increased patient demand,” she says. “I think another important component is that the Endocrine Society recognizes that menopause training has been largely missing from medical education. There is a huge knowledge gap, and we need to address it by bringing experts together in sessions like this.”

In “Boning Up: The Year in Bone Health” on page 34, Senior Editor Derek Bagley looks at the **ENDO 2026** session, “The Year in Bone,” which will feature experts in bone research who will review and discuss the most influential and cutting-edge publications from the past year. From basic science discoveries, translational advances, and key updates in clinical research, attendees will get a comprehensive overview of the latest progress shaping the field of bone health and disease, which is becoming more and more relevant as the years go by. “We are now living in a super-aged society, and conditions such as osteoporosis and sarcopenia are becoming increasingly important,” says Yumie Rhee, MD, PhD, professor, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, South Korea, and one of the sessions presenters. “In this setting,



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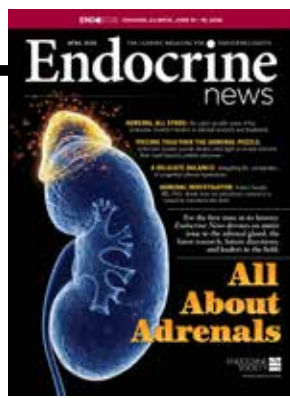
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I hope attendees will come away with a clear and up-to-date overview of where the field currently stands, as well as the direction in which it is moving through the efforts of many scientists and the pharmaceutical industry.”

“**Breaking Point: Weight Loss Therapies and the Musculoskeletal Stakes**” on page 28 by Kelly highlights the **ENDO 2026** session, “Weight Loss: Friend or Foe for Bone & Muscle?” Attendees to this symposium will be in for a treat as three experts weigh in on the impact of various weight loss therapies on muscle and bone. Pharmacologic, surgical, and even lifestyle impacts will be discussed and debated in this Sunday morning symposium. One of the session’s speakers will be 40-year Endocrine Society member Clifford J. Rosen, MD, director and principal investigator, Rosen Musculoskeletal Laboratory Clinical & Translational Medicine, Maine Medical Center Research Institute; professor of medicine, Tufts University School of Medicine, Scarborough, Maine, who says we don’t understand the mechanisms of bone loss from the GLP-1 RAs but weight loss alone causes bone to change and thin,” he says, adding, “There might be other mechanisms as well for GLP-1 RAs.”

Next month, we take a broader look at what attendees can expect from **ENDO 2026** in Chicago, so be sure to keep an eye out for the June issue! If you have any suggestions, questions, or comments, feel free to contact me at: mnewman@endocrine.org.

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

Letter to the Editor

Am I the only one bothered by articles written for endocrinologists by journalists, who sound as if they’re mainly trying to educate themselves or the lay public? Do endocrinologists need to be taught that cortisol is “the ‘stress hormone’ essential for maintaining blood pressure, blood sugar and the immune response” (p. 17), or that androgens are male sex hormones (p. 18), or that bilateral adrenalectomy is removal of both adrenal glands (p. 18)?

There are countless other examples in this and all other issues. This dumbing down is why I just skim the magazine and don’t spend much time with it. If I want to be updated on CAH or other topics, I’ll read articles or reviews written by physicians or other scientists with actual expertise and experience with those patients. Sometimes an article in *Endocrine News* may pique my interest enough to do that, so that’s one good thing.

Thanks for the opportunity to give my opinion.

Richard E. Kleinmann MD, FACP, (retired)

Volunteer Endocrinology consultant, Kintegra Health, Gastonia, N.C.

Editor’s Response:

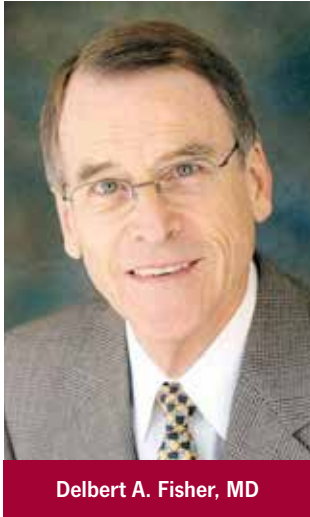
Thank you for reaching out to us regarding the content in *Endocrine News*. It is our goal that our content is compelling enough to draw readers in, rather than push them to skim.

While endocrinologists like yourself are the primary audience of the magazine, there is a portion of our audience who could benefit from such explanation including students, nurses, other medical professionals, and even patients and laypeople who are seeking to educate themselves about a particular condition or its treatment.

While we want to be as accessible as possible, it’s important to us that the magazine remains relevant to our primary audience, and we’re committed to publishing content that inspires while informs.

Again, I appreciate your comments, and I’ll keep them in mind as we plan future issues.

Mark A. Newman, Executive Editor
Endocrine News



Delbert A. Fisher, MD

Remembering Endocrine Society Past-President, Delbert A. Fisher, MD

BY JENNIFER K. YEE, MD, AND RONALD S. SWERDLOFF, MD, MACP

Delbert A. Fisher, past-president of the Endocrine Society and former editor of *The Journal of Clinical Endocrinology & Metabolism*, passed away March 4, 2026, at the age of 97. Fisher was a pediatric endocrinologist best

known for his work in delineating fetal and newborn thyroid physiology, which led to the launch of newborn screening for congenital hypothyroidism in North America.

Fisher received his undergraduate degree from the University of California, Berkeley, where he met his wife, Beverly. They moved across the bay where he earned his medical degree from the University of California, San Francisco, and stayed on to complete his internship and residency in pediatrics. It was here that he began studying hypothyroidism in a primate model with pediatric endocrinologist Donald Pickering.

After serving in the United States Air Force for two years during which time his son David was born, Fisher commenced fellowship training in pediatric endocrinology at Oregon Health Sciences University and resumed his research with Donald Pickering. Twins Tom and Mary were born during this time in Oregon. Fisher moved to the University of Arkansas for his first faculty position as director of the Division of Pediatric Endocrinology and Metabolism from 1960 to 1968. During this time, he published multiple studies with radiation physicist Thomas Oddie on iodine uptake in thyroid hormone metabolism. His group trained Arkansas's first pediatric endocrinologist, Joycelyn Elders, who would later become U.S. Surgeon General under President Bill Clinton.

In 1968, Fisher was recruited to Harbor-UCLA Medical Center and its Research and Education Institute by UCLA's Chair of Pediatrics Joseph St. Geme, Jr., and Division Chief of Endocrinology (internal medicine) William Odell. As the institution's first pediatric endocrinologist, he collaborated on development of radioimmunoassay for thyroid hormone testing, delineated fetal thyroid physiology in a sheep animal model, and characterized human perinatal thyroid function. The research culminated in thyroid hormone testing for broad dissemination in screening newborns for congenital hypothyroidism across North America. Initially serving as division head, he later became chair of the Department of Pediatrics from 1985 to 1989. During this time at Harbor-UCLA, he left a lasting impression on the field and numerous trainees including medical students, residents, fellows, and visiting scholars.

Fisher advanced the dissemination of scientific research through numerous editorial positions. He was the editor-in-chief of *The Journal of Clinical Endocrinology & Metabolism* from 1978 to 1983, with Beverly serving as a managing editor. Afterwards, he was editor-in-chief of the *Journal of Pediatrics* from 1984 to 1989.

In 1991, Fisher moved on from Harbor-UCLA to join the Nichols Institute reference laboratories as president, where he remained until his retirement in 2007.

Fisher holds the unique distinction as having served as president of numerous endocrinology societies: the Pediatric Endocrine Society (1982 – 1983), the Endocrine Society (1983 – 1984), and the American Thyroid Association (1988 – 1989). Additional presidencies in pediatrics include the Western Society for Pediatric Research (1982 – 1983) and the American Pediatric Society (1992 – 1993). Together, Fisher

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and his wife, Beverly, demonstrated a lasting commitment to preserving scientific legacy by establishing scholar awards with the Endocrine Society and the Pediatric Endocrine Society to support work chronicling the history of endocrinology.

Fisher's scientific vision, leadership, and mentorship profoundly shaped the field of endocrinology, and have enduring impact on the lives and careers of the many colleagues and trainees who worked with him.

Each year, the Endocrine Society honors Fisher with the Delbert A. Fisher Research Scholar Award, which provides a \$2,000 honorarium to a scholar demonstrating exceptional work in the preservation of the history of endocrinology. The scholar also delivers the Clark T. Sawin Memorial History of Endocrinology Lecture at ENDO. This award is made possible by the generous support of Dr. and Mrs. Delbert A. Fisher.

Yee is an investigator at the Lundquist Institute; chief, Division of Pediatric Endocrinology, Harbor-UCLA Medical Center; HS Clinical Professor of Pediatrics, David Geffen School of Medicine at UCLA, Los Angeles, Calif. Swerdloff is the Distinguished Professor of Medicine, David Geffen School of Medicine at UCLA Division of Endocrinology, Harbor-UCLA Medical Center; senior investigator, the Lundquist Research Institute, Torrance, Calif.



Adrenaline Overload: Rare Adrenal Tumors Linked to Hidden Bone Loss

Rare neuroendocrine tumors that flood the body with stress hormones like adrenaline do more than spike blood pressure; they may also be quietly degrading the patient's skeletal system, according to a comprehensive review published by researchers at Comenius University.

Titled, “Effects of Catecholamines on Bone and Mineral Metabolism in Patients with Pheochromocytoma and Paraganglioma” and appearing in *The Journal of Clinical Endocrinology & Metabolism*, the article highlights a critical but often overlooked systemic effect of pheochromocytomas and paragangliomas (PPGLs). These tumors produce catecholamines — hormones responsible for the “fight or flight” response — which the authors note are directly linked to decreased bone mineral density and increased bone resorption in affected patients.

While the cardiovascular impacts of these tumors, such as heart palpitations and hypertension, are well-documented, the impact on bone metabolism has remained in the shadows. Research into catecholamine-driven bone loss has lagged because life-threatening cardiovascular symptoms took clinical priority, and the complex “talk” between the nervous system and the skeleton — a new field called neuro-osteology — was only recently mapped at the molecular level. Additionally, the fluctuating nature of stress hormones, such as cortisol, in patients with severe illnesses and the rarity of patients with catecholamine-secreting tumors made it difficult to isolate these hormones as the primary cause of bone degradation.

The authors synthesized data from experimental models and clinical retrospective studies, revealing that high levels of catecholamines activate specific receptors on bone cells.

“Evidence suggests that β -adrenoceptor signaling increases the rate at which the body breaks down bone tissue,” the authors write. This process, known

as bone resorption, leads to lower trabecular bone scores and a higher presence of serum C-terminal telopeptides — markers that indicate the skeleton is being dismantled faster than it can be rebuilt.

The review offers a silver lining for patients diagnosed with these rare tumors. Clinical data analyzed in the article consistently showed that bone mineral density (BMD) began to stabilize or reversed following surgical removal of the tumors. By eliminating the source of excess catecholamines, the skeletal “biological clock” appears to regain balance.

Furthermore, the research suggests a protective role for β -adrenoceptor blockers. Epidemiological studies included in the review indicate that these common medications, often used to treat heart conditions, may help maintain bone density by blocking the harmful signaling pathways triggered by the tumors.

The findings serve as a call to action for endocrinologists and oncologists to include bone health monitoring in the standard care package for PPGL patients. Because these tumors are rare, the skeletal symptoms can easily be mistaken for general aging or other metabolic issues if not specifically screened.

By identifying these risks early through bone turnover markers and BMD measurements, clinicians can implement primary prevention strategies to improve the long-term quality of life for survivors.

As the medical community continues to explore the intersection of the nervous system and bone biology, this study underscores the necessity of a “whole-body” approach to treating neuroendocrine disorders. For patients battling PPGLs, protecting the heart is only half the battle; protecting the architecture of the skeleton is just as vital for a full recovery. — Jackie Oberst

“

As the medical community continues to explore the intersection of the nervous system and bone biology, this study underscores the necessity of a ‘whole-body’ approach to treating neuroendocrine disorders. For patients battling PPGLs, protecting the heart is only half the battle; protecting the architecture of the skeleton is just as vital for a full recovery.

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New Research Defines Best Ways to Switch Osteoporosis Meds

Effective long-term management of osteoporosis requires a carefully choreographed sequence of medications, as certain drug transitions can significantly enhance or inadvertently undermine bone density, according to a clinical review published by researchers at Aarhus University.

The article, “**Approach to the Patient—Transitions in Osteoporosis Therapy**,” appearing in *The Journal of Clinical Endocrinology & Metabolism*, emphasizes that a “goal-directed” treatment strategy is essential for preventing fractures. While most transitions between bone-building (anabolic) and bone-preserving (antiresorptive) drugs are beneficial, the research team identified specific “danger zones” — particularly involving the drug denosumab — where incorrect timing or discontinuation can lead to rapid bone loss and increased fracture risk.

For many patients, a single medication is not enough to maintain healthy bone mineral density (BMD) over a lifetime. The article found that the most effective sequence involves starting with an anabolic agent — a drug, such as teriparatide, abaloparatide, or romosozumumab that actively builds new bone — followed by an antiresorptive agent, such as bisphosphonates or denosumab, to “lock in” and further improve those gains.

“Transition from bone anabolic treatment to antiresorptives maintains or further improves the bone mineral density increase obtained during the initial phase,” the authors write. This sequential approach ensures that the newly formed bone is preserved, providing a long-term defense against skeletal fragility. They also note that the Endocrine Society, the American Association of Clinical Endocrinologists, and the American Society for Bone and Mineral Research recommend the sequential approach of initiating bone anabolic therapy in patients at very high fracture risk.

The most critical findings involve denosumab, a common injectable antiresorptive. The authors warned that transitioning from denosumab to an anabolic agent, or simply stopping denosumab without a follow-up treatment plan, can be hazardous.

Unlike other medications that linger in the bone, the effects of denosumab wear off quickly. If the drug is discontinued after more than two or three years without immediate follow-up therapy, patients may experience a “rebound” effect, in which bone turnover spikes, potentially leading to multiple vertebral fractures.

The article also addressed the common practice of switching from oral medications to more potent intravenous or injectable treatments. These transitions are generally considered safe and often result in further increases in BMD. However, researchers noted a “blunting” effect when patients move from long-term antiresorptives to anabolic treatments, suggesting that the order in which these drugs are prescribed can change how well they work.

As the medical community moves toward personalized, goal-directed care, this research provides a vital framework for clinicians. By understanding the molecular interactions of these therapies, doctors can better tailor treatment plans to hit specific bone density targets.

For the millions of individuals living with osteoporosis, the message is clear: The success of a bone health journey depends not just on the first medication prescribed, but on the strategic plan for every transition that follows. Proper medical supervision is essential during any change in therapy to ensure that the skeletal “architecture” remains stable and secure. — Jackie Oberst



“

As the medical community moves toward personalized, goal-directed care, this research provides a vital framework for clinicians. By understanding the molecular interactions of these therapies, doctors can better tailor treatment plans to hit specific bone density targets.

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The research adds to a growing body of evidence suggesting that everyday environmental exposures can have lasting biological consequences. Phthalates and phenols are ubiquitous in modern life, often entering the body through ingestion, inhalation, or skin contact.

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Widespread Chemicals in Plastics May Be Linked to Developmental Delays in Baby Girls

Exposure to common endocrine-disrupting chemicals (EDCs) during pregnancy may significantly alter the reproductive development of female infants during their first months of life, according to a new study published in *The Journal of Clinical Endocrinology & Metabolism*. Researchers found that daughters of women with higher concentrations of certain chemicals in their systems during pregnancy exhibited slower growth in key reproductive markers by the time they reached five months of age.

The findings highlight a potential “delay,” in which the impact of prenatal exposure becomes more pronounced during a developmental phase known as “mini-puberty.” This phase, occurring in the first few months of life, involves a temporary surge in reproductive hormones that is vital for the maturation of organs. By showing that chemical exposure may slow growth of markers of reproductive system development during this window, the study raises concerns about long-term reproductive health, including potential impacts on fertility or hormone-related disorders later in life.

The study, “**Associations of Endocrine-Disrupting Chemicals with Anogenital Distance Across Infancy**,” part of the Illinois Kids Development Study (I-KIDS), tracked 563 mother–infant pairs between 2013 and 2019. Researchers measured levels of 10 phthalates and nine phenols — chemicals often found in plastics, personal care products, and food packaging — in maternal urine samples collected throughout pregnancy. They then measured the infants’ anogenital distance (AGD) at birth and again at five months. AGD is a sensitive, hormone-dependent marker used by scientists to gauge reproductive system development in the womb.

While findings were inconsistent at the time of birth, a clear pattern emerged by the five-month mark in female infants. For every quartile increase

in maternal phthalate exposure, researchers observed a significant reduction in AGD length and a nearly 40% decrease in the growth of specific anogenital measures from birth to mini-puberty. These findings suggest that the hormonal “programming” occurring in utero may not manifest physically until the infant’s system undergoes the hormonal surges typical of early infancy. This lag suggests that assessing infants only at birth may provide an incomplete picture of environmental health risks.

“Anogenital distance in mini-puberty and growth across infancy may reflect EDC-mediated hormonal disruption in utero,” the study authors conclude. The research team emphasized that these developmental milestones are critical indicators of the “hormonal milieu” the fetus experienced during gestation. They noted that findings were particularly prominent in females, whereas the associations in male infants were less consistent across the chemical mixtures studied, although they highlighted the need for additional studies that consider the roles of prenatal phenol exposure for male reproductive health.

The research adds to a growing body of evidence suggesting that everyday environmental exposures can have lasting biological consequences. Phthalates and phenols are ubiquitous in modern life, often entering the body through ingestion, inhalation, or skin contact. Because many of these chemicals are known to interfere with or mimic natural hormones, even low-level exposure during pregnancy is of significant public health concern.

Moving forward, the research team emphasized the need for continued monitoring of these children to determine if these early developmental delays persist into adolescence. For now, the study serves as a reminder of the importance of the in utero period for future child health. — Jackie Oberst

“

We are now living in a super-aged society, and conditions such as osteoporosis and sarcopenia are becoming increasingly important. In this setting, I hope attendees will come away with a clear and up-to-date overview of where the field currently stands, as well as the direction in which it is moving through the efforts of many scientists and the pharmaceutical industry.”

according to Yumie Rhee, MD, PhD, Yonsei University College of Medicine, in Seoul, Korea, in “Boning Up: The Year in Bone ENDO 2026 Preview” on page 34.



36%

The percentage increase in gestational diabetes diagnoses in the U.S. over the past decade, with rates rising every year since 2016.

SOURCE: NORTHWESTERN UNIVERSITY



29%

Increased risk of osteoporosis diagnosis among GLP-1 users compared with non-users. SOURCE: WWW.HEALTH.COM



1 in 5

The number of U.S. blood donors with elevated A1C levels, highlighting how common prediabetes and diabetes are even among generally healthy adults. SOURCE: AMERICAN RED CROSS



127 million

The estimated number of global cases of obesity, type 2 diabetes, and metabolic syndrome linked to BPA exposure in 2024.

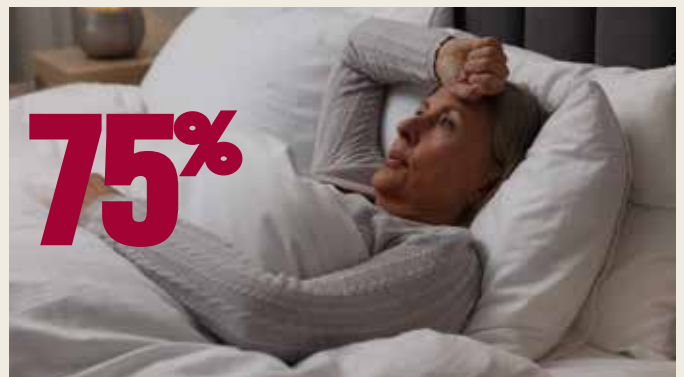
SOURCE: AMERICAN JOURNAL OF MANAGED CARE



15%

The percentage of adults diagnosed with diabetes in West Virginia, the highest prevalence in the U.S., compared with Vermont, which has the lowest rate at 7.7%.

SOURCE: U.S. DIABETES SURVEILLANCE SYSTEM



75%

The percentage reduction in menopausal vasomotor symptoms, including hot flashes and night sweats, that hormone therapy can provide for women. SOURCE: NORTH AMERICAN MENOPAUSE SOCIETY

ENDO 2026

Chicago, Ill. • June 13 – 16, 2026



We hope to see you at **ENDO 2026**, taking place June 13 – 16, 2026, in Chicago, Ill. With more than 7,000 attendees, nearly 2,000 abstracts, and more than 200 other sessions, **ENDO** is the top global meeting on endocrinology research

and clinical care. **ENDO** provides the opportunity to collaborate with an unparalleled list of endocrinologists, healthcare practitioners, and leading scientists from around the world. Through sharing our experience, advice on patient care, and new advances in research, we move the needle forward in hormone health and science. Our outstanding slate of world-renowned speakers will showcase the most cutting-edge advances in research and medicine, with presentations spanning the spectrum of science, clinical care, and social implications.

<https://endo2026.endocrine.org/>



ADA 2026 Scientific Sessions

**New Orleans, Louisiana
June 5 – 8, 2026**

The American Diabetes Association's (ADA's) Scientific Sessions is the largest and most prominent conference in the world focused on diabetes, bringing together research, clinical care, and innovation. Annually welcoming over 12,000 researchers and clinicians, including physicians, nurses, endocrinologists, cardiologists, registered dietitian nutritionists, and others, this conference distills the latest care standards from the ADA's Standards of Care in Diabetes, brings the newest research to the forefront, and convenes the diabetes professional community to share ideas, network, and form connections.

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

26th Annual Santa Fe Bone Symposium

**Santa Fe, New Mexico
July 31 – August 1, 2026**

The Santa Fe Bone Symposium is an annual forum devoted to advances in the science and economics of osteoporosis, metabolic bone disease, and assessment of skeletal health. Presented by the Osteoporosis Foundation of New Mexico

(OFNM), this meeting is for healthcare providers, scientists, and researchers with a special interest in bone disease, and for bone densitometry technologists who seek a high level of knowledge in their field. Close interaction and collaboration between faculty and participants is an integral part of the Santa Fe Bone Symposium. <https://www.ofnm.org/26th-annual-santa-fe-bone-symposium/>

Disorders of Pituitary-Adrenal Function Conference

Milwaukee, Wisconsin
September 30 – October 2, 2026
 Join leading national and international endocrinology expert clinicians for a comprehensive in-person symposium on the diagnosis and management of pituitary and adrenal disorders. This conference will cover the latest advances and future directions of the diagnosis and management of adrenal insufficiency and hypercortisolism. <https://PituitaryAdrenal2026.eventbrite.com>

ATA 2026 Annual Meeting

Philadelphia, Pennsylvania
November 4 – 7, 2026
 The American Thyroid Association (ATA) is the leading organization focused on thyroid biology and the prevention and treatment of thyroid disorders through innovation in research, clinical care, education, and public health. Earn CME credits, hear innovative talks on clinical topics, participate in interactive sessions, develop professionally, and meet with friends and colleagues. The ATA is the leading organization focused on thyroid biology and the prevention and treatment of thyroid disorders through excellence and innovation in research, clinical care, education, and public health. <https://thyroid.joynmeeting.com/conference/>

INTERNATIONAL ITINERARY

ICE 2026/JES 2026

Kyoto, Japan
June 2 – 6, 2026
 The joint 22nd International Conference of Endocrinology/99th Annual Congress of the Japan Endocrine Society will take place June 2 – 6 in Kyoto, Japan, with the theme of “Enlightened Endocrinology in Unprecedented Times.” In the midst of these unprecedented times, we will gather to discuss the new century of clinical and basic research in various fields of endocrinology. Participants from all over the world are encouraged to present cutting-edge science from their respective countries, and through active discussions, we hope that you will experience the “Enlightened Endocrinology” of endocrinology in this unprecedented era. <https://icecongress.com/>

Global Summit on Diabetes and Endocrinology

London, United Kingdom
June 22 – 23, 2026
 This year’s theme is “Trending Medical Research and Recent Developments for Changing Life of Diabetes World.” This prestigious event offers a unique platform for diabetologists, endocrinologists, healthcare professionals, academics, and researchers to connect, share insights, and collaborate across global boundaries. <https://diabetesconference.org/>

I-DSD Symposium 2026

Lübeck, Germany
July 1 – 3, 2026
 The 2026 International Registries For Rare Conditions Affecting Sex Development & Maturation Symposium will provide an update on conditions affecting sex development and maturation; facilitate networking of professionals involved in the care of people with conditions affecting sex development and maturation; and

promote high-quality research in the field of sex development and maturation. <https://sdmregistries.org/i-dsd-symposium-2026/>

3rd Global Summit on Diabetes and Endocrinology

Zurich, Switzerland
August 17 – 18, 2026
 This event offers a unique platform for endocrinologists, diabetologists, healthcare professionals, academics, and researchers to connect, share insights, and collaborate on advancements in diabetes and endocrinology. Centered around the theme “Innovations in the Field of Diabetes & Endocrinology Procedures and Treatment,” the summit aims to explore cutting-edge research, emerging technologies, and best practices that are shaping the future of diabetes care and endocrine health worldwide. <https://diabetes.intellglobalconferences.com/>

2026 World Pediatrics Conference

Osaka, Japan
October 5 – 6, 2026
 The conference will focus on the latest advancements and innovations in different fields of pediatrics research with the theme of “Advancing Pediatric Innovation for a Healthier Tomorrow.” This theme highlights the critical need for international cooperation, focusing on sustainable strategies to improve pediatric healthcare outcomes globally. The congress will provide an invaluable platform for professionals from around the world to exchange perspectives on a wide range of topics impacting child health and pediatric diseases. <https://pediatrics.episirus.org/>

unpausing the **CONVERSATION**

Women’s bone health takes center stage in Chicago, Ill., during the symposium “‘Hot and Flashy’ Topics in Menopause,” on Saturday, June 13. From catching endocrinologists up regarding menopause care and past regulatory missteps to estrogen’s impact on bone health and the myriad non-hormonal options, this **ENDO 2026** Symposium will definitely give attendees something to talk about!

Menopause Is Having a Moment at **ENDO 2026**



BY KELLY HORVATH

Hot flashes are sudden and intense feelings of heat and are one of the most common and most bothersome symptoms of menopause. They occur when estrogen levels fluctuate.



The field of medicine can move very fast, with advances happening in one area triggering a cascade of discoveries elsewhere — and endocrinology is no exception. With such rapid forward progress, however, it’s no wonder that some important conversations can get left behind, including one concerning a condition that affects every woman who lives long enough to experience it: menopause. One session at **ENDO 2026** in Chicago, Ill., next month promises to change that.

“**Hot and Flashy’ Topics in Menopause**” happening Saturday, June 13, brings together four leading experts in the field to address menopausal hormone therapy (MHT), bone health, and non-hormonal treatment options for vasomotor symptoms. Gina Woods, MD, MSCP, clinical professor of medicine and chief of the Division of Endocrinology and Metabolism at the University of California, in San Diego, who will chair the session, puts it this way: “Several factors likely explain why the Endocrine Society is featuring this topic right now, including the long-overdue reevaluation of safety and the U.S. Food and Drug Administration’s (FDA’s) removal of the black box warning for MHT, the ongoing social media buzz, and the increased patient demand. I think another important component is that the Endocrine Society recognizes that menopause training has been largely missing from medical education. There is a huge knowledge gap, and we need to address it by bringing experts together in sessions like this one.”

Joining Woods are three presenters: James A. Simon, MD, CDD, NCMP, FACOG, clinical professor of obstetrics and gynecology at the GW School of Medicine & Health Sciences in Washington, D.C., will explore the latest in MHT; E. Michael Lewiecki, MD, FACP, CCD, FASBMR, director of New Mexico Clinical Research & Osteoporosis Center and director of Bone Health ECHO at the University of New Mexico Health Sciences Center in Albuquerque, N.M., will talk about bone health in menopause; and JoAnn V. Pinkerton, MD, FACOG, MSCP, the Midlife Women’s Health and Mamie Jessup Professor of Ob Gyn; division director of Midlife Health at the University of Virginia Health System in Charlottesville, Va., will round out the session

with a discussion of non-hormonal therapies in menopause. All four know each other’s work well — and all are eager to share their complementary insights and set certain records straight.

Of the session and her role as chair, Woods says, “This session will draw a big crowd, and I’m delighted to introduce this lineup of experts. I expect a lot of questions during the post-presentation Q&A and getting through as many of them as we can in a timely manner may be challenging. But I hope the audience is really engaged, and I anticipate they will be.” As for why Woods (as well as the co-presenters) expect a good audience turnout, this partly comes down to how topical menopause is currently as well as to correcting the short shrift it has sometimes gotten in the past. Woods invokes her colleague Cynthia A. Stuenkel, who is first author on the Endocrine Society’s clinical practice guideline on menopause: “[Stuenkel] often points out that medical students have historically received just one lecture on menopause, the same number of lectures as for congenital adrenal hyperplasia, which is a much rarer condition. So, you can see that the time devoted to this incredibly common condition, one that affects half of all people who live long enough to experience it, is quite limited.”

Woods explains that this carries through into internal medicine residency and endocrinology fellowship training. “Historically, our fellows have had very little exposure to menopause care, either in lectures or in clinical opportunities to work in a menopause practice. I’m glad to see this changing because, in my opinion, menopause care falls squarely within the realm of what



Gina Woods, MD, MSCP



Historically, our fellows have had very little exposure to menopause care, either in lectures or in clinical opportunities to work in a menopause practice. I'm glad to see this changing because, **in my opinion, menopause care falls squarely within the realm of what an endocrinologist should be able to provide. We need to do a much better job of training our endocrine fellows and our colleagues in this area.**"

— GINA WOODS, MD, MSCP,
CLINICAL PROFESSOR OF MEDICINE, CHIEF,
DIVISION OF ENDOCRINOLOGY AND METABOLISM,
UNIVERSITY OF CALIFORNIA, SAN DIEGO, CALIF.

an endocrinologist should be able to provide. We need to do a much better job of training our endocrine fellows and our colleagues in this area."

This session may indeed seem long overdue, and it will cover a lot of important clinical ground. According to Woods, some potentially fruitful areas of discussion include whether MHT should be used for osteoporosis prevention in women who have no menopausal symptoms as well as to treat osteoporosis in younger postmenopausal women who have no contraindications. Other areas of ongoing debate include timing of MHT and what might constitute absolute contraindications. "Another area I'd highlight is selective estrogen-receptor modulators (SERMs)," she says. "The question of how to use them, particularly in women who have an elevated breast cancer risk, deserves more focus. If a woman wants to be proactive about protecting her bones but is worried about breast cancer, where should SERMs fit into the treatment plan? Ongoing studies are helping to address this question."

Setting the Record Straight on MHT

If the training gap Woods identified is one part of the problem, the misinformation gap is another, and few people are better positioned to set the record straight on MHT than Simon. A reproductive endocrinologist and gynecologist, he has been a long-time member of the Endocrine Society and, like his co-presenters, has attended dozens of its meetings. He also became president of the Menopause Society in 2003; in other words, he was at the epicenter of the MHT controversy when it mattered most. "About a quarter of all menopausal women were on hormones at that time," he recalls, "which dropped to roughly 5% in the years following the Women's Health Initiative (WHI) and the black box warning."

That black box warning, he argues, should not have been applied in the first place: "It single-handedly reversed a trend toward investigation and study of hormone therapy in women." It also contributed to the premature morbidity and mortality of tens of thousands of women who were, in reality, candidates for therapy but who went without it. "The warning had been applied broadly based on one arm of the WHI without adequately accounting for the distinction between combined therapy and estrogen alone and without any consideration of local vaginal estrogen for genitourinary syndrome of menopause or recurrent urinary tract infections," explains Simon. He cites a 2020 editorial published in *Menopause: The Journal of The North American Menopause Society*, by Philip M. Sarrel, MD, that explored these issues in relation to burgeoning healthcare costs but with an underlying cautionary message: "Failure to recognize the significance of menopause and the effects of ovarian hormone deficiency, estrogen in particular, pervades medical research, clinical care, and teaching. Menopause is simply not in the awareness of most academics and practitioners."

"The FDA's recent removal of the warning was long overdue," says Simon.

That's not the only aspect of the MHT discussion he hopes to shed more light on. Social media has elevated the dialogue (and can be at least partly credited with menopause's

current status as a “cause célèbre,” as Simon puts it) while simultaneously distorting it. “The benefits and risks of MHT are seldom discussed in context or with any balance. You have people who think it’s the most horrible thing on the planet, and then enthusiasts who think that everyone, regardless of any qualifying health issue, should be on hormones, and neither of those is correct,” says Simon. He cites a systematic scoping review of prescription drug promotion by social media influencers, published in March in *JAMA Open Network* by Gell S., et al., the conclusion of which found that such promotion “carries risks of inaccurate or misleading advice, often amplified through personal and emotionally resonant narratives in an environment with limited oversight and enforcement.” This phenomenon even has a name now: “menopause profiteering.”

Against this backdrop, Simon’s goal for the session is straightforward: to set the record straight with scientific evidence, to show both where the FDA was when they made the judgment to add the black box warning, and what the evidence has shown since. He is also hoping to bridge a longstanding divide between his own specialty and the endocrinologists in the room. OB-GYNs, he explains, tend to see younger, healthier patients and are comfortable managing the most common side effects of MHT (breast tenderness and bleeding). Endocrinologists, by contrast, frequently see an older patient population with additional underlying conditions. “My hope is that at this meeting, for this audience, I can bring those two disparate points of view closer together.”

As for what he wants attendees to take away? Simon keeps it simple: “The truth will set you free.”

Revisiting Osteoporosis Prevention

If Simon’s section of the session addresses what went wrong with MHT, Lewiecki’s asks a related but distinct question: Now that the conversation around estrogen is shifting, what opportunities does that open up? For Lewiecki, the answer lies in a concept that has been sidelined in recent years — osteoporosis prevention.



“

The benefits and risks of MHT are seldom discussed in context or with any balance. You have people who think it’s the most horrible thing on the planet, and then enthusiasts who think that everyone, regardless of any qualifying health issue, should be on hormones, and neither of those is correct.”

— JAMES A. SIMON, MD, CDD, NCMP, FACOG,
CLINICAL PROFESSOR OF OBSTETRICS
AND GYNECOLOGY, GW SCHOOL OF MEDICINE &
HEALTH SCIENCES, WASHINGTON, D.C.

Women may lose up to 20% of bone density within five to seven years after menopause, making early intervention and basic lifestyle counseling essential. Patients and clinicians may now be more open to prevention-oriented conversations than they have been in decades due to the removal of estrogen’s black box warning.

“



E. Michael Lewiecki, MD,
FACP, CCD, FASBMR

Most of the current clinical practice guidelines for osteoporosis focus on identifying menopausal women at high risk for fracture and treating them. **Even though, ideally, as with most diseases, we'd rather prevent than treat, osteoporosis prevention has not gotten much attention in recent clinical practice guidelines.**”

— E. MICHAEL LEWIECKI, MD,
FACP, CCD, FASBMR, DIRECTOR, NEW MEXICO
CLINICAL RESEARCH & OSTEOPOROSIS CENTER
AND DIRECTOR OF BONE HEALTH ECHO,
UNIVERSITY OF NEW MEXICO HEALTH
SCIENCES CENTER, ALBUQUERQUE, N.M.

“Most of the current clinical practice guidelines for osteoporosis focus on identifying menopausal women at high risk for fracture and treating them,” he explains. “Even though, ideally, as with most diseases, we'd rather prevent than treat, osteoporosis prevention has not gotten much attention in recent clinical practice guidelines.” The stakes are significant: Women begin to lose bone density several years before their final menstrual period and may lose up to 20% within five to seven years after menopause, making early intervention and basic lifestyle counseling regarding calcium, vitamin D, and weight-bearing exercise essential. The removal of the black box warning from estrogen, he notes, means that both patients and clinicians may now be more open to prevention-oriented conversations than they have been in decades.

The distinction between prevention and treatment matters more than it might initially appear. “By intervening early, before women have osteoporosis, we can hope to prevent the irreversible microarchitectural deterioration of bone structure and put them in better shape as they get older, rather than waiting until fracture risk is high before doing something,” says Lewiecki. Although several medications are approved for osteoporosis prevention, including raloxifene and bisphosphonates, as well as estrogen, awareness of prevention among both clinicians and patients has lagged.

Indeed, estrogen is FDA-approved for prevention of osteoporosis but has not been broadly used for that purpose, instead thought of mainly for menopausal symptom management. So, what is the role of hormone therapy for primary prevention of osteoporosis, even in the absence of symptoms? (And, perhaps, even more controversially, could MHT be used to treat osteoporosis? Although it is not FDA-approved for that indication, in the WHI study, MHT prevented spine, hip, wrist, and all-site fractures.)

ENDO2026

“Hot and Flashy” Topics in Menopause

Saturday, June 13, 2026 • 4:30 p.m. – 6:00 p.m.

Discover the latest evidence shaping midlife women's health in this dynamic session featuring world-renowned experts. With new data highlighting the safety of hormone therapy and a resurgence of interest in its role, we'll explore how to strike the right balance in clinical practice.

Chair: Gina Woods, MD, UC San Diego, San Diego, Calif.

Non-Hormonal Treatments for Vasomotor Symptoms: JoAnn V. Pinkerton, MD, University of Virginia, Charlottesville, Va.

Preserving Bone During the Menopausal Transition: E. Michael Lewiecki, MD, New Mexico Clinical Research & Osteoporosis Center, Albuquerque, N.M.

Striking the Balance: Renewed Focus on HRT Hormonal Therapy: James A. Simon, MD, George Washington University School of Medicine, Washington, D.C.

Although MHT is not FDA-approved for treating osteoporosis, results from the Women's Health Initiative study showed that it prevented spine, hip, wrist, and all-site fractures.



“That’s where we as healthcare professionals need to use our communication skills, talk with the patient, and come to a shared decision about what’s best,” Lewiecki acknowledges. If you’re wondering why an osteoporosis-specific medication like alendronate may not be appropriate for some women, more is understood decades since bisphosphonates were first approved. Lewiecki explains: “People thought, great, we’ll put all postmenopausal women on it forever, and they’ll never get osteoporosis. Then we learned about side effects that were not appreciated or recognized in the initial clinical trials. Later, we learned about concepts such as pausing bisphosphonate therapy, sequencing therapy, and using different drug classes at different lifetime stages. So hopefully we’ve become wiser about when and how to use all the available medications.”

The individualized conversations Lewiecki alluded to are also important in light of the expanded therapeutic options now possible. “In some cases, estrogen and a bisphosphonate may be used together, not as combination therapy in the traditional sense,” he adds, “but as two medications addressing two different clinical needs simultaneously.”

Redefining Non-Hormonal Therapy

If the preceding sections of the session address what MHT can do and for whom, Pinkerton’s rounds out the picture by asking, what about the women for whom non-hormonal therapies are the right choice? Whether non-hormonal therapy is the better option from the outset or because MHT is not an option or not a preference, this group now has more evidence-based choices than ever before.

Pinkerton will focus on non-hormonal therapies for vasomotor symptoms, with particular attention to a class of medications that represents a genuine paradigm shift in menopause care: neurokinin-targeted therapies (NKTs), also called neurokinin receptor antagonists. When estrogen levels decline, hypothalamic KNDy neurons become enlarged and hyperactivated, triggering hot flashes. NKTs work by interrupting that process directly.

Three FDA-approved non-hormonal therapies are now available. Low-dose paroxetine salt (Brisdelle) was approved specifically for hot flashes and remains a viable option, although

it is generally considered less effective than the newer agents. Fezolinetant (Veozah), FDA approved in 2023, works quickly and effectively, although liver monitoring is required due to a rare risk of hepatotoxicity. Elinzanetant (Lynkuet), FDA approved in October 2025, is a dual NK1/NK3 receptor antagonist (whereas fezolinetant targets only the NK3 receptor). In the OASIS 3 trial, women on elinzanetant experienced nearly 74% fewer moderate-to-severe hot flashes over the course of a year. “This is a major step forward for women,” says Pinkerton, who was a primary author on the OASIS 1 and 2 publications in *JAMA*. Elinzanetant has also demonstrated benefits for mood and sleep, mediated through the NK1 receptor, and has been studied in women with natural, surgical, and endocrine therapy-induced menopause.

Importantly, both NKTs may be options for women on endocrine therapy for breast cancer, a population that has historically had very few safe options for vasomotor symptom management. elinzanetant has one-year data on women taking elinzanetant for hot flashes due to endocrine therapy for breast cancer, and an ongoing Phase 3 trial (HIGHLIGHT 1) is evaluating fezolinetant for this population. “The women who are candidates for non-hormonal therapy are fewer in number but more complex,” Pinkerton explains. “These are the women who have been suffering the most because they haven’t been getting effective therapies.” That group includes women with estrogen-sensitive cancers, those with a history of stroke or blood clots, those with migraines with aura that worsen on MHT, and those with liver disease or recent cardiovascular events. The questions Woods raises about SERMs and breast cancer risk point toward some of the population Pinkerton has in mind.

Pinkerton will also address what she calls “repurposed” medications, agents approved for other indications that have demonstrated efficacy for hot flashes in clinical trials. Oxybutynin (Ditropan), approved for overactive bladder,

“

The women who are candidates for non-hormonal therapy are fewer in number but more complex. These are the women who have been suffering the most because they haven't been getting effective therapies.”



JoAnn V. Pinkerton, MD, FACOG, MSCP

— JOANN V. PINKERTON, MD, FACOG, MSCP, THE MIDLIFE WOMEN'S HEALTH AND MAMIE JESSUP PROFESSOR OF OB GYN; DIVISION DIRECTOR, MIDLIFE HEALTH, UNIVERSITY OF VIRGINIA HEALTH SYSTEM, CHARLOTTESVILLE, VA.

has been shown in recent trials to be effective for vasomotor symptoms as well; clinicians should note that it crosses the blood–brain barrier. Selective serotonin-reuptake inhibitors (SSRIs) and serotonin/norepinephrine–reuptake inhibitors (SNRIs) including venlafaxine, escitalopram, desvenlafaxine, and paroxetine remain standard non-hormonal options, although breast cancer patients taking tamoxifen should use these medications with caution given potential drug interactions. For clinicians navigating prior authorization requirements, such as when patients may be required to try non-FDA-approved therapies before accessing newer agents, understanding the evidence base for these medications is essential.

Underlying all these treatment decisions is a commitment to protecting bone health, a concern that becomes acute when estrogen levels drop at menopause and bone loss accelerates. Clinicians should also be alert to medications that may compound bone loss. Early 2026 data identified osteoporosis in 4% of patients using glucagon-like peptide 1 receptor agonists (GLP-1 RAs), compared to 3% of non-users, a difference attributed primarily to rapid weight loss reducing mechanical stress on bones as well as potential reductions in dietary calcium intake and absorption. (The effect of weight loss on bone, a topic Lewiecki also touches on in his portion of the session, is serendipitously being covered at an ENDO 2026 session happening on Sunday, June 14.)

Emerging metabolic research adds another dimension: Early 2026 findings have identified a link between elevated midlife insulin levels and an increased likelihood of experiencing hot flashes earlier and for longer durations, suggesting that managing metabolic health may itself be a meaningful non-hormonal strategy for some patients.

Pinkerton's practical, evidence-based approach to the question of who gets which therapy captures the spirit of the session as a whole. “My goal is to share the clinical trial results and offer practical advice to help clinicians best care for women going through menopause, considering their different needs,” she says.

The four voices in this session tell a coherent and urgent story, one in which each piece reinforces the others. Woods sets the stage by naming what has been missing: a generation of endocrinologists undertrained in menopause care and now hungry to catch up. “Endocrinologists need to be involved in menopause care,” she says, “up to date, informed, and prepared to deliver it to our patients. And, of course, there is such an urgent need for more research in women's health.” Simon fills in the historical record, showing how a regulatory misstep rippled outward for decades, before looking forward to why the correction now underway matters so much. He makes the case that the benefits of MHT, properly understood and appropriately individualized, outweigh the risks for many more women than current prescribing patterns would suggest. Lewiecki reminds us that estrogen's rehabilitation has a direct bearing on bone health, reopening a conversation about osteoporosis prevention that the guidelines had neglected. And Pinkerton closes the loop by equipping clinicians with an arsenal of non-hormonal options that stand on their own merits.

All four are longtime Endocrine Society members who are genuinely energized to be bringing this conversation to Chicago and committed to making sure that both clinicians and patients benefit. Both groups have been waiting long enough. **EN**

— HORVATH IS A FREELANCE WRITER BASED IN BALTIMORE, MD. IN THE APRIL ISSUE, SHE WROTE ABOUT RECENT JOURNAL STUDIES THAT HIGHLIGHTED ADRENAL RESEARCH.



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Weight Loss Therapies and the Musculoskeletal Stakes

The two most common types of bariatric surgery, sleeve gastrectomy (pictured) and Roux-en-Y gastric bypass, both result in some degree of nutrient malabsorption, including the calcium and vitamin D critical for bone health.

ENDO 2026 attendees who catch the session, “Weight Loss: Friend or Foe for Bone & Muscle?” will be in for a treat as three experts weigh in on the impact of various weight loss therapies on muscle and bone. Pharmacologic, surgical, and even lifestyle impacts will be discussed and debated in this Sunday morning symposium.

BY KELLY HORVATH

On Sunday, June 14, **ENDO 2026** will feature “Weight Loss: Friend or Foe for Bone & Muscle?” a session that complements the menopause session happening a day earlier (and also featured in this issue). The Sunday session will characterize the effects of different methods of weight loss on musculoskeletal health in people living with obesity and discuss current management approaches including lifestyle and pharmacologic treatments. Of the three presenters, two will discuss the role of glucagon-like peptide-1 receptor agonists (GLP-1 RAs) in this dynamic, and one will cover how bariatric surgery fits in.

Fractured Picture

From the start, each presenter is quick to point out that the pathophysiology underlying the deleterious effects of weight loss on musculoskeletal health — bone in particular — is not yet fully elucidated but is certainly multifactorial. Clifford J. Rosen, MD, director and principal investigator for the Rosen Musculoskeletal Laboratory Clinical & Translational Medicine, Maine Medical Center Research Institute and professor of medicine at Tufts University School of Medicine in Scarborough, Maine, for example, explains that, “We don’t understand the mechanisms of bone loss from the GLP-1 RAs, but weight loss alone causes bone to change and thin. There might be other mechanisms as well for GLP-1 RAs.” Zhenqhi Liu, MD, professor of medicine and past chief of the Division of Endocrinology and Metabolism, University of Virginia, in Charlottesville, Va., agrees: “Weight loss, whether lifestyle or pharmacologically induced, creates a negative energy balance that drives not only fat loss but also reductions in fat-free (or lean) body mass and bone mineral density (BMD). Mechanistically, lower nutrient intake, reduced mechanical loading, reduced anabolic signaling, and relative increases in catabolic pathways all contribute.”

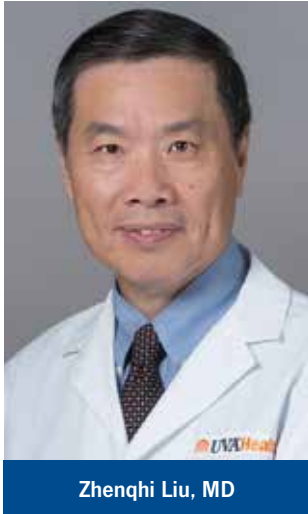
Although all patients living with obesity who begin an incretin regimen are at risk of musculoskeletal health impairment and consequent risk of fracture, populations with lower baseline BMD and muscle mass are at

disproportionately increased risk. “The most vulnerable people for bone loss are postmenopausal women,” says Rosen. Liu adds to this that older adults, patients experiencing rapid or substantial weight loss, and those with inadequate protein intake or low physical activity are also at higher risk. Liu furthermore suggests that some of the leading theories on why this happens include that “incretin-based therapies may further modulate muscle and bone health through effects on nutrient intake, gut–muscle signaling, blood vessel–muscle crosstalk, muscle–bone coupling, and possibly direct receptor-mediated pathways,” while remaining incompletely defined.

The clinical picture is similar for patients who have undergone bariatric surgery, explains Elaine W. Yu, MD, MMSc, associate professor, Massachusetts General Hospital, in Boston, but with a couple of bariatric surgery-specific mechanisms. “I think of the components that impact bone health in three categories,” she says. Mechanical unloading of the skeleton, as Liu also mentioned, is a prime culprit, insofar as higher weight loads more onto bone and therefore may be osteoprotective. “*Unloading* the skeleton,” says Yu, “whether because patients are sedentary, immobilized, or in this case losing weight, will inevitably lead to bone loss.”

A second mechanism is malabsorption, which varies depending on the type of bariatric surgery. The two most common types, sleeve gastrectomy and Roux-en-Y gastric bypass, both result in some degree of nutrient malabsorption, including the calcium and vitamin D critical for bone health.

The third mechanism is hormonal. “Many of the hormonal shifts that occur after bariatric surgery mediate the beneficial impact of bariatric surgery on weight, but some of those changing hormones can have a direct impact on bone health,” says Yu. Among these include changes in gastrointestinal hormones, including potentially GLP-1, as well as other adipocytic and neurohormonal pathways. “More research is needed to better define these bone–gut–brain interactions.”



“Weight loss, whether lifestyle or pharmacologically induced, creates a negative energy balance that drives not only fat loss but also reductions in fat-free (or lean) body mass and bone mineral density (BMD). Mechanistically, lower nutrient intake, reduced mechanical loading, reduced anabolic signaling, and relative increases in catabolic pathways all contribute.”

— ZHENQHI LIU, MD, PROFESSOR OF MEDICINE AND PAST CHIEF, DIVISION OF ENDOCRINOLOGY AND METABOLISM, UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VA.

Skeletal Guidance

The incomplete mechanistic picture is compounded by a lack of formal guidance. “Currently, there are no standards,” says Rosen. Liu frames it this way: The current approach is “largely supportive and preventive,” combining weight-loss therapy with resistance exercise, adequate protein intake, and optimization of calcium and vitamin D, but he acknowledges that this is extrapolated from general obesity, sarcopenia, and osteoporosis care principles rather than derived from evidence specific to incretin-based therapies.

Yu describes a similar framework for her bariatric surgery patients but with some additional nuance. Exercise is a first line of defense; she explains: “Studies have demonstrated that rigorous exercise regimens can at least partially prevent the bone loss seen after surgery, although they don’t fully prevent it.” Calcium and vitamin D supplementation is also strongly recommended, often at doses higher than those used for standard postmenopausal osteoporosis. “Making sure patients get adequate calcium and vitamin D, and monitoring related laboratory values to ensure sufficiency, is really important,” she says.

For those patient groups at elevated baseline risk, however, lifestyle measures alone fall short. In those cases, says Yu, pharmacologic intervention may be warranted, including with such antiresorptive agents as bisphosphonates or denosumab. Rosen notes that exercise and protein supplementation are currently being tested as targeted interventions, although data remain limited.

The controversies embedded in this de facto approach are significant. Liu identifies the core problem: “It is not based on standardized or evidence-based in the context of modern, highly effective incretin therapies.” Open questions persist about optimal protein intake, the type and intensity of exercise required, and whether pharmacologic adjuncts should be routinely considered as well as how aggressively clinicians should monitor body composition rather than focusing on weight alone.

Counting Losses

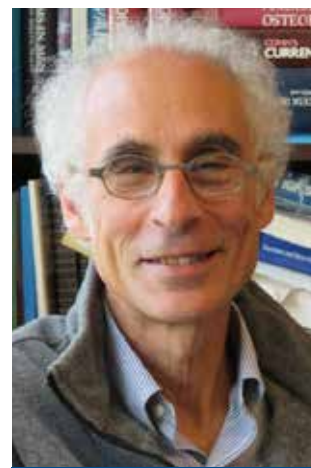
Perhaps the most clinically significant controversy is whether the bone loss associated with obesity treatment is an expected, proportionate response to weight loss or something more concerning. High body mass index correlates with high BMD (likely due to mechanical loading, as mentioned), and patients with obesity have historically shown lower rates of certain fractures, including, importantly, hip fractures. From this perspective, some clinicians

have argued that a degree of bone loss is justified — in other words, physiologic and proportionate.

That's not always the full story, according to Yu. "The amount of bone loss we see exceeds what you would expect for the amount of weight loss." Large epidemiologic studies have demonstrated significant increases in fracture risk, including wrist, pelvic, and, most concerning, a twofold increase in hip fractures. "So, it does appear to be pathologic," she says. "That's probably the biggest controversy of clinical significance here."

Building a Better Matrix: Prevention, Investigation, and Vigilance

Given these uncertainties, the field is moving in two parallel directions: studying novel interventions and refining the threshold for when to intervene. On the investigational front, Liu points to several active areas of inquiry, including combining incretin agents with anabolic or anticatabolic therapies like resistance-training protocols, higher-protein dietary regimens,



Clifford J. Rosen, MD

“

We don't understand the mechanisms of bone loss from the GLP-1 RAs, but weight loss alone causes bone to change and thin. **There might be other mechanisms as well for GLP-1 RAs.”**

— CLIFFORD J. ROSEN, MD, DIRECTOR AND PRINCIPAL INVESTIGATOR, ROSEN MUSCULOSKELETAL LABORATORY CLINICAL & TRANSLATIONAL MEDICINE, MAINE MEDICAL CENTER RESEARCH INSTITUTE; PROFESSOR OF MEDICINE, TUFTS UNIVERSITY SCHOOL OF MEDICINE, SCARBOROUGH, MAINE

ENDO2026

Weight Loss: Friend or Foe for Bone & Muscle? Sunday, June 14, 2026 • 10:30 a.m. – 12:00 p.m.

This session characterizes the effects of different methods of weight loss (i.e., caloric restriction, metabolic and bariatric surgery, and glucagon-like peptide-1 receptor agonists) on musculoskeletal health in people living with obesity and summarizes current management approaches including lifestyle and pharmacological treatments.

Clinical Management of Musculoskeletal Health After Bariatric Surgery

Elaine W. Yu, MD – Massachusetts General Hospital, Boston

Incretin Receptor Agonism: Implications for Skeletal Muscle and Bone Health

Zhenqi Liu, MD – University of Virginia, Charlottesville

Understanding the Pathophysiology of Musculoskeletal Effects of Bone Loss

Clifford J. Rosen, MD – Maine Medical Center Research Institute, Scarborough, Maine



Elaine W. Yu, MD, MMSc



Studies have demonstrated that rigorous exercise regimens can at least partially prevent the bone loss seen after [bariatric] surgery, although they don't fully prevent it. **Making sure patients get adequate calcium and vitamin D, and monitoring related laboratory values to ensure sufficiency, is really important.**

— ELAINE W. YU, MD, MMSc, ASSOCIATE PROFESSOR, MASSACHUSETTS GENERAL HOSPITAL, BOSTON

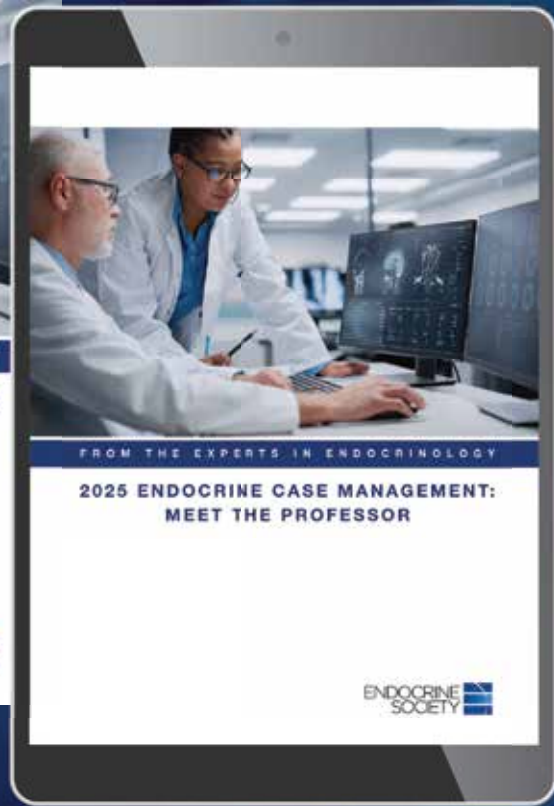
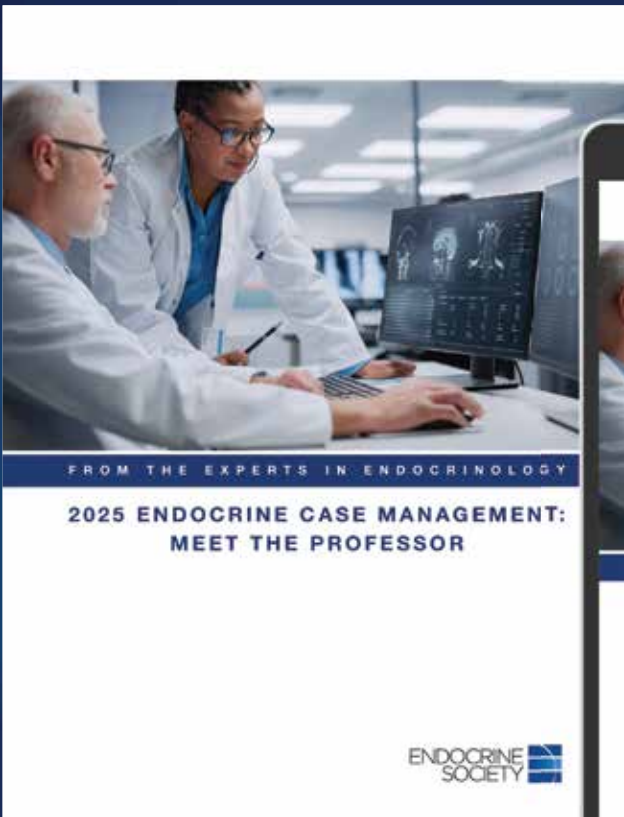
and pharmacologic agents. Whether multi-agonist incretin therapies differentially affect lean mass and skeletal health compared with GLP-1 RA monotherapy, as alluded to earlier, is also being explored.

On the preventive side, Yu advocates for lowering the threshold for pharmacologic intervention in high-risk patients. For standard osteoporosis, the conventional T-score cutoff for initiating therapy is -2.5 . For bariatric surgery patients, particularly those at risk for rapid postoperative bone loss, Yu recommends adjusting that T-score threshold to -2.0 “with an eye toward preventing the bone loss that would occur after surgery,” she explains. This more aggressive approach is also supported by published guidelines from the European Calcified Tissue Society.

What unites all three presenters, despite their different areas of focus, is a call for a shift in clinical mindset. “We need to move beyond weight-centric metrics,” says Liu, “and better understand and proactively address the effects of these therapies on muscle and bone health.” Yu echoes this while adding an important counterpoint: Bone loss and fracture risk should not dissuade patients or clinicians from pursuing weight-loss interventions that are, in many cases, dramatically beneficial or even lifesaving. “At the same time,” she says, “we need to be cognizant of these potential side effects and do our best to mitigate the negative consequences.”

In addition to their clinical concerns, the three presenters share genuine enthusiasm for the work ahead and, more imminently, for **ENDO** itself. Liu looks forward to engaging with colleagues across clinical, translational, and basic science disciplines and hopes the meeting will seed collaborations that push the field toward more mechanistic and interventional studies. Yu, whose subspecialty keeps her day-to-day work focused on bone and osteoporosis, treasures **ENDO** precisely because it pulls her back into the full breadth of endocrinology. “It’s a wonderful mix of both clinically useful information and cutting-edge research,” she says, and she hopes for a robust turnout. Rosen, meanwhile, will arrive with something extra to celebrate: 40 years in the Endocrine Society. The challenges surrounding musculoskeletal health in the setting of weight loss may persist, but this particular session will make sure attendees are on solid footing.

— HORVATH IS A FREELANCE WRITER BASED IN BALTIMORE, MD. IN THE APRIL ISSUE, SHE WROTE ABOUT RECENT JOURNAL STUDIES THAT HIGHLIGHTED ADRENAL RESEARCH.



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Boning UP:

The
Year in
Bone
ENDO
2026
Preview

BY DEREK BAGLEY

ENDO 2026 in Chicago, Ill., will include a session titled “Year in Bone” featuring two leading experts in bone research who will review and discuss the most influential and cutting edge publications from the past year. *Endocrine News* provides a sneak peek of the talks on this “mysterious and dynamic tissue.”

Last February, a paper appeared in the *Journal of Bone and Mineral Research* titled, “Romosozumab following denosumab improves lumbar spine bone mineral density and trabecular bone score greater than denosumab continuation in postmenopausal women.”



The authors of the paper, Namki Hong, et al., write that the drug romosozumab following antiresorptive can be an effective sequential treatment strategy to improve bone strength. However, whether the transition to romosozumab after denosumab is associated with greater improvement in bone mineral density (BMD) and trabecular bone score (TBS) compared with denosumab continuation remains unclear, the authors continue.

The researchers for this study, led by Yumie Rhee, MD, PhD, a professor in the Department of Internal Medicine at Yonsei University College of Medicine in Seoul, South Korea, analyzed data from postmenopausal women who initiated denosumab between 2017 and 2020 and found that romosozumab following denosumab improved LS BMD and TBS greater than denosumab continuation in postmenopausal women.

At **ENDO 2026** in Chicago, Ill., Rhee will moderate the session, “**Year in Bone**” on Monday, June 15 from 3:30 PM to 4:15 PM CT. “As endocrinologists, we cannot focus only on the one organ system we personally like best,” Rhee says. “We need to understand the body in an integrated way — how organs communicate with one another, how feedback systems work, and how discoveries in one area reshape the whole field. **ENDO** is where that happens at the highest level.

“It is a global gathering of endocrinologists where cutting-edge science, new therapies, and fresh ideas are introduced and shared all at once. For me, attending **ENDO** is like recharging a battery; you learn a tremendous amount in a short time, reconnect with the bigger picture of endocrinology, and come away energized. That is why I would strongly encourage people to attend this session.”

Rhee will be joined by Clifford Rosen, MD, director of clinical and translational medicine at the Maine Medical Center Research Institute in Scarborough, and Dolores Shoback, MD, of the UCSF/VA Medical Center in San Francisco, Calif. Rosen and Shoback will review and discuss the most influential and cutting edge publications from the past year. Topics will span basic science discoveries, translational advances, and key updates in clinical research, offering attendees a comprehensive overview of the latest progress shaping the field of bone health and disease.

“



Yumie Rhee, MD, PhD

We are now living in a super-aged society, and conditions such as osteoporosis and sarcopenia are becoming increasingly important. In this setting, **I hope attendees will come away with a clear and up-to-date overview of where the field currently stands, as well as the direction in which it is moving through the efforts of many scientists and the pharmaceutical industry.**”

— YUMIE RHEE, MD, PHD, PROFESSOR,
DEPARTMENT OF INTERNAL MEDICINE, YONSEI
UNIVERSITY COLLEGE OF MEDICINE, SEOUL,
SOUTH KOREA

Latest and Greatest

Just a couple months ago, Rosen led a team of researchers to investigate the role bone marrow adipose tissue (BMAT) has on myelopoiesis and osteoclastogenesis. They hypothesized that the expansion of BMAT associated with diet-induced obesity would have a negative impact on the bone marrow (BM) microenvironment. Using a mouse model of high-fat diet-induced obesity, the researchers classified mice as having obesity based on predetermined changes in body weight and fat mass.

Mice with obesity showed a rapid increase in BM adiposity that altered the molecular phenotype of BMAT, which led to changes in immune cell function and skeletal homeostasis. “Here,” the authors write, “we report that in obese mice, the expansion in BMAT is directly associated with decreased trabecular and cortical bone volume through increased osteoclastogenesis by creating an immunosuppressive BM microenvironment through elevated [programmed death ligand-1 (PD-L1)] signaling.” According to the authors, PD-L1 is an immune checkpoint protein found on antigen-presenting cells, such as macrophages and dendritic cells, which regulates the immune response by functioning as an immune response “brake.”

Rosen says that he is eager to share and hear in this upcoming ENDO session about developments such as these — the newer developments in bone related to obesity. “I am most excited about the microbiome and bone and the new thoughts on the mechanical loading of bone,” he says. “And to hear the latest and greatest new insights into diagnosis and treatment.”

ENDO 2026

Year In Bone

Monday, June 15, 2026 • 3:30 p.m. - 4:15 p.m.

This session will feature two leading experts in bone research who will review and discuss the most influential and cutting-edge publications from the past year. Topics will span basic science discoveries, translational advances, and key updates in clinical research, offering attendees a comprehensive overview of the latest progress shaping the field of bone health and disease..

Moderator: Yumie Rhee, MD, PhD, Yonsei University College of Medicine, Seoul, South Korea

Speakers: Clifford Rosen, MD, Maine Medical Center Research Institute, Scarborough, Maine.

Dolores Shoback, MD, UCSF/VA Medical Center, San Francisco, Calif.

Bone: A Mysterious and Dynamic Tissue

Rhee tells *Endocrine News* that her interest in bone health deepened after the discovery of FGF23 in 2001, when it became increasingly clear that that bone is not simply a passive target of hormones within the endocrine system but an active endocrine organ in its own right. “I found that idea incredibly exciting. Bone is not just something that develops ‘holes’ with aging. It is a mysterious and dynamic tissue, influenced by genetic factors and deeply connected with many other organs and systems in the body. Realizing how much is happening within bone — and how much bone itself can influence the rest of physiology — is what truly made me fall in love with this field.”


Rosen came to discover endocrinology as anyone does — at summer camp in endocrinology as a high school student. He started as a primary care physician but got referrals for endocrinology even though he wasn’t a specialist; his colleagues recognized his passion for the specialty. “Bone health came later since they never taught it at med school,” he says.

Rosen goes on to say that he hopes attendees of the “Year in Bone” session will come away with better awareness about the dynamic nature of the skeleton.

Rhee echoes that sentiment: “We are now living in a super-aged society, and conditions such as osteoporosis and sarcopenia are becoming increasingly important. In this setting, I hope attendees will come away with a clear and up-to-date overview of where the field currently stands, as well as the direction in which it is moving through the efforts of many scientists and the pharmaceutical industry.”

Solving the Puzzle

This will be Rosen’s 40th ENDO. “Back in 1986 when I joined, it was a huge accomplishment to get accepted into the Society. It’s been a great run, and I served on the Endocrine Society Board for three years, which was a great experience. I’m really looking forward to my two presentations this year.”

Rhee says her love of solving puzzles is what drew her to endocrinology, and the Endocrine Society has felt like her second home. “It may sound a little unusual, but I am someone who genuinely lights up whenever hormones come into the conversation,” she says. “My mind immediately goes to: What comes next, what does this mean, how does this connect? The Endocrine Society has been an important place that continually feeds that curiosity. It has given me a community, intellectual stimulation, and a sense of belonging in a field that I truly love.” 



Bone is not just something that develops ‘holes’ with aging. It is a mysterious and dynamic tissue, influenced by genetic factors and deeply connected with many other organs and systems in the body. **Realizing how much is happening within bone — and how much bone itself can influence the rest of physiology — is what truly made me fall in love with this field.”**

— YUMIE RHEE, MD, PHD, PROFESSOR,
DEPARTMENT OF INTERNAL MEDICINE, YONSEI
UNIVERSITY COLLEGE OF MEDICINE, SEOUL,
SOUTH KOREA

— BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. IN THE APRIL ISSUE, HE CONDUCTED A ROUNDTABLE WITH SOME OF THE ENDOCRINE SOCIETY’S “ADRENAL ALL STARS.”

Beyond Basic DXA

At ENDO 2026, taking place June 13 – 16 in Chicago, Ill., “Beyond Basic DXA” is set to challenge how clinicians think about bone health assessment.



Angela M. Cheung, MD, PhD

BY GLENDA FAUNTLEROY SHAW

Angela M. Cheung, MD, PhD, a professor of medicine at the University Health Network and the University of Toronto, will lead “Beyond Basic DXA” on Day 4 (Monday, June 15), a session designed for bone and mineral metabolism specialists ready to move past standard bone density measurements.

Her presentation will explore how dual-energy X-ray absorptiometry (DXA) can be expanded with advanced tools such as trabecular bone score (TBS), offering deeper insight into fracture risk, body composition, and early metabolic bone disease.

Cheung’s research interests are in metabolic bone disease, atypical femoral fractures and rare bone diseases. She obtained her MD degree from Johns Hopkins University School of Medicine and her PhD degree from Harvard University. Cheung brings extensive expertise to the topic, including currently holding a Tier 1 Canada Research Chair in Musculoskeletal and Postmenopausal Health and her role as a contributing author to Canada’s 2023 clinical practice guidelines on osteoporosis management and fracture prevention. Those guidelines highlight the scale of the challenge: More than 2 million people in her home of Canada are living with osteoporosis, a condition linked to fractures that drive increased mortality, diminished quality of life, and loss of independence. Globally, the burden of osteoporosis and related bone diseases continues to rise, underscoring the need for more precise diagnostic strategies.

Endocrine News spoke with Cheung ahead of her session to preview what attendees can expect and why advancing beyond “basic” DXA is becoming essential in modern endocrine care.

Endocrine News: What will be your presentation's main message to the ENDO audience?

Cheung: I hope the audience will understand that there are other clinical tools using DXA. DXA scans are not limited to

hip and spine bone density scans. Other tools and scan types are also helpful in clinical care, such as TBS for assessment of bone health, full femur imaging (FFI) for the detection of incomplete atypical femur fracture, and total body scan for body composition.

The session’s key learning objectives are:

- ▶ Manage patients at risk of fractures by using the TBS to refine 10-year fracture risk estimates.
- ▶ Explain what FFI is used for and when to use it for detecting incomplete atypical femoral fractures (AFFs).
- ▶ Illustrate how total body composition scans with DXA can be used for patients with sarcopenia.


EN: What are the key limitations of traditional DXA scans that your research is trying to address?

Cheung: There are technical limitations of traditional DXA scans. For example, Asians in general have smaller bone size compared to white population. DXA is a two-dimensional projection of bone (rather than three-dimensional measurement), so the bone density of Asians can be falsely low because of bone size.

EN: How do you see these advancements changing clinical practice or guidelines in the future?

Cheung: I do see these tools/scan types being adopted into clinical practice and guidelines in the next 5-10 years.

EN: What are most looking forward to as a presenter and attendee at ENDO 2026?

Cheung: I regularly attend the ENDO conference. I specialize in bone, so I look forward to learning updates on topics other than bone. 

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



Endocrine Society Advocates on Behalf of Its Members on a Variety of Policy Issues

The Endocrine Society maintains a Government and Public Affairs Department that staffs the organization's advocacy activities. This spring the Society has worked on a variety of policy issues that affect our members. This includes:

- ▶ Expanding support for women's health research
- ▶ Funding for the National Institutes of Health (NIH)
- ▶ Insulin affordability
- ▶ Obesity coverage
- ▶ Physician payment
- ▶ Regulation of endocrine-disrupting chemicals (EDCs)

We have provided additional details on some of these topics below. If you are interested in learning more, please contact: advocacy@endocrine.org or visit: endocrine.org/advocacy.



President's Budget Calls for Significant NIH Cuts

Last month, the White House released the administration's fiscal year 2027 budget request to Congress. The request includes significant funding cuts for the National Institutes of Health (NIH) and proposes some restructuring that would eliminate three institutes/centers. Specifically, the administration calls for the elimination of the National Institute on Minority Health and Health Disparities, the Fogarty International Center, and the National Center for Complementary and Integrative Health. Also slated for elimination are specific initiatives within the National Library of Medicine and National Institute of Allergy and Infectious Diseases. The rest of the NIH would see an overall budget reduction of \$5 billion.

The president’s budget is only a proposal, and it now falls to Congress to make final spending decisions through the appropriations process. The Endocrine Society conducted a

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The Endocrine Society will continue to analyze budget documents from the White House and the agencies to understand how these cuts will impact our members and we will update the Society’s website and share through *Endocrine News*

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“Hill Day” earlier this year to connect some of our members in key states with their representative and senators’ offices to share our message about the importance of funding research and our recommendation to provide \$51.3 billion for the

NIH in the coming fiscal year. We also have led and worked with several coalitions of patient advocacy and professional organizations to share our message. Most recently, we created a statement opposing the requested budget and urging Congress to not only increase funding but also to protect the NIH from policies recommended in the president’s budget request that would harm research, such as arbitrary caps on indirect costs, multiyear funding, delaying awards and convening advisory councils, and restructuring the NIH by eliminating institutes and centers.

It is also critical that all representatives and senators hear from the medical research community about how these proposed cuts would affect research programs and jeopardize public health. U.S.-based Endocrine Society members can take action through our online advocacy campaign (www.endocrine.org/advocacy/take-action) to urge Congress to increase funding for medical research.

As more details are made available, the Endocrine Society will continue to analyze budget documents from the White House and the agencies to understand how these cuts will impact our members, and we will update the Society’s website and share through *Endocrine News*.

TAKE ACTION

Urge Your Senators to Make Insulin More Affordable by Supporting the INSULIN Act

The Endocrine Society successfully advocated for the introduction of historic legislation to make insulin more affordable that was introduced in the Senate. Senators Jeanne Shaheen (D-NH), Susan Collins (R-ME), Raphael Warnock (D-GA), and John Kennedy (R-LA) introduced the Improving Needed Safeguards for Users of Lifesaving Insulin Now (INSULIN) Act of 2026.

The INSULIN Act would expand the \$35 monthly cap on out-of-pocket insulin costs, currently available for Medicare beneficiaries, to those with private insurance. The legislation also would create a program to provide lower-cost insulin

to the uninsured. The Endocrine Society has endorsed this bipartisan legislation, and we need your help asking your senators to cosponsor and advance the INSULIN Act in the Senate HELP Committee.

It is imperative that your senators hear from you about the importance of cosponsoring this legislation and supporting this bill. We urge all Endocrine Society members to take action today and ask your senators to cosponsor and pass this legislation quickly. You can take action today by visiting: endocrine.org/advocacy/take-action.


Endocrine Society Recognized for Advocacy in the European Union

Last month, the European Parliament voted on revisions to the Cosmetics Regulation under the Chemicals Omnibus. Prior to the vote, Members of the European Parliament (MEPs) had a chance to introduce amendments to the proposed legislation from the European Commission to achieve a majority vote in the Parliament. Recognizing that cosmetics are a source of exposure to endocrine-disrupting chemicals (EDCs), the Endocrine Society and European Society of Endocrinology (ESE)



drafted a joint letter to MEPs on the Environment (ENVI) and Internal Market and Consumer Protection (IMCP) Committees urging them to adopt amendments that would strengthen the regulation and reduce exposure to EDCs.

Important protections were included in the negotiated text that we advocated for, including restrictions on carcinogens, mutagens, and reprotoxic substances without exemption for certain routes of exposure. Additionally, and consistent with our requested amendments proposal, a faster timeline for restrictions on hazardous substances is included to ensure that implementation of regulations moves quickly.

Our societies faced an uphill battle as the chemicals industry lobbied extensively to weaken the overall regulation. Martin Hojsik, vice president of the European Parliament, responded to our letter saying that our support was “crucial” as very few organizations contacted the Parliament in support of stronger standards for safe cosmetics. We will continue to work with the ESE on all aspects of the Chemicals Omnibus as they come up for debate to urge policymakers in the EU to implement strong regulations to minimize exposure to EDCs throughout consumer products. 



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Talking with
2026 Outstanding
Mentor Laureate
Award recipient,
Patricia Lee
Brubaker, PhD



guiding
CURIOSITY

When Patricia Lee Brubaker, PhD, the Endocrine Society's 2026 recipient of the Outstanding Mentor Laureate Award, was interviewing potential candidates to join her laboratory, she always kept in mind that she needed to choose someone she really liked as well as respected.

BY GLENDA FAUNTLEROY SHAW

Mentorship is one of the most powerful forces in shaping scientific careers — guiding curiosity, building confidence, and opening doors that might otherwise remain closed. The Endocrine Society has recognized Patricia Lee Brubaker, PhD, as one of its 2026 Laureates with the Outstanding Mentor Award, honoring her career-long commitment to supporting and inspiring the next generation of researchers.

Brubaker, professor emerita in the Departments of Physiology and Medicine at the University of Toronto, retired three years ago after a distinguished 38-year tenure on faculty. Since 1985, she has mentored hundreds of postdoctoral fellows as well as graduate and undergraduate research students, helping them navigate their careers and achieve success.

We sat down with Brubaker to reflect on her approach to mentorship, the impact of her trainees, and what this recognition means to her.

***Endocrine News:* When you first heard the news that you won the outstanding mentor, what was your first reaction?**

Patricia Lee Brubaker: I was deeply honored to even be nominated. It really meant a lot to me because working with my trainees, of whom there have been over 200 in my career, has been the most fulfilling part of my career. In fact, I love the science, but I truly have loved working with my trainees. So, I was thrilled to be recognized by the Endocrine Society and humbled because I know that there have been a lot of outstanding mentors who've won this award before me.

***EN:* How do you describe great mentorship in science?**

Brubaker: Part of being a great mentor is instilling self-sufficiency. You want your students to be able to go on into whatever career they choose with confidence and with skills, even if it's not science. The ability to write, to prepare and deliver a presentation, to be in a question-and-answer situation. All of these are important skills. I also think a great mentor encourages exploration. So, it's not just that you have a task to do and you don't do anything else. You look around to see what else inspires you.

Another thing that was important in my philosophy was that I assumed that pretty much anyone who came into my lab would have areas where they already had great skills and perhaps one or more areas where they would need extra assistance, whether that's fear of presenting publicly or not understanding how to look at data analytically. So, I looked for areas in my incoming students to see where I could give them extra assistance so that by the time they finished, they were a more well-rounded individual.



Patricia Lee Brubaker, PhD

“ Part of being a great mentor is instilling self-sufficiency. You want your students to be able to go on into whatever career they choose with confidence and with skills, even if it’s not science. The ability to write, to prepare and deliver a presentation, to be in a question-and-answer situation. All of these are important skills. I also think a great mentor encourages exploration. So, it’s not just that you have a task to do and you don’t do anything else. You look around to see what else inspires you.”

— PATRICIA LEE BRUBAKER, PHD
2026 OUTSTANDING MENTOR AWARD LAUREATE



Pictured here is the team from Brubaker's Laboratory in 2019, taken at her house at the annual lab dinner. Brubaker says she keeps photos of her past mentees on her office wall to remind her of their past contributions.

And finally, what I really enjoyed with my trainees, students, postdocs, and undergrads was that we also spent some social time together. We often had lunch or we went out for coffee. We had a lab lunch every month, and then every year I would invite the entire lab back to my house where I would cook dinner for them. That was also the time that we took the lab photograph for the year. So, I have photographs of probably 199 of my 200 trainees, and I put those photographs on a wall in my office to remind me of their contributions.

EN: What mentors made the biggest impression on you when you were beginning your career?

Brubaker: I had some wonderful, very generous mentors. The person who did have the greatest impact on me was a man named Dr. Joe Schwarcz. I first met him in 1973 when I went to CEGEP in Montreal, Quebec (in Quebec, you do CEGEP [Collège d'enseignement général et professionnel] between grade 11 in high school and first year at university).

Joe was my organic chemistry teacher, and he made organic chemistry come alive. He was just a brilliant teacher, and he took me and many of us, including my future husband, under his wing. We spent a lot of time with Joe talking about what we wanted to do and also just being friends. And I'm still in contact with him, 50 years later! He changed the trajectory of my career because until then, I had really wanted to go into medicine, but he introduced me to some of the joy of science.



A few times a year, Brubaker has a virtual meeting with some of her former trainees, some of whom go back decades! She says she hires people that she likes, and that's what creates such long-lasting relationships.

EN: How do you train your students to deal with setbacks or failed experiments or any kind of frustrations that can happen in today's science world?

Brubaker: It's always difficult when you don't get the result that you expect. And these are all things that we would discuss in our lab journal club, quite openly and quite frankly. Not all hypotheses are right. Not all techniques are the right way to approach a question. We would talk about whether it's a species-dependent issue. For example, maybe it works in mice, but it doesn't work in rats, or maybe it won't work in humans eventually. We were very open in our discussions in the lab about reasons that things can go wrong. But in addition, sometimes the answer is no. Sometimes your hypothesis is wrong. But all knowledge is useful. In fact, I had a quote from Thomas Jefferson on my wall that I kept for many years. It says, "Knowledge is like a candle. When you light your candle from mine, my light is not diminished, it is enhanced, and a larger room is enlightened as a consequence." It's a wonderful quote, and I tried to live by that quote.

EN: I read that many of your mentees have continued your relationships long after they've left your lab. What did you attribute that longevity to?

Brubaker: I certainly don't keep in contact with all 200, but I do receive a surprising number of emails every year from people who say, "I was just doing something in my life and it reminded me of you and things that you used to say and I wanted to write and see how you're doing."

But I have former trainees that I continue to meet a couple times a year by Zoom or in person when possible. Some of these go back probably 25 or 30 years. And I attribute those long-lasting relationships to the fact that I hire people that I like. During the interview process, I go through this process in my mind saying, 'this is going to be a very close relationship for the next two years or the next five years with this student, depending on the degree that they're doing. Do I like this person enough to spend hours and hundreds of hours with them?' By trying to make sure that I like them to start with, it becomes easier to develop a long-term relationship. And I like them as friends.

Also, my job as a mentor was to help advise and grow my students wherever they decided where they wanted to be after they left my lab. So, of the 150 undergraduates, maybe couple of dozen stayed on in science, but many of them went on to other careers. They went to medicine and dentistry. They also went into law. They went into teaching, accounting, just a wide variety of different careers. I was trying to make sure that I supported them in whatever career choice they had. ^{EN}

In Pursuit of Precision

Advances in lab technology are helping endocrinology researchers improve accuracy, efficiency, and confidence in their work.

BY COURTNEY CARSON

In the lab, even the smallest variation can impact results, making precision essential at every step. As endocrinology research continues to expand, the tools supporting this work are evolving just as quickly. Today's laboratories rely on technologies that not only deliver sensitivity and accuracy, but also streamline workflows and support reproducible, high-confidence results. Here, we look at some of the latest tools designed to help endocrinology researchers work smarter, move faster, and generate data they can trust.



Thermo Scientific TSQ Quantis Plus Triple Quadrupole Mass Spectrometer Designed for high-throughput laboratories, the TSQ Quantis Plus triple quadrupole mass spectrometer delivers fast, sensitive, and reliable targeted quantitation across a wide range of molecular compounds. Its advanced SRM acquisition speed and broad dynamic range support precise measurement of hormones, metabolites, and biomarkers central to endocrine research. With intuitive software, integrated method templates, and seamless compatibility with LC-MS/MS workflows, the system enables confident results for both routine analysis and complex method development. www.thermofisher.com

Eppendorf Research Plus Pipette A fundamental tool in laboratory workflows, pipettes support accurate and consistent liquid handling across a wide range of applications. The Eppendorf Research Plus pipette is designed for precision and ease of use, helping reduce user fatigue during repetitive tasks. Its reliable

performance supports sample preparation for hormone assays, molecular workflows, and other applications central to endocrine research.

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STEMCELL Hypoxia Incubator Chamber

The STEMCELL Hypoxia Incubator Chamber provides a controlled, low-oxygen environment for in vitro studies, allowing researchers to more closely replicate real-world conditions. Designed for use within standard incubators, the chamber enables precise regulation of oxygen levels while maintaining consistent temperature and humidity. This approach supports investigations into metabolic function, tumor biology, and other processes closely tied to endocrine pathways, helping generate more accurate and reproducible results. www.stemcell.com

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A key component of modern laboratory infrastructure, the SterilGARD e3 Class II Type A2 biosafety cabinet provides a controlled, HEPA-filtered environment for sensitive procedures. Designed to protect personnel, samples, and the surrounding environment, this biosafety cabinet supports sterile workflows commonly used in endocrine research, including cell culture and sample preparation. Features that promote consistent airflow and reduced turbulence help maintain reliable, reproducible conditions across a range of laboratory applications. www.sigmaaldrich.com

HEMCO UniFlow Radioisotope Fume Hood

Engineered for laboratory work involving radiochemicals, the UniFlow Radioisotope Fume Hood prioritizes safety with a seamless, welded Type 304 stainless steel interior and rounded corners for easy cleaning. Its reinforced work surface is designed to support heavy shielding materials and equipment used in isotope applications. Standard features include LED lighting and a vertical sliding tempered glass sash. Available in multiple widths with customizable accessories and exhaust options, this hood provides reliable containment for radiolabeled studies in endocrine research. www.hemcocorp.com



HEMCO UniLine Modular Lab Furniture Systems Modular lab furniture systems provide the foundation for efficient, organized laboratory environments. HEMCO's UniLine offerings include base and wall cabinets, countertops, sinks, fixtures, and mobile workstations designed to support a range of research needs. Configurable casework groupings allow labs to tailor layouts based on space and workflow, while turnkey installation services help ensure a cohesive, streamlined setup from start to finish. www.hemcocorp.com

As endocrinology research continues to evolve, so do the tools behind it. From foundational laboratory infrastructure to advanced analytical platforms, these technologies play a key role in helping labs work more efficiently and generate data they can trust. 

– CARSON IS A FREELANCE WRITER BASED IN BIRMINGHAM, ALA., SHE FREQUENTLY COVERS NEW TECHNOLOGY FOR *ENDOCRINE NEWS*.