

JANUARY 2022

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Endocrine news

INTERNATIONAL

Hot and **BOTHERED**

Global Warming and Endocrinology

A recent editorial in *The Journal of Clinical Endocrinology & Metabolism* calls on endocrinologists to step up to the challenges of a warming and polluted planet. How clinicians – and their patients – can impact climate change.

WEAKEST LINKS:

How supply chain chaos is stalling science

ENDOCRINE EXPLORERS:

The 2021 REGMS recipients look to the future

ENDOCRINE
SOCIETY



Hormone Science to Health

Endocrine news

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

2020 – 2022 EDITORIAL ADVISORY BOARD

Henry Anhalt, DO

Bergen County Pediatric Endocrinology

Sally Camper, PhD

Department of Human Genetics
University of Michigan Medical School

Rodolfo J. Galindo, MD

Assistant Professor of Medicine
Mount Sinai School of Medicine

Christian M. Girgis, MBBS, PhD, FRACP

Royal North Shore and Westmead Hospitals
University of Sydney, Australia

Andrea Gore, PhD

Division of Pharmacology and Toxicology
University of Texas

Daniel A. Gorelick, PhD

Baylor University, Houston, Texas

M. Carol Greenlee, MD, FACP

Western Slope Endocrinology
Grand Junction, Colo.
(Faculty for Transforming Clinical Practice initiative [TCPi])

Gary D. Hammer, MD, PhD

Millie Schembechler Professor of Adrenal Cancer,
Endocrine Oncology Program
University of Michigan

Robert W. Lash, MD

Chief Professional & Clinical Officer, Endocrine Society

Karl Nadolsky, DO

Assistant Clinical Professor of Medicine,
MSU College of Human Medicine
SHMG Endocrinology

Joshua D. Safer, MD, FACP

Executive Director, Center for Transgender Medicine and Surgery
Mount Sinai Health System
Professor of Medicine
Icahn School of Medicine at Mount Sinai
New York, NY

Shehzad Topiwala, MD, FACE

Endocrinology Department
SevenHills Hospital, Mumbai, India

Kristen R. Vella, PhD

Beth Israel Deaconess Medical Center
Harvard Medical School

Christina Wang, MD

UCLA Clinical and Translational Science Institute
Harbor – UCLA Medical Center

Mihail “Misha” Zilbermint, MD

Division of Endocrinology, Diabetes and Metabolism,
Johns Hopkins University School of Medicine;
Endocrinology, Diabetes and Metabolism, Suburban Hospital;
Johns Hopkins Community Physicians

DID YOU MISS ENDO 2021?

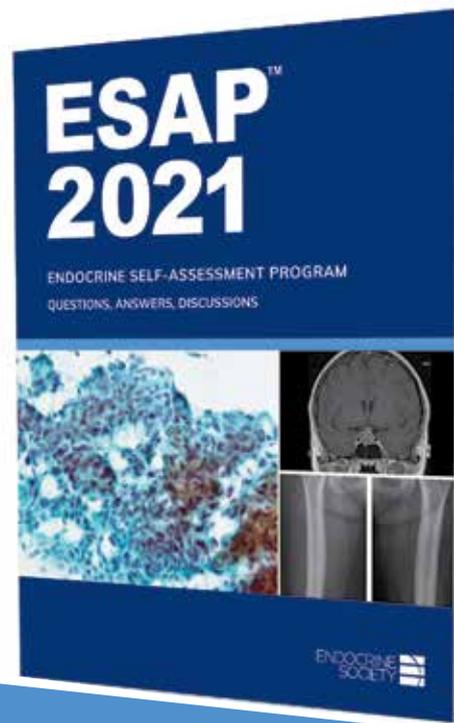


DO NOT WORRY!

You can still access our library of sessions covering the most significant breakthroughs in hormone science and health shared at ENDO 2021. Obtain access today and earn up to 110 AMA *PRA Category 1 Credits*™.

endocrine.org/store

NOW AVAILABLE



TEST YOUR KNOWLEDGE

WITH THE #1 SELF-ASSESSMENT TOOL IN THE FIELD

- 120 brand-new case questions
- Interactive online module with three learning modes
- **NEW! FLEXIBLE FORMAT OPTION:** Select from a printed book or e-Book to complement the online module
- Lab values in conventional and SI Units
- 40.0 *AMA PRA Category 1 Credits*[™] and ABIM MOC Points

ORDER ONLINE AT [ENDOCRINE.ORG/STORE](https://www.endocrine.org/store)

38 | Endocrine Explorers: Catching up with the 2021 REGMS Participants

Endocrine News talks with several of the early-career scientists who are participating in the Endocrine Society's 2021 Research Experiences for Graduate and Medical Students (REGMS) program to learn more about their work in the laboratory and how the program has helped them during the early stages of their careers.

BY GLENDA FAUNTLEROY SHAW

18 | The Heat Is On: Global Warming and Endocrinology

Endocrine leaders say it is time for endocrinologists to step up to the challenges of a warming and polluted planet, according to a recent editorial in *The Journal of Clinical Endocrinology & Metabolism*. But what are the challenges in changing the behaviors of patients as well as clinicians?

BY ERIC SEABORG

24 | The Endocrine Society 2022 Laureate Award Winners

For more than 70 years, the Endocrine Society has recognized the achievements of endocrinologists worldwide. The Laureate Awards recognize endocrinologists for seminal research, meritorious service, leadership and mentorship, innovation, international contributions, education, translation of science to practice, and lifetime achievement.

4 | PRESIDENT'S VIEWPOINT

Awards Abound for Our Early-Career Endocrinologists

6 | FROM THE EDITOR

Recognizing Endocrine Society Leaders of Today and Tomorrow

8 | INTOUCH

Remembering "a True Giant in Endocrinology and Neuroendocrinology," Mary F. Dallman, PhD; Hammes Elected Endocrine Society 2023 - 2024 President; Endocrine Society Statement Addresses Racism in Endocrinology; and Endocrine Society Urges Senate to Address Insulin Affordability.

13 | TRENDS & INSIGHTS

COVID-19 Pandemic Associated with Disruptions to Women's Reproductive Health; Community Initiative Launched to Advance Access to Diabetes Care and Technology; Baseline IGF-1 and Stimulated GH Can Predict Pediatric GHD Severity, Response to Treatment

BY DEREK BAGLEY

16 | ENDOCRINE ITINERARY

Scientific meetings of interest to endocrinologists from around the world

47 | ADVOCACY

New Requirements for All Physicians and Facilities Resulting from Surprise Billing Act; Advocacy Victory: EU Effectively Bans BPA in Food Contact Materials; Congress Approves Continuing Resolution to Fund NIH Through February 18; Advocacy Victory: Congress Passes Legislation Averting Medicare Cuts

50 | LABORATORY NOTES

**THE WEAKEST LINK:
HOW SUPPLY CHAIN
SHORTAGES ARE
CREATING CHALLENGES
AT THE BENCH**

COVID-19 has impacted the healthcare world for almost two years now, but the aftershocks continue to ripple outward. As factories slowly reopen and

scientists return to their labs, the lack of materials needed for research is slowing down science.

BY GLENDA FAUNTLEROY SHAW

www.endocrine.org



Follow us on Twitter:
[@Endocrine_News](https://twitter.com/Endocrine_News)

ENDOCRINE
SOCIETY

Hormone Science to Health



Awards Abound for Our Early-Career Endocrinologists

As president of the Endocrine Society, I understand the challenges in career advancement faced by medical and graduate students, postdoctoral fellows, clinical fellows, junior faculty, and early-career investigators, especially as you consider a future in endocrinology. No matter your future position (i.e., basic or clinical research, clinical practice, etc.), funding and recognition are critical to reaching this goal. In contemplating the possibilities in endocrinology, I would like to highlight a few of the travel, recognition, and leadership awards offered by the Society for those in the early stages of their careers.

For those considering submitting an abstract for **ENDO 2022**, which will be held in Atlanta, Ga., on June 11 – 14, 2022, several abstract awards are available. Abstract awards offer both a chance to present your research at a national meeting and recognition for your outstanding work. We have several enhancements for abstract presentations planned for **ENDO 2022**.

The Early Career Forum is our premier professional development workshop for trainees. Early Career Forum travel awards provide funding support to those attending this workshop. This full-day workshop will take place the day prior to the start of **ENDO 2022** on June 10, 2022.

The Society provides additional recognition awards, research fellowships, and awards to participate in invaluable leadership development programs we think will be of interest. Here's a summary of the Society's prestigious awards available for early-career professionals:

ENDO 2022 Awards

▶ **Early Career Forum Travel Awards:** Provided to graduate or medical students, residents, postdoctoral fellows, or clinical fellows to attend the one-day professional development workshop.

▶ **Endocrine Society Outstanding Abstract Awards:** Provided to trainee and early-career first authors of the best abstracts submitted for **ENDO**.

▶ **Eugenia Rosenberg Abstract Award:** Provided to junior faculty/early-career professionals within three years of completing a training program. Open to any abstract submitted in the basic science categories.

▶ **Mara E. Lieberman Memorial Awards:** Provided to the top-scoring abstracts submitted by women. Award winners must be a graduate student, postdoctoral fellow, or junior faculty.

▶ **C. Wayne Bardin International Travel Award:** Provided to current endocrine fellows or junior faculty in their first faculty position for less than five years. This award was created in honor of Dr. Wayne Bardin, MD, to promote the career development of international (residing outside the U.S.) early-career professionals.

Research, Recognition, and Leadership Development Awards

▶ **Early Investigators Award:** Provided to early-career investigators within 10 years of their terminal degree granting date in recognition of outstanding achievements in endocrine research.

▶ **Excellence in Clinical Endocrinology Leadership (ExCEL) Program:** Provided to 10 post-clinical fellows of groups underrepresented in medicine and science (URM) for participation in a unique two-day workshop focused on leadership skills training and career development. Following the workshop, participants have opportunities to be part of year-round mentoring, networking, and service activities.

▶ **Future Leaders Advancing Research in Endocrinology (FLARE) Program:** Provided to URM graduate students,

postdoctoral fellows, and junior faculty for participation in leadership and professional development programming. FLARE activities include attendance at the FLARE leadership workshop, building connections through the mentoring program, learning about the Society's volunteer

“

I highly encourage every early-career member to look at the travel awards and fellowship opportunities available through the Endocrine Society. The spectrum of possibilities is as diverse as our membership.

”

leadership through the internship program, and receiving one-on-one guidance on journals' peer review through the Early Career Reviewer program.

► **Research Experience for Graduate and Medical Students (REGMS) Program:** Provided to 14 first- or second-year graduate students or medical students beyond their first year of enrollment.

I highly encourage every early-career member to look at the travel awards and fellowship opportunities available through the Endocrine Society. The spectrum of possibilities is as diverse as our membership. For more information, please visit <https://www.endocrine.org/awards>. EN

Carol H. Wysham, MD
President, Endocrine Society

THE ENDOCRINE SOCIETY
IS THRILLED TO ANNOUNCE
AND CONGRATULATE THE

2022 LAUREATE AWARDS WINNERS

FRED CONRAD KOCH LIFETIME ACHIEVEMENT AWARD

Henry M. Kronenberg, MD

GERALD D. AURBACH AWARD FOR OUTSTANDING TRANSLATIONAL RESEARCH

Terry J. Smith, MD

INTERNATIONAL EXCELLENCE IN ENDOCRINOLOGY AWARD

Lourdes Ibáñez, MD, PhD

OUTSTANDING CLINICAL INVESTIGATOR AWARD

Karel Pacak, MD, PhD, DSc

VIGERSKY OUTSTANDING CLINICAL PRACTITIONER AWARD

David W. Harris MD

OUTSTANDING EDUCATOR AWARD

Kathryn A. Martin, MD

OUTSTANDING LEADERSHIP IN ENDOCRINOLOGY AWARD

John A. H. Wass, MD, MA, FRCP

OUTSTANDING MENTOR AWARD

Jane E.B. Reusch, MD

OUTSTANDING PUBLIC SERVICE AWARD

Rita Rastogi Kalyani, MD, MHS

OUTSTANDING SCHOLARLY PHYSICIAN AWARD

Ken K.Y. Ho, MD, FRACP, FRCP, FAHMS

RICHARD E. WEITZMAN OUTSTANDING EARLY CAREER INVESTIGATOR AWARD

Shingo Kajimura, PhD

ROY O. GREEP AWARD FOR OUTSTANDING RESEARCH

Michael W. Schwartz, MD

SIDNEY H. INGBAR AWARD FOR DISTINGUISHED SERVICE

Simon J. Rhodes, PhD

AWARDS WILL BE PRESENTED AT ENDO 2022:
THE ANNUAL MEETING & EXPO IN ATLANTA, GA,
JUNE 11-14, 2022.



FROM THE **EDITOR**

Recognizing Endocrine Society Leaders of Today and Tomorrow

As we kick off a new year and leave 2021 in the rearview mirror, *Endocrine News* is giving you quite a variety of articles this month, all of which celebrate endocrinology as well as those of you who practice and research it.

What better way to start 2022 than with celebrating of the new class of Endocrine Society Laureate Award recipients? On page 24 we have devoted 14 pages to these leaders in the practice and science of endocrinology. The 2022 Endocrine Society Laureate Awards showcase endocrinologists around the world for their seminal research, meritorious service, leadership and mentorship, innovation, entrepreneurship, international contributions, education, translation of science to practice, as well as lifetime achievement. As usual, it's a very impressive list!

However, this year we are taking a different approach to highlighting this new batch of endocrine legends. Instead of typical writeup or tribute, we are including some of the Laureates' own thoughts. In cooperation with Endocrine Society staff, we are presenting mini-Q&As with the 2022 Laureates this year so we can get their thoughts on not only how the Society has helped them throughout their career but also any advice they might have for our early-career members. As we know, each new generation can learn so much from the ones that preceded it, and we thought this would be a fun way to engage with our Laureates in a more accessible manner than in years past because, let's face it, everyone's journey through the endocrinology profession is different and everyone has something to learn just as everyone has something to teach.

This year's Fred Conrad Koch Lifetime Achievement Award recipient, Endocrine Society Past-President Henry M. Kronenberg, MD, had some very salient advice for those endocrinologists just starting their careers: "The key to a satisfying career is finding an area or activity about which you are passionate," he says. "As I started my career, I was amazed by the discovery of how hormones could control gene regulation in molecular detail. I badly wanted a chance to study this process, and I continue to be as excited now as I was then at the chance to participate in that effort. If your job is to do what you love to do, then you've chosen the right career. For me, the chance to combine endocrine research with the care

JANUARY 2022

Endocrine news

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

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

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

Art Director/Production: **Anthony S. Picco**

Art Director/Design: **Catherine C. Neill,**
CNJ Creative, saLLC
www.cnjcreative.com

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

Endocrine News is a registered trademark owned by the Endocrine Society.

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



President: **Carol H. Wysham, MD**
president@endocrine.org

President-Elect: **Ursula B. Kaiser, MD**
ukaiser@bwh.harvard.edu

Past-President: **Gary D. Hammer, MD, PhD**
ghammer@med.umich.edu

Secretary-Treasurer: **Dolores M. Shoback, MD**
dolores.shoback@ucsf.edu

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

The mission of the Endocrine Society is to advance excellence in endocrinology and promote its essential and integrative role in scientific discovery, medical practice, and human health.

Endocrine News® is published 12 times a year by the Endocrine Society, 2055 L Street, NW, Suite 600, Washington, DC 20036
Phone 202-971-3636 • Fax 202-736-9708
www.endocrine.org.

Print ISSN 2157-2089 Online ISSN 2157-2097
Copyright © 2022 by the Endocrine Society.
All rights reserved.

- Please send letters to the editor, comments, and suggestions for *Endocrine News*® to mnewman@endocrine.org.
- Product print and product online display advertising, by Pharmaceutical Media, Inc., contact Joe Schuldner, jschuldner@pmi.com, or John Alberto, jalberto@pmi.com.
- For classified print advertising by Pharmaceutical Media, Inc., Dan Simone, dsimone@pmi.com
- For classified online advertising by endocareers@endocrine.org

The statements and opinions expressed in *Endocrine News*® are those of individual authors and do not necessarily reflect the views of the Endocrine Society.

Advertising appearing in this publication does not constitute endorsement of its content by *Endocrine News*® or the Endocrine Society.

of patients with hormone problems combines that passion for discovery with the sense of fulfillment that comes from trying to help others.”

On page 38, we switch gears in a roundtable discussion with early-career scientists who have participated in the Endocrine Society’s 2021 Research Experiences for Graduate and Medical Students (REGMS) program. Glenda Fauntleroy Shaw spoke with 11 of this year’s 14 recipients about their work in the laboratory and how the program has helped them during the early stages of their careers. “The REGMS program is an incredible opportunity to connect with other students and researchers, allowing me to expand and diversify my skillset as a student researcher,” says Parleen Pander, PhD, a graduate student at the University of Northern British Columbia in Prince George, British Columbia, Canada. “I felt like I was lacking the networking opportunities that come with attending in-person conferences while studying towards my graduate degree during the COVID-19 pandemic, but the REGMS program and its virtual nature allowed me to make meaningful connections with others in the endocrine field that I otherwise would not have been able to.”

No doubt their achievements will soon be filling the pages of future issues of *Endocrine News*!

Finally, this month’s cover story by Eric Seaborg (“The Heat is On: Global Warming and Endocrinology,” p. 18) addresses a topic that has been affecting all aspects of our lives long before the COVID-19 pandemic reared its ugly head almost two years ago: climate change. Paul Stewart, MD, editor-in-chief of *The Journal of Clinical Endocrinology & Metabolism* (JCEM) and deputy editors Ursula B. Kaiser, MD, and Raghavendra G. Mirmira, MD, all authored an editorial, “Environmental Pollution, Climate Change, and a Critical Role for the Endocrinologist,” published last month that put forth a number of steps endocrine clinicians, and their patients, can do to lessen the impact of global warming.

Stewart, a professor at the University of Leeds in the U.K., tells Seaborg that the idea for the editorial came to him from his work with the U.K. Academy of Medical Science: “It struck me that there was a major endocrine aspect to this that we really

needed to be on the front foot about,” he says. “The purpose of the editorial was to raise awareness across endocrinologists and hopefully stimulate much-needed change. The Endocrine Society certainly appears to be taking this seriously, and other societies across the globe are also interested.”

As the JCEM editorial states: “We can all make choices that will benefit our own lives while collectively, by reducing greenhouse gas emissions, benefiting the lives of others.”

If there’s something you want to see on the pages of *Endocrine News*, feel free to send me an email at: mnewman@endocrine.org. 

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



MASTER THE BOARDS WITH ENDOCRINE BOARD REVIEW 13TH EDITION

Endocrine Board Review (EBR) 13th Edition will allow you to assess your knowledge on core principles and challenges in endocrinology with 220 case-based questions that span the breadth of the field. Certified for 21 *AMA PRA Category 1 Credits™* and ABIM MOC Points.

Two options:

- *EBR 13th Edition book*
- Endocrine Board Review 2021 Bundle, which includes: the *EBR 13th Edition book*; an interactive on-demand mock exam sessions; a topical Q&A session recordings from the EBR 2021 Virtual Meeting.

**ORDER TODAY AT
[ENDOCRINE.ORG/STORE](https://www.endocrine.org/store)**

ENDOCRINE
SOCIETY 

© 2021 ENDOCRINE SOCIETY

Remembering “a True Giant in Endocrinology and Neuroendocrinology,” Mary F. Dallman, PhD



It is with sadness that we inform the endocrine community that Mary F. Dallman, PhD, passed away on December 21, 2021.

Mary was a true giant in endocrinology and neuroendocrinology. She received her BA from Smith College (Magna Cum Laude) and her PhD from Stanford with Gene Yates and did postdoctoral training in Stockholm with Bengt Andersson and at UCSF with Fran Ganong. Mary joined the UCSF faculty in 1970 and rose to professor and vice chair in the 1980s. In fact, Mary was one of the first women to be a tenured basic science faculty at UCSF and led the way for many others to follow.

Mary’s research was wide ranging and profoundly influential. She developed one of the first useable and reliable plasma ACTH immunoassays that revolutionized both basic science and clinical practice. As a graduate student, she developed the idea that there are different time domains and kinetics of glucocorticoid negative feedback. She knew more about the stress response and HPA axis dynamics than just about anyone. Her later career was devoted to understanding how feeding and “comfort food” was important in stress dynamics, endocrinology, and metabolism.

It is impossible to summarize Mary’s breadth and depth of research in a short space. She was honored by the British Neuroendocrine Society, Women in Endocrinology, Society for the Study of Ingestive Behavior, and the International Society of Psychoneuroendocrinology. Mary served as president of Women in Endocrinology and of the International Society of Neuroendocrinology; served on the Endocrine Society Council; and was an associate editor of *Endocrinology*.

But Mary’s most important attribute was the mentorship that she provided to at least three generations of endocrine and neuroendocrine scientists. When you joined Mary’s lab, you joined a real family where great — even wild and crazy — ideas were encouraged and nurtured. Mary was a unique character with the most joyous eccentricities and novel ideas in which we all reveled. Her laboratory was the nexus for

“**When you joined Mary’s lab, you joined a real family where great — even wild and crazy — ideas were encouraged and nurtured.”**

many informal gatherings of graduate students, staff, and postdocs from all over the UCSF campus. She was a role model for all of us but particularly for women in endocrinology. Many years after leaving Mary’s laboratory, we would still “run data” by her, and she always had great insights into a new way of looking at results.

Mary was a devoted wife, mother, and grandmother. Once you were part of Mary’s extended family, you were a “Dallmanite” forever. We cannot express the level of joy and excitement she brought to the laboratory every day. Also hard to describe is her generous and caring personality — she touched us with her honesty, encouragement, constructive criticisms, and above all, life-long nurturing. We will all greatly miss her but will remember the good times we had and great science we did under her guidance, collaboration, and mentorship.

– *Hershel Raff, PhD, Medical College of Wisconsin, on behalf of Mary’s trainees over five decades*

Hammes Elected Endocrine Society 2023 – 2024 President



Stephen R. Hammes, MD, PhD



Rexford Ahima, MD, PhD



Andrea Gore, PhD



Karen Lam, MBBS, MD



Barbara Onumah, MD

Endocrine Society members elected Stephen R. Hammes, MD, PhD, to serve as the organization's president for the 2023 – 2024 term.

Hammes is the Louis S. Wolk Distinguished Professor of Medicine, chief of the Division of Endocrinology, Diabetes, and Metabolism, and vice chair for research and academic affairs in the Department of Medicine at the University of Rochester in Rochester, N.Y. He will serve as president-elect for a year beginning in June 2022 before becoming president in June 2023.

Hammes' laboratory studies steroid signaling, and his clinical focus is on gonadal and adrenal diseases, as well as transgender health. He has served on several Endocrine Society committees and is currently deputy editor of the *Journal of the Endocrine Society* and the Annual Meeting Steering Committee chair for **ENDO 2022**.

The Society's Nominating Committee also added four new members to its Board of Directors beginning in June 2022. The new Board members are:

- ▶ Rexford Ahima, MD, PhD – Board At Large
- ▶ Andrea Gore, PhD – Board At Large
- ▶ Karen Lam, MBBS, MD – Board At Large
- ▶ Barbara Onumah, MD – Board At Large

The new Board members will begin serving their three-year terms following **ENDO 2022**, which will take place in Atlanta, Ga., from June 11 to 14, 2022.

Ahima is the director of the Division of Endocrinology, Diabetes, and Metabolism; Bloomberg Distinguished Professor of Diabetes in the Schools of Medicine, Public Health, and Nursing; and the leader of the Johns Hopkins Diabetes Initiative at Johns Hopkins University in Baltimore, Md. He is a member of the Laureate Awards Committee and an associate editor of *Endocrine Reviews*.

Gore is professor of pharmacology and toxicology and Vacek Chair in Pharmacology at the University of Texas at Austin in Austin, Texas. Her laboratory focuses on neuroendocrine control of reproduction and connections among hormones, brain sexual differentiation, and behavior. She's a member of the Endocrine Society's Endocrine-disrupting Chemicals (EDC) Advisory Group and co-chairs the Society's EDCs Writing Group.

Lam is chair and professor in medicine, Rosie TT Young Professor in Endocrinology and Metabolism, clinical director of the State Key Laboratory of Pharmaceutical Biotechnology, and academic lead of the Clinical Trial Center, at the University of Hong Kong in Hong Kong. She serves on the Society's Publication Core Committee and is an associate editor of *The Journal of Clinical Endocrinology & Metabolism*.

Onumah is the medical director of the Luminis Health Anne Arundel Medical Center's Diabetes and Endocrinology Program in Bowie, Md. She was previously a faculty member at Medstar Washington Hospital Center Endocrine Training Program, where she served as an assistant professor at Georgetown University Hospital. She was also a member of the Society's Committee on Diversity and Inclusion and is currently on the Laureate Awards Committee.



Endocrine Society Statement Addresses Racism in Endocrinology

Society proposes interventions to diversify endocrine workforce

The Endocrine Society calls for policies to address racial and ethnic inequities in the endocrine workforce and in access to care, the Society said in a perspective published in *The Journal of Clinical Endocrinology & Metabolism*.

“Health disparities are one of the most pressing issues facing science and medicine,” says Ruban Dhaliwal, MD, MPH, of Massachusetts General Hospital and Harvard Medical School in Boston, Mass., and member of the Endocrine Society’s Advocacy and Public Outreach Core Committee. “As endocrinologists, we have a responsibility to take actions to eliminate racism in our discipline and for our patients. The Endocrine Society has incorporated its commitment to diversity, equity, and inclusion into all facets of its education and advocacy initiatives and programming.”

The policy perspective outlines several strategies for addressing racism in endocrinology, including:

- ▶ Building an inclusive and equitable endocrine workforce;
- ▶ Diversifying clinical trial participation and the research workforce; and
- ▶ Ensuring equal access to quality care.

As part of its commitment to diversity, equity, and inclusion, and following its policy recommendations, the Endocrine Society:

► Offers leadership training and mentorship to early-career physicians of communities underrepresented in medicine and science with its Excellence in Clinical Endocrinology Leadership (ExCEL) program. This is one way to build diversity into the endocrine workforce.

► Develops the careers of minority scientists and clinician-scientists through the Future Leaders Advancing Research in Endocrinology (FLARE) program. The program has trained over 150 early-career scientists and faculty (47% Black and 43% Hispanic) since 2013. Seventy-one percent of FLARE fellows have published original research following their participation in the program, with an average of six research articles published. This is one example of how to create a program to train and mentor investigators from diverse backgrounds and grow a diverse research workforce.

► Advocates for telemedicine reimbursements to continue beyond the COVID-19 pandemic. Insurance companies and policy makers should consider high copays, insulin accessibility and affordability, and equal access to telemedicine when allocating funds to eliminate barriers to care. This is an important way to increase access to care for diverse populations.

Other health disparities resources from the Endocrine Society include a scientific statement, patient resources, and a recent webinar, “Breaking Down Barriers to Diabetes Care.”

Co-authors of the policy perspective include: Rocio Pereira of the University of Colorado School of Medicine in Aurora, Colo.; Alicia Diaz-Thomas of the University of Tennessee Health Science Center in Memphis, Tenn.; Camille Powe of Massachusetts General Hospital and Harvard Medical School, Boston, Mass.; Licy Yanes Cardozo of the University of Mississippi Medical Center in Jackson, Miss.; and Joshua Joseph of the Ohio State University College of Medicine in Columbus, Ohio.

“As endocrinologists, we have a responsibility to take actions to eliminate racism in our discipline and for our patients. **The Endocrine Society has incorporated its commitment to diversity, equity, and inclusion into all facets of its education and advocacy initiatives and programming.**”

— RUBAN DHALIWAL, MD, MPH, OF MASSACHUSETTS GENERAL HOSPITAL AND HARVARD MEDICAL SCHOOL IN BOSTON, MASS., AND MEMBER OF THE ENDOCRINE SOCIETY'S ADVOCACY AND PUBLIC OUTREACH CORE COMMITTEE

The manuscript, “Eradicating Racism in Endocrinology: An Endocrine Society Policy Perspective,” was published online, ahead of print.

The paper is a collaborative effort between the Society's Committee on Diversity and Inclusion and the Advocacy and Public Outreach Core Committee.



Endocrine Society Urges Senate to Address Insulin Affordability

The Endocrine Society urges the Senate to protect the insulin affordability provisions included in the Build Back Better Act and move quickly to pass this crucial legislation.

We implore all senators to ensure these provisions are not scaled back. The Build Back Better Act represents the best opportunity to address the price of insulin. Millions of Americans cannot wait any longer for a solution.

The Build Back Better Act, which was passed by the House, would cap insulin copays at \$35 per month for Medicare beneficiaries and those on private insurance. It is also critical that the legislation include individuals covered by private insurance. These individuals face insulin price hikes just like Medicare beneficiaries. Imposing limitations on this provision would perpetuate limited access to affordable insulin for people living with diabetes.

The Build Back Better Act would institute an inflation cap ensuring that the price of insulin doesn't increase faster than inflation. In addition, the bill would give the government authority to negotiate the price of certain drugs, including insulin.

For millions of Americans living with diabetes, including all people living with type 1 diabetes, insulin is a life-saving drug that must be taken to control blood sugar. Although insulin has been available for 100 years, its price continues to increase and has nearly tripled over the past 15 years.

The Endocrine Society has prioritized the need for affordable insulin for years. Our members are dedicated to educating Congress about the challenges people with diabetes face in accessing affordable insulin. We have shared policy recommendations, testimony, and a collection of patient stories illustrating that people with diabetes continue to suffer due to the high price of insulin.

The Senate must move quickly to pass this legislation, which would make insulin more affordable for millions of Americans with diabetes. 



BY DEREK BAGLEY
Senior Editor

COVID-19 Pandemic Associated with Disruptions to Women's Reproductive Health

Women's reproductive health has been disrupted as a result of the psychological burden of the COVID-19 pandemic, and affected women need additional medical and psychological support, according to research presented at the Society for Endocrinology annual conference in Edinburgh, Scotland, last November.

The findings indicate that stress and sleep disturbance related to the pandemic have had adverse effects on women's menstrual cycles. The study suggests that further studies are necessary to establish the longer-term impact of the pandemic on female reproductive health.

Researchers led by Lisa A. Owens, MD, of St. James's Hospital in Dublin, Ireland, surveyed more than 1,300 women in April 2021. In addition to standard measures of depression, anxiety, and sleep quality, the survey also asked about their menstrual cycles. Menstrual disturbances included irregular, missed, painful, or heavy periods and pre-menstrual symptoms. Fifty-six percent of respondents reported an overall change in their menstrual cycles since the beginning of the pandemic, with 64% reporting a worsening in pre-menstrual symptoms, and 54% experiencing reduced sex drive. Rates of severe depression, anxiety, and poor sleep were more than double those from pre-pandemic levels for women of reproductive age. Menstrual cycle disturbances were associated with increased levels of mental distress and poor sleep among the women surveyed.

"Our findings highlight a real need to provide appropriate medical care and mental health support to women affected by menstrual disturbance, given the unprecedented psychological burden associated with the

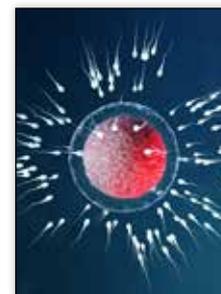
pandemic," says Michelle Maher, MB, BCH, BAO, also of St. James's Hospital and the paper's lead author.

This is the first study to demonstrate that women continue to experience reproductive health disturbances one year into the pandemic, and that this is associated with increased levels of psychological distress and poor sleep. Further investigation will contribute to greater understanding of the extent of reproductive health disruption and guide our future practice and health policy.

"This study was conducted at a relatively early stage of the COVID-19 vaccination program, so the length of the pandemic and effectiveness of the vaccine may influence future findings; further investigation with objective, measurable data is needed," Maher says.

The team now plan to conduct these surveys at six-month intervals to determine progress and identify any longer-term effects on female reproductive and mental health. In addition to the surveys, more objective measurements of blood pressure, weight, sex hormone levels, and ovulation will be collected from the women participating.

"We would encourage women experiencing any reproductive disturbances (irregular, missed periods, painful or heavy periods, PMS, or reduced sex drive) as well as mental health disturbances (including symptoms of low mood, anxiety, stress, and poor sleep) to see their GP for advice," Maher says. "We are planning to provide support for women affected by menstrual cycle abnormalities by developing psychological support workshops at our center."



“

Our findings highlight a real need to provide appropriate medical care and mental health support to women affected by menstrual disturbance, given the unprecedented psychological burden associated with the pandemic.

”



“

New technologies such as continuous glucose monitors make diabetes management easier and lead to better control of glucose and may close the disparities in diabetes mortality. Unfortunately, Black populations have lower access and usage of such devices.

”

Community Initiative Launched to Advance Access to Diabetes Care and Technology

Last November, Abbott and the American Diabetes Association (ADA) announced the launch of their first joint community health partnership. The community initiative, which is the first program under the ADA’s Health Equity Now platform, will launch in Columbus, Ohio, and be conducted in partnership with the National Center for Urban Solutions (NCUS), a Columbus-based organization focused on providing solutions in workforce development, education, and wellness. The program seeks to better understand and address healthcare disparities for people of color living with diabetes, while fostering accessibility of diabetes care technology within the community.

As part of the program, the NCUS will provide up to 150 Black adults living with diabetes with health education and access to Abbott’s FreeStyle® Libre flash glucose monitoring technology. By removing existing barriers to tools and technology, this program aims to demonstrate how continuous glucose monitoring can help improve diabetes management and quality of life for Black people living with diabetes.

“Diabetes is one of the most pressing health issues of our time, particularly for people of color,” says Charles Henderson, chief advocacy officer of the ADA. “Our Health Equity Now platform serves to tear down the healthcare barriers for historically underserved communities. The program in Columbus will gather real-time data that will help us understand the challenges preventing healthcare equity and uncover solutions to minimize disparities.”

Black Americans are 60% more likely to be diagnosed with diabetes and much less likely to have their condition well managed largely because care can be cost prohibitive.

Furthermore, Black Americans are at the most pronounced disadvantage when it comes to access to continuous glucose monitoring. This is one of the reasons why this project was established — to create awareness of healthcare disparities and find holistic solutions to drive improved health outcomes.

“Black individuals across Ohio are twice as likely to die from diabetes compared to non-Hispanic whites,” says Joshua Joseph, MD, assistant professor of Endocrinology, Diabetes, and Metabolism at The Ohio State University. “New technologies such as continuous glucose monitors make diabetes management easier and lead to better control of glucose and may close the disparities in diabetes mortality. Unfortunately, Black populations have lower access and usage of such devices. Thus, approaches like the ADA’s Health Equity Now, getting continuous glucose monitors to those who need them most, are critical to advancing diabetes equity.”



Baseline IGF-1 and Stimulated GH Can Predict Pediatric GHD Severity, Response to Treatment

Baseline insulin-like growth factor-1 (IGF-1) and stimulated peak growth hormone response can serve as predictors for how severe growth hormone deficiency is in pediatric patients as well as how these patients will respond to different treatments, according to a study recently published in the *Journal of the Endocrine Society*.



Researchers led by Michael O. Thorner, MB, BS, DSc, of Lumos Pharma in Austin, Texas, write that the amount of growth hormone secreted by children ranges from zero in the most severe cases to measurable subnormal quantities in milder cases. Recombinant human growth hormone (rhGH) is approved for treatment of pediatric GHD, and the greatest growth responses with that drug have been observed in patients with severe GHD, while orally administered GH secretagogues (GHS) may be more beneficial for children with more moderate cases. The authors point to the drug ibutamoren as a GHS that has the potential to stimulate growth over time in children with milder GHD. “Distinguishing

children with severe vs. moderate GHD could identify children who would be better treated with rhGH or GHS,” the authors write.

For this analysis, the researchers looked at data from Eli Lilly’s GeNeSIS trial of 514 treatment-naïve children with GHD, to determine whether stimulated maximum GH and serum IGF-I are still significant indicators of severe or moderate GHD, if other contributing variables are included. “A series of multivariate analyses of annualized [height velocity (HV)] from 514 children treated with rhGH indicated that age, rhGH dose, the difference between patient and target height SDS, BMI SDS, GH stimulation test result, and baseline IGF-I concentration were all independent indicators,” the authors write. “Based on our analysis, prepubertal children aged 4 to 10 years with moderate idiopathic IGHD (stimulated GH ≥ 2 $\mu\text{g/L}$ and IGF-I > 30 $\mu\text{g/L}$) have the potential to grow on average 8.3 cm/y in the first year of rhGH treatment.”

The researchers conclude that baseline IGF-I and stimulated GH alone or together are significant indicators of the degree of pediatric GHD, independent of other markers. In children with idiopathic IGHD, their combined use with cutoffs >30 $\mu\text{g/L}$ for IGF-I and ≥ 2 $\mu\text{g/L}$ for GH are predictive enrichment markers to segregate HV responses to rhGH therapy and can identify patients with moderate GHD who qualify for oral GH secretagogue testing and treatment, they write.

“Notably, children with the most severe GHD grow at highest HV in response to rhGH treatment,” the authors continue. “Our working hypothesis is that children with moderate GHD will grow at similar rates in response to either daily injections of rhGH or oral ibutamoren.”



“

Our working hypothesis is that children with moderate GHD will grow at similar rates in response to either daily injections of rhGH or oral ibutamoren.

”

ENDO 2022

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

ADVANCE REGISTRATION:

Early Bird: January 12, 2022 – March 4, 2022

Advanced: March 5, 2022 – May 18, 2022

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

ABSTRACT DEADLINE: January 17, 2022

HOUSING DEADLINE: May 20, 2022

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

Attendees can expect top-flight education at **ENDO 2022**, as well as a new vibrancy and contemporary conference experience with expanded networking. Learners can expect a range of carefully curated sessions in a variety of delivery formats spanning the endocrinology journey from bench to bedside and back again. **ENDO 2022** attendees will have the opportunity to tailor their learning experience to fit their precise professional and personal development needs. The Society is also ramping up its investment in technology-forward learning enhancements to align the **ENDO** learning experience with the reality of day-to-day life in the 21st century. www.endocrine.org/endo2022



CDEI 57th Annual CME Conference

Snowmass, Colorado

January 22 – 25, 2022

The 57th Annual Clinical Diabetes and Endocrinology Institute (CDEI) CME Conference will address insulin on its 100th birthday, thyroid nodule evaluation, hypercalcemia work-up and management, diabetes technology, cholesterol-lowering therapy, post-op management of pituitary tumors, insulins: how they work, menopausal hormone therapy, and more. The faculty will be composed of known experts, will offer insights, latest research, case presentations, and clinical guidelines. To reinforce knowledge gained from the course and ensure lasting value to each attendee's practice, CDEI will provide access to course presentation

slides and recorded live presentations after the completion of the course. Ideally suited for endocrinologists, primary care physicians, and other healthcare professionals with an interest in diabetes, endocrinology, and metabolism.

<https://www.cdei-snowmass.com/>

Medical Management of the Metabolic-Bariatric Surgery Patient

February 15, 2022

10:00 a.m. – 5:20 p.m. (ET)
(Webinar)

Severe obesity and its complications are best managed by an interdisciplinary team including both surgical and medical providers. This webinar will feature presentations by leading experts, panel discussions, and dedicated time for interactive Q&A to

cover best practice recommendations for the pre- and post-operative management of patients undergoing metabolic-bariatric surgery. Topics include optimizing pre-operative care as well as recognizing and developing approaches to the variability in post-operative weight loss and remission rates of obesity-related complications in both adult and pediatric patients. All registrants will receive on-demand access to recordings throughout 2022. <http://www.obesity.org/meetings-education/webinars/>

BPS 2022: 66th Biophysical Society Annual Meeting

San Francisco, California
February 19 – 22, 2022

The Biophysical Society annual meetings are the largest annual gathering of biophysicists around the world. The

meetings include symposia, workshops, 15 subgroup programs, over 500 platform speakers selected from submitted abstracts, the Biophysical Society Lecture, more than 4,000 packed poster presentations, as well as educational exhibits, exhibitor presentations, and career development sessions.

www.biophysics.org/2022meeting#/

Clinical Endocrinology 2022

Live Streaming

April 6 – 10, 2022

Clinical Endocrinology 2022, a live streaming CME program, has been optimized for remote learning. All sessions and workshops will be live streamed and include online, live chat, where participants can pose their specific questions to faculty. All sessions and workshops will be recorded and made available to participants for online viewing, at their convenience, via a course archive. As a participant, you will be able to access these recordings for 60 days after the conclusion of this course. For nearly 50 years, renowned experts in endocrinology at Harvard Medical School and Massachusetts General Hospital have delivered the CME course Clinical Endocrinology – the acclaimed annual update of current endocrine diagnostic and management strategies. If you provide care to patients with endocrine disorders, this course will be invaluable to your medical decision making and patient care.

<https://endocrinology.hmscme.com>

AAES 2022

Cleveland, Ohio and Virtual Event

May 22 – 24, 2022

As the leading endocrine surgery association in North America, the American Association of Endocrine Surgeons (AAES) Annual Meeting is the premier event to connect with professionals and leaders across the globe in the field of endocrine surgery while receiving high-level education on the latest advancements in science and research. The 2022 Annual Meeting will be a hybrid event taking place in Cleveland, Ohio, but with virtual opportunities. While in-person podium presentations are preferred, exceptions will be made, and the ability to travel to the meeting venue is not a prerequisite for abstract acceptance.

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

INTERNATIONAL ITINERARY

ATTD 2022

Paris, France

March 8 – 11, 2022

Join us in Paris for the 15th International Conference on Advanced Technologies & Treatments for Diabetes. For 15 years, ATTD has stood at the forefront of diabetes innovation. Remarkable developments keep coming at full speed, and ATTD 2022 will again be the platform to present, review, and discuss the latest changes. We aim to move the diabetes field forward with an ever-growing community that promotes and enhances novel technologies and treatments to change the lives of people with diabetes.

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

WCO-IOF-ESCEO 2022

Berlin, Germany

March 24 – 27, 2022

For this 22nd edition of the World Congress on Osteoporosis, Osteoarthritis, and Musculoskeletal Diseases (WCO-IOF-ESCEO) Congress, the members of the Committee of Scientific Advisors of the IOF and the members of the Scientific Advisory Board of ESCEO are developing a very exciting Congress' scientific program that will bring together the world's best in the field of musculoskeletal health and disease.

<https://www.wco-iof-esceo.org>

3rd World Congress on Diabetes & Endocrinology

Dubai, UAE

May 9 – 10, 2022

The 3rd World Diabetes Congress 2022 brings together a unique international mix of experts, researchers, and decision makers both from academia and industry across the globe to exchange their knowledge, experience, and research innovations. This conference is a unique international platform that's a confluence of all stakeholders of the ecosystem – industry, academia, research, innovators, regulators – coming together to present and discuss current topics in diabetes and endocrinology, gestational diabetes, epidemiology and public health, obesity, pediatric endocrinology, diabetes and immunology, diabetic neuropathy, and many more. Join us to network with your peers, exchange expertise and experiences, and arm yourself with the latest information to take your department to the next level.

<https://diabetes.inovineconferences.com/>

THE HEAT IS ON:

Global Warming and Endocrinology

BY ERIC SEABORG

Endocrine leaders say it is time for endocrinologists to step up to the challenges of a warming and polluted planet, according to a recent editorial in *The Journal of Clinical Endocrinology & Metabolism*. But what are the challenges in changing the behaviors of patients as well as clinicians?



Endocrinologists need to broaden their work for better health to include not only their patients, but also the Earth, the editors of *The Journal of Clinical Endocrinology & Metabolism* recently urged their readers.

Editor-in-chief Paul M. Stewart, MD, and deputy editors Ursula B. Kaiser, MD, and Raghavendra G. Mirmira, MD, collaborated on a special editorial, “Environmental Pollution, Climate Change, and a Critical Role for the Endocrinologist,” that says: “The challenge is real, the evidence base is compelling, and we can all play our parts.”

Stewart, a professor at the University of Leeds in the U.K., says that the idea came to him from his work with the U.K. Academy of Medical Sciences: “It struck me that there was a major endocrine aspect to this that we really needed to be on the front foot about. The purpose of the editorial was to raise awareness across endocrinologists and hopefully stimulate much-needed change. The Endocrine Society certainly appears to be taking this seriously, and other societies across the globe are also interested.”

Global Call for Action

In September, health professionals worldwide highlighted the danger of climate change with an editorial published simultaneously by more than 200 medical journals as a “call for emergency action to limit global temperature increases.” Editors of the *New England Journal of Medicine*, *The Lancet*, and *The BMJ* joined a who’s who of international journals to call for “governments and other leaders to act, marking 2021 as the year that the world finally changes



“ There are many aspects of how we counsel our patients that have an impact on the environment. We can talk about balanced food choices that reflect better stewardship of our environment, excessive meat consumption, and how farming animals contributes to methane and nitrite release. **We can recommend altering diets in ways that reduce our exposure to foods that impact our environment but also reduce the global obesity epidemic.**”

— RAGHAVENDRA G. MIRMIRA, MD, DIRECTOR,
TRANSLATIONAL RESEARCH CENTER,
UNIVERSITY OF CHICAGO, CHICAGO, ILL.

course. Higher temperatures have brought increased dehydration and renal function loss, dermatological malignancies, tropical infections, adverse mental health outcomes, pregnancy complications, allergies, and cardiovascular and pulmonary morbidity and mortality.”

This widely published editorial was a more generic call for action, whereas the *JCEM* article focused on the endocrine aspects of the crisis and the special role endocrinologists can play.

Pollution and Climate Change

Endocrinologists have been active in alerting the public to the dangers of pollution for some time, but a concern with the tie between climate change and endocrine function is relatively new.

The most-studied effects come from the many endocrine-disrupting chemicals that have been shown to interfere with hormone action. And more evidence is accumulating that particulate matter air pollution not only exacerbates asthma, lung dysfunction, and respiratory disease but is also implicated in contributing to type 2 diabetes and premature delivery.

The editorial points out that the endocrine system can be affected by both broad categories in which climate change can affect health: the direct impact of heat and extreme weather events as well as the indirect effects on ecosystems that lead to changes in food and water supplies.

The editorial makes an important connection between climate change and perhaps the greatest challenge endocrinologists face in their practices — the epidemics of obesity and type 2 diabetes. “Endocrinology must take center stage in the food consumption–energy expenditure debate” because of food consumption’s direct relationship to obesity and diabetes. The editors note that better dietary choices can contribute to better health both of the individual and the planet: “Avoiding overconsumption and



striking a better balance between animal- and plant-based food can have benefits for both health and the climate.” Dietary changes could reduce greenhouse gas emissions and agricultural emissions enough to lead to a 19% reduction in mortality from particulate-matter air pollution.

And the flip side of the energy equation is that if individuals replace their motors with their muscles to transport themselves places, the result will be not only a reduction in their greenhouse gas emissions but an increase in their personal caloric expenditures that will benefit their health. “UK Biobank data show that active bicycle commuters have a ~50% reduction in all-cause mortality and cardiovascular disease,” the editorial notes.

Medical Practices and Personal Practices

Mirmira, who is director of the Translational Research Center at the University of Chicago, says that endocrinologists can respond to climate change in both their practices and personal lives. “There are many aspects of how we counsel our patients that have an impact on the environment,” he tells *Endocrine News*. “We can talk about balanced food choices that reflect better stewardship of our environment, excessive meat consumption, and how farming animals contributes to methane and nitrite release. We can recommend altering diets in ways that reduce our exposure to foods that impact our environment but also reduce the global obesity epidemic. We can also consider the ways we practice medicine. To what extent do we need to be commuting every day to work in a car versus taking public transportation, biking, or walking? Can we employ telemedicine more broadly?”

“I think that as a group, we can help to bring attention to the issue, particularly to some of the deniers who don’t recognize the importance,” agrees Kaiser, who is chief of the Endocrinology Division at Brigham and Women’s Hospital in Boston. “By bringing their health into it, and telling patients how these environmental changes can be impacting their health, we may help them to recognize that this issue may be more important than they had previously thought. Highlighting how climate change may be impacting metabolism and risk of diabetes might start them thinking more about climate change.”

Consorting with Medical Societies

For its part, the Endocrine Society has become involved by joining the Medical Society Consortium on Climate and Health, 38 medical groups that include about 70% of U.S.



AT A GLANCE

- ▶ **Endocrinologists can and should be involved in action to combat climate change, the editors of *The Journal of Clinical Endocrinology & Metabolism* write.**
- ▶ **Climate change and pollution are inextricably linked to issues such as food choices, agricultural practices, obesity, and type 2 diabetes.**
- ▶ **The Endocrine Society has joined the Medical Society Consortium on Climate and Health to provide education and advocate for policies to combat global warming.**

“

It struck me that there was a major endocrine aspect to this that we really needed to be on the front foot about. The purpose of the editorial was to raise awareness across endocrinologists and hopefully stimulate much-needed change. **The Endocrine Society certainly appears to be taking this seriously, and other societies across the globe are also interested.**”

— PAUL STEWART, MD, PROFESSOR, UNIVERSITY OF LEEDS, LEEDS, U.K.; EDITOR-IN-CHIEF, *THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*

RESOURCES

“Environmental Pollution, Climate Change, and a Critical Role for the Endocrinologist.” Stewart PM, Mirmira RG, Kaiser UB. *JCEM*. <https://academic.oup.com/jcem/article/106/12/3381/6410138>

“Call for Emergency Action to Limit Global Temperature Increases, Restore Biodiversity, and Protect Health.” Atwoli L, Baqui AH, Benfield T, et al. *New England Journal of Medicine* and 200 other journals. <https://www.nejm.org/doi/full/10.1056/NEJMe2113200>

The Medical Society Consortium on Climate & Health
<https://medsocietiesforclimatehealth.org/>

physicians. Daniel Oppenheim, PhD, MD, a clinical endocrinologist at Maine Medical Center in Scarborough, is the Society’s representative to the consortium.

“The consortium is very effective, both in terms of educating physicians and healthcare practitioners of all types about the connection between climate change and human health, but also inside the Beltway,” Oppenheim says. “The Build Back Better bill contains some excellent climate policy provisions, as does the infrastructure bill, and the consortium has clearly played an important role in ensuring that those types of policies are included in broad legislation like these two bills.”

“Having an editorial like this in a major journal is a hugely important step because it helps to legitimize climate change as the medical and public health issue that it truly is,” Oppenheim says. “We need to use our position in society as physicians and scientists to leverage our voices to influence public policy. It has an impact when medical societies advocate for policies that help mitigate climate change and when individual physicians express their opinions by, for example, writing letters to the editor and meeting with their legislators. We need to help blow the political winds in the direction that makes it safe for policy makers to change regulatory and legislative policies toward preventing the disaster that is looming if we allow the planet to continue to warm.”

Stewart says that organizers of the 2022 Endocrine Society annual meeting are discussing how to integrate sessions and information on climate change into the program.

In addition to educating patients and advocating to policy makers, “we should be mindful of our personal carbon footprint in all we do,” the editorial says. The endocrinologists interviewed for this article all said that they have changed their behavior in response to climate change by installing solar panels, commuting to work less, using more telemedicine, eating a more plant-based diet, and more.

“We can all make choices that will benefit our own lives while collectively, by reducing greenhouse gas emissions, benefiting the lives of others,” the editorial says. 

— SEABORG IS A FREELANCE WRITER BASED IN CHARLOTTESVILLE, VA. HE INTERVIEWED SPARROW PHARMACEUTICALS CHIEF SCIENCE OFFICER AND FOUNDER, DAVID A. KATZ, PHD, IN THE DECEMBER ISSUE.



CLINICAL ENDOCRINOLOGY UPDATE 2021 SESSION RECORDINGS

DISCOVER THE LATEST CLINICAL ADVANCES IN ENDOCRINOLOGY

ENHANCE YOUR CLINICAL PRACTICE WITH THE LATEST TREATMENT RECOMMENDATIONS

CEU 2021 Session Recordings contain the most comprehensive review of clinical endocrinology. These session recordings are synchronized with presentation slides and are accessible on iPhone, iPad, and Android devices, offering the flexibility of learning on-the-go.

Plus, earn up to 27 *AMA PRA Category 1 Credits*[™], ABIM MOC Points, and AAPA Category 1 CME Credits.

BUY NOW AT [ENDOCRINE.ORG/STORE](https://www.endocrine.org/store)

ENDOCRINE
SOCIETY 



The Endocrine Society

2022

Laureate Award

WINNERS

For more than 70 years, the Endocrine Society has recognized the achievements of endocrinologists worldwide.

The Laureate Awards recognize endocrinologists for seminal research, meritorious service, leadership and mentorship, innovation, international contributions, education, translation of science to practice, and lifetime achievement.

Established in 1944, the Society's Laureate Awards recognize the highest achievements in the endocrinology field, including groundbreaking research and innovations in clinical care.

The distinguished recipients on the following pages join a prestigious list of past award recipients, all of whom have advanced scientific breakthroughs, medical practice, and human health around the world. Award categories honor the achievements of endocrinologists at all stages of their careers, recognizing those at the pinnacle of the field as well as young endocrinologists who are making a mark.

The dedication, commitment, and achievements of current and past award recipients have earned each a place in Endocrine Society history as well as the history of the practice and science of endocrinology.

This year, we've asked the 2022 Laureates how the Endocrine Society has helped shape their careers as well as what advice they have for those aspiring, early-career endocrinologists.

The Endocrine Society will present the awards to the winners at **ENDO 2022**, the Society's 105th Annual Meeting, taking place both virtually and in-person in Atlanta, Ga., June 11 – 14, 2022.



Fred Conrad Koch Lifetime Achievement Award

Henry M. Kronenberg, MD

Henry M. Kronenberg, MD, has been chief of the Endocrine Unit at Massachusetts General Hospital in Boston, Mass., for over 32 years and is a professor of medicine at Harvard Medical School in Boston, Mass.

His research group studies the actions of parathyroid hormone and parathyroid hormone-related protein, with a particular emphasis on bone development, bone biology, calcium homeostasis, and the roles of osteoblast-lineage cells in hematopoiesis. His biggest accomplishment is bringing molecular biology to the bone and mineral field with the cloning of the parathyroid hormone. Kronenberg's laboratory in recent years has used several genetically altered strains of mice to establish the role of signaling by the PTH/PTHrP receptor in bone.

President of the Endocrine Society from 2016 to 2017, Kronenberg has served on many other Society committees over the years, most notably as vice president, Basic Science, and as the Endocrine Society's representative on the Federation of American Societies for Experimental Biology (FASEB) Board of Directors.

How has the Endocrine Society supported your professional development/career journey?

The Endocrine Society was the first national society to welcome me, and, from that beginning, I have relied on the Endocrine Society to make me aware of new ways of thinking about endocrinology, both at the basic and clinical level. **The annual meeting and journals, in particular, have defined current endocrinology for me.** Equally importantly, the Endocrine Society has been the vehicle for my meeting people in the field from whom I have learned a lot and gained lasting friendships. I have been extremely grateful that the Society has provided me with leadership opportunities that gave me a unique chance to contribute to the broader missions of the Endocrine Society.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

I think that the key to a satisfying career is finding an area or activity about which you are passionate. As I started my career, I was amazed by the discovery of how hormones could control gene regulation in molecular detail. I badly wanted a chance to study this process, and I continue to be as excited now as I was then at the chance to participate in that effort. If your job is to do what you love to do, then you've chosen the right career. For me, the chance to combine endocrine research with the care of patients with hormone problems combines that passion for discovery with the sense of fulfillment that comes from trying to help others.

ABOUT THE AWARD

The Fred Conrad Koch Lifetime Achievement Award — the Society's highest honor — recognizes the lifetime achievements and exceptional contributions of an individual to the field of endocrinology. Fred Conrad Koch, PhD, the Society's 19th president, is best remembered for his elucidation of testicular function. In 1957, the late Elizabeth Koch bequeathed a substantial legacy to the Endocrine Society in memory of her late husband, Fred Conrad Koch, PhD.

Richard E. Weitzman Outstanding Early Career Investigator Award

Shingo Kajimura, PhD



How has the Endocrine Society supported your professional development/career journey?

ENDO has been a source of my inspiration. For example, when I was a trainee (grad student and post-doc), I had opportunities to see rapid advances in the nuclear receptor field and meet the leading scientists in **ENDO** meetings. These experiences tremendously inspired me. I also enjoy catching up with my colleagues every time I join **ENDO** annual meetings. I feel very fortunate to have had these opportunities throughout my career.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

As a basic scientist, I aim to tackle unexplored areas where I can contribute by creating new dots rather than connecting existing dots that someone has already made. In this regard, curiosity is the strongest internal drive. **Finding out your curiosity, rather than feasibility, is important.**

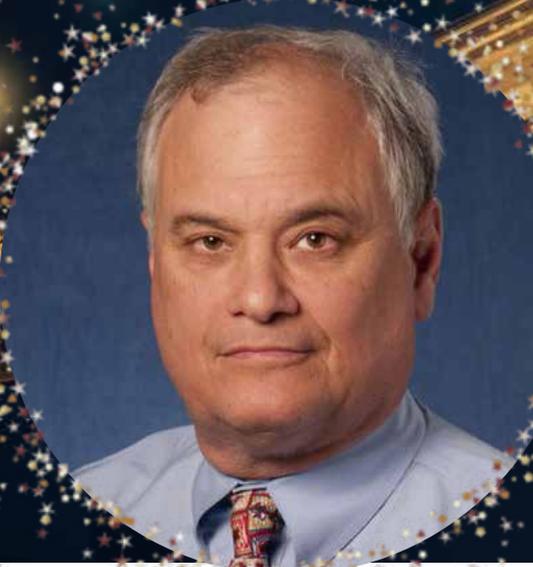
ABOUT THE AWARD

Established in 1982 through a generous gift by an anonymous donor, this award honors the memory of the late Richard E. Weitzman, who had a brief but outstanding career studying neurohypophyseal hormone and cardiovascular-endocrine physiology. This award recognizes an exceptionally promising young clinical or basic investigator based upon the contributions and achievements of the nominee's own independent scholarship performed after completion of formal training and on the recipient's entire body of work, rather than a single work.

As an investigator at Beth Israel Deaconess Medical Center in Boston Mass., **Shingo Kajimura, PhD**, has made pioneering contributions to the field of endocrinology and metabolism by identifying the key determinants of adipose tissue development and function.

Kajimura's work transformed our fundamental understandings of how brown/beige fat controls energy homeostasis in physiology and disease, and further provides a blueprint for rewiring adaptive pathways to improve metabolic health. His studies led to the new but now well-appreciated notion that the role of brown/beige fat is far beyond thermogenesis. His discoveries have the potential to influence new therapies for diseases including obesity, NASH, and type 2 diabetes.

Kajimura is currently a member of the Endocrine Society's Basic Science Strategy Advisory Group.

A circular portrait of Terry J. Smith, MD, a middle-aged man with grey hair, wearing a light blue shirt and a patterned tie. The background of the portrait is a dark blue with white stars and a golden comet streak.

Gerald D. Aurbach Award for Outstanding Translational Research

Terry J. Smith, MD

Terry J. Smith, MD, is the Frederick G.L. Huetwell Professor in Ophthalmology and Visual Sciences and professor of internal medicine at the University of Michigan Medical School in Ann Arbor, Mich.

He's studied Graves' disease, its ocular manifestations, and related autoimmune diseases for over 35 years, and his laboratory group was the first to describe the unique molecular attributes of tissue surrounding the eye that make the orbit susceptible to immune activation and inflammation in Graves' disease.

He and his colleagues have mapped the mechanisms involved in tissue remodeling occurring in thyroid-associated ophthalmopathy (TAO), a disfiguring and potentially blinding disease. They identified the insulin-like growth factor-I receptor as a therapeutic target for TAO, and their work has culminated in the creation of teprotumumab — the first FDA-approved drug to treat thyroid eye disease.

How has the Endocrine Society supported your professional development/career journey?

The Endocrine Society has always provided me and many of our colleagues with a valued home, supporting the dissemination of new concepts and fostering career advancement of countless numbers of scientists, physicians, and others toiling in the field of endocrinology.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

My advice to young investigative and clinical endocrinologists concerns the importance of persistence, regardless of any “prevailing wisdom.”

A well-reasoned hypothesis is almost always worth testing. But this persistence is best punctuated both by self-scrutiny and by scrutiny from wise, open-minded colleagues who should periodically critique your research direction and the strategies you are employing. Above all else, never allow the loudest voice in the crowd to dissuade you from following your instincts, unless their criticisms are founded in rock-solid fact and objectivity.

ABOUT THE AWARD

The Gerald D. Aurbach Award for Outstanding Translational Research is presented in recognition of outstanding research that accelerates the transition of scientific discoveries into clinical applications. Translational research supported with this award will typically involve expertise, collaboration, and engagement across disciplines. Supported by the Gerald D. Aurbach Memorial Fund.

Sidney H. Ingbar Distinguished Service Award

Simon J. Rhodes, PhD



How has the Endocrine Society supported your professional development/career journey?

I am grateful to the Society for providing so many opportunities to meet other scientists and physicians to discuss science and career development. One of the great strengths of the Society is that it brings basic science, clinical science, policy, and patient service together in true synergy. That magical mix has enabled me to meet collaborators, to translate basic science to the clinic, and to provide forums for my students and trainees to present their work.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

Get involved in the Society: attend meetings and volunteer for service. The network you build will improve your science, your service to patients, and your career. Realize that the Society is a true partnership between the staff and the membership, so getting to know the Society staff is equally important.

ABOUT THE AWARD

The Sidney H. Ingbar Award for Distinguished Service is presented in recognition of distinguished service to the Endocrine Society and the field of endocrinology. Supported by the Sidney H. Ingbar Memorial Fund.

Simon J. Rhodes, PhD, was appointed as the provost and vice president for academic affairs at the University of North Florida in Jacksonville, Fla., in 2019. Over the past 15 years, Rhodes has reached trainees and early-career investigators around the world and given special attention to diversity, equity, and inclusion.

Rhodes has been engaged in the Endocrine Society's Future Leaders Advancing Research in Endocrinology (FLARE) program since its inception and served as a program presenter and mentor for eight years. He was also co-chair of the Endocrine Society's Trainee and Career Development Core Committee and a member of the Minority Affairs Committee. He currently serves on the Society's Finance & Audit Committee and the Global Leadership Academy Planning & Advisory Task Force.



Roy O. Greep Award for Outstanding Research

Michael W. Schwartz, MD

Michael W. Schwartz, MD, holds the Robert H. Williams Chair in Medicine at the University of Washington in Seattle, Wash., where he has been on faculty since 1996.

He's published over 260 peer-reviewed studies that have shaped our understanding of how the brain regulates energy balance and glucose homeostasis, and his work investigating the central actions of leptin on energy balance and glucose metabolism over the past two decades has provided a novel avenue for developing weight-loss therapeutics.

His lab currently focuses on the anti-diabetic effects of members of the FGF family, including FGF19, FGF21, and FGF1. A key long-term goal of these studies is to translate the findings into novel approaches for treating type 2 diabetes.

How has the Endocrine Society supported your professional development/career journey?

The first meeting where I presented my research was at the annual meeting of the Endocrine Society in 1989. At that time, my focus on insulin action in the brain and mechanisms governing energy homeostasis was seen as something of a “scientific outlier,” but the Endocrine Society always welcomed my work and ideas. I met many colleagues that went on to become collaborators and, in some cases, dear friends, through our connection to **ENDO**. Indeed, my father, Theodore B. Schwartz, MD, was also an academic endocrinologist and a member in good standing of the Endocrine Society for his entire career, so in a sense I have been carrying on a family tradition.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

Perseverance in the face of failure is the key to success. As my mentor Dan Porte, Jr., MD, used to tell me, “If more than half of your studies give the outcome you expected, you’re not asking tough enough questions.” The key is to learn from studies that don’t turn out the way you expected and allow that new perspective to drive your research forward. At its best, this is a fundamentally dynamic and creative process.

ABOUT THE AWARD

Roy O. Greep Award for Outstanding Research is presented for meritorious contributions to research in endocrinology. Supported by the Roy O. Greep Memorial Fund.

International Excellence in Endocrinology Award

Lourdes Ibáñez, MD, PhD



How has the Endocrine Society supported your professional development/career journey?

I have been attending the Endocrine Society meeting for more than 25 years. In every meeting, there was a topic(s) in the program that became a source of inspiration for further research back at home. In addition, ENDO has prompted the development of collaborations with other researchers and thus contributed to expand the horizon of my research program, too.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

Have an objective; be persistent and work a lot. Failures do indeed generate new strength.

ABOUT THE AWARD

The International Excellence in Endocrinology Award is presented to an endocrinologist who resides outside of the U.S. who has made exceptional contributions to the field of endocrinology in geographic areas with underdeveloped resources for endocrine research, education, clinical practice, or administration. These may include non-traditional activities with substantial local impact to his/her own country and/or internationally. Sponsored by the Endocrine Society.

Lourdes Ibáñez, MD, PhD, is a pediatric endocrinologist at Sant Joan de Déu Barcelona Hospital and chair of Pediatrics, chair of Clinical Research in Endocrinology at the University of Barcelona in Barcelona, Spain.

A worldwide leader in the field of polycystic ovary syndrome, Ibáñez pioneered the use of combined, low-dose insulin sensitization for the treatment of the disease — a novel therapeutic approach directed to the pathophysiology of the disorder.

In 2002, Ibáñez started the Fellowship Program in Pediatric Endocrinology & Diabetes of the University of Barcelona and has since mentored 22 fellows from Latin America.



Outstanding Mentor Award

Jane E. B. Reusch, MD

Jane E. B. Reusch, MD, is a professor of medicine and biochemistry at the University of Colorado Denver and Denver VAMC, and associate director of the Center for Women's Health Research in Denver, Colo. Her professional mission has been to extend her experience and expertise to train the next generation of diabetes researchers. Reusch has mentored 77 trainees through her research program ranging from students to senior faculty.

At the University of Colorado, Reusch continues to actively mentor pre- and postdoctoral fellows and directs the University of Colorado Pilot and Feasibility Program to fund diabetes researchers. She's a leader in the university's Women in Medicine and Science Leadership Training Program and Center for Women's Health Research career development series. Reusch represented the Endocrine Society as chair of the FASEB Science Policy Clinical Research subcommittee focused on career development.

How has the Endocrine Society supported your professional development/career journey?

The Endocrine Society has been an academic home from fellowship until today. The opportunities made possible by the Endocrine Society increased my impact as a mentor and as a leader in translational research. More recently, I served on the ENDO planning committee where I was inspired by the systematic efforts to highlight early-career scientists and formally address DEI. In addition to committee work, the Endocrine Society has supported three underrepresented summer scholars in my lab (all currently in the field of research and medicine) and provided leadership opportunities for many of my formal and informal mentees. I am grateful to the Endocrine Society, and I look forward to reengaging with colleagues and dear friends in person at ENDO 2022.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

Do what you love. All jobs have pros and cons, so at the end of the day your job should bring you and your team joy. For me, being a physician-scientist is the world's best job. It is my job to teach, see patients, and discover. If you are a scientist, find a question that you "need" to answer and build a network that enables you to address the question with rigor and integrity. Embrace new techniques and strategies and cultivate collaborations. Perseverance is the mantra and the imposter syndrome is the norm. However, if discovery fuels and inspires you, the hurdles are more than worth it. As we have learned with COVID-19, the world needs science. I have the great good fortune of a wonderful husband and fascinating children. Early in my career I faced the reality that there is no such thing as work/life balance. A happy life is a continuum of great and challenging priorities. So, embrace a career path that brings you joy, so that you will enjoy going to work most days for the next few decades. **That will be success.**

ABOUT THE AWARD

Established in 2013, the Outstanding Mentor Award is presented to an individual in recognition of a career commitment to mentoring, a significant positive impact on his/her mentees' education and career, and who, through his/her mentees, has advanced research or patient care in the field of endocrinology.

Outstanding Scholarly Physician Award

Ken K. Y. Ho, MD, FRACP, FRCP, FAHMS



How has the Endocrine Society supported your professional development/career journey?

The Endocrine Society has been integral to my career development in providing a culture of academic excellence for clinicians and a governance structure of engagement and inclusion.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

Follow your passion guided by the signposts for learning and for achieving clinical and scholarly excellence from a mentor and your Society.

Ken K. Y. Ho, MD, FRACP, FRCP, FAHMS, is emeritus professor at the Garvan Institute, University of New South Wales, and honorary consultant endocrinologist, St. Vincent's Hospital in Sydney, Australia.

As a globally recognized pituitary medicine expert and a leader in academic clinical endocrinology, he's developed therapeutic guidelines and advocated for regulatory agency decisions geared toward improving patient outcomes. He established a gold-standard diagnostic test for growth hormone (GH) deficiency and developed standards for use of GH replacement therapy in adults.

He's published over 250 peer-reviewed studies that directly impact clinical practice and is currently an associate editor for the *Journal of the Endocrine Society* and a member of the Society's Nominating Committee.

ABOUT THE AWARD

The Outstanding Scholarly Physician Award is presented in recognition of outstanding contributions to the practice of clinical endocrinology in an academic setting. Sponsored by the Endocrine Society.



Outstanding Educator Award

Kathryn A. Martin, MD

Kathryn A. Martin, MD, is an assistant professor of medicine at Harvard Medical School, and has been a faculty member and practicing clinician in the Reproductive Endocrine Unit at Massachusetts General Hospital in Boston, Mass., since 1989.

In addition to her clinical practice, Martin has an active teaching role and is involved in the training and supervision of junior faculty members and endocrine fellows. An internationally recognized authority in women's health, Martin has contributed significantly to the field's current status as a data-driven medical science and has contributed to several Endocrine Society Clinical Practice Guidelines and Scientific Statements on women's health.

ABOUT THE AWARD

The Outstanding Educator Award is presented in recognition of exceptional achievement as an educator in the discipline of endocrinology and metabolism.

How has the Endocrine Society supported your professional development/career journey?

The Endocrine Society, my professional home since my endocrinology training, has supported me since my early career with growth and development opportunities as a clinician, educator, and leader. In addition, my personal life has been enriched by meeting new colleagues, interacting with the wonderful Endo staff, and developing lifelong friendships. My Endo teaching opportunities have included presentations at annual ENDO meetings (MTPs, Symposia), lectures, and workshops for Clinical Endocrinology Update and Endocrine Board Review presentations. I have been a member of committees and task forces, with leadership opportunities as chair of the Special Programs Committee, Clinical Guidelines Subcommittee, the Nominating Committee, and Task Force of the "Evaluation and Management of the Premenopausal Woman with Hirsutism" guideline (2008, 2018). I am currently serving on both the Endocrine Board Review Committee and the Board of Directors (2020 – 2023).

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

- **There are many career paths to choose from.** Find one that best fits you intellectually and personally. What makes you most enjoy being a physician and/or scientist? Work hard at your chosen path and develop an area of expertise.
- **For women: Find a mentor (and role models)** who will help you navigate the many challenges of being a female physician, provide constructive feedback, actively support your career development, and celebrate your successes. Gender equity in medicine does not yet exist. Speak up and speak out if you or a colleague experience sexual harassment or discrimination.
- **Strive to maintain balance in your life.** Prioritize your family, and take time for yourself.
- **Celebrate your own successes, both professional and personal.** For those doing clinical medicine, try to remain committed to the humanitarian principles of the practice of medicine. This can be very difficult in our current system driven by metrics, documentation, and billing. Speak out on behalf of improving the system.
- **Join the Endocrine Society.** It will be your professional home for your entire career, offering additional opportunities and benefits outside your academic and/or clinical position.

Outstanding Clinical Investigator Award

Karel Pacak, MD, PhD, DSc



As a Laureate Award recipient, do you have any advice for those just beginning their careers?

It does not matter the work you are destined to as long as you are driven by imagination and passion for what you do. Imagination is the beginning of creating unique and limitless possibilities, however, it is passion that can move you to its realization. We cannot truly make an impact on this world without imagination and passion, and without them, a person will fall into mediocrity.

Karel Pacak, MD, PhD, DSc, is chief of the Section on Medical Neuroendocrinology and head of the Developmental Endocrinology, Metabolism, Genetics and Endocrine Oncology Affinity Group of the Eunice Kennedy Shriver National Institute of Child Health and Human Development of the Intramural NIH Research Program in Bethesda, Md. His translational research has provided novel understanding of and treatments for patients with neuroendocrine tumors, especially pheochromocytoma and paraganglioma.

Pacak established the International Symposia on Pheochromocytoma, the most internationally recognized meeting in this field. He was part of the Endocrine Society's 2014 Pheochromocytoma Task Force and currently serves as a member of *The Journal of Clinical Endocrinology & Metabolism's* Editorial Board.

ABOUT THE AWARD

The Outstanding Clinical Investigator Award is presented to an internationally recognized clinical investigator for meritorious contributions to clinical research related to pathogenesis, pathophysiology, and therapy of endocrine diseases.



Outstanding Leadership in Endocrinology Award

John Wass, MD, MA, FRCP

John Wass, MD, MA, FRCP, is a clinical researcher and educator at Oxford University in Oxford, England, whose contributions have had a significant effect on patients with pituitary disease.

His early observations about the importance of single-surgeon expertise for acromegaly outcomes paved the way many years later for adoption of criteria for pituitary centers of excellence, while his early recognition of the need to minimize neurological sequelae in pituitary apoplexy paved the way for ongoing studies to establish best practices for this difficult-to-manage disorder. In these areas, as well as in PCOS, Addison's disease, and obesity, Wass's leadership has enabled endocrinologists to adopt new approaches to improve patient outcomes.

Wass has trained multiple endocrinologists who are well recognized globally for their own leading contributions to endocrinology research and practice.

How has the Endocrine Society supported your professional development/career journey?

The Endocrine Society has provided a sound scientific basis for presentation of results at its very busy annual meeting, ENDO.

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

Enthusiasm, energy, charm, and an enquiring mind!

ABOUT THE AWARD

The Outstanding Leadership in Endocrinology Award is presented in recognition of outstanding leadership in fundamental or clinical endocrinology as exemplified by the recipient's contributions and those of his or her trainees and associates to teaching, research, and/or administration.

Outstanding Public Service Award

Rita Rastogi Kalyani, MD, MHS



How has the Endocrine Society supported your professional development/career journey?

As an endocrinology fellow, the Endocrine Society provided experiences for me to interact with leading endocrinologists and postdoctoral fellows from other institutions. This included attending the Osteoporosis Update and Metabolic Bone Diseases Research Forum for fellows and a travel fellowship to attend Endocrine Trainee Day at ENDO. These opportunities were invaluable to my early-career development. I have particularly enjoyed the opportunity to advocate for greater research funding for endocrine diseases as a member of the Endocrine Society's Research Hill Day and for better access to healthcare as a spokesperson for the "Increasing Insulin Affordability: An Endocrine Society Position Statement." **The opportunity to interact with endocrinologists from all over the world, and to advocate on behalf of our patients and the communities in which they live, is unparalleled.**

As a Laureate Award recipient, do you have any advice for those just beginning their careers?

My advice is to focus on what you are most passionate about and cultivate the skills and expertise needed to meaningfully contribute to endocrinology in whatever area you decide, whether it be as a researcher, clinician, or educator. While it is important to look ahead, you don't need to have the future planned out ahead of time. Be flexible and open to new possibilities as they arise; persevere in your personal and professional goals; and surround yourself with great colleagues and mentors to learn from. **Stay centered on doing what you love, and love what you do.**

ABOUT THE AWARD

Established in 2013, the Outstanding Public Service Award is presented to an individual who best demonstrates dedication to public awareness or public service in support of the field of endocrinology and the patients who suffer from endocrine disorders.

Rita Rastogi Kalyani, MD, MHS, is an associate professor of medicine in the Division of Endocrinology, Diabetes & Metabolism at Johns Hopkins University School of Medicine in Baltimore, Md., where she's an active clinician and sees patients regularly in the Johns Hopkins Comprehensive Diabetes Center.

Kalyani directs the Diabetes Management Service for Johns Hopkins' Total Pancreatectomy Islet Auto Transplant Program and served on the Board of Directors for Diabetes Sisters, a national organization working to improve the quality of life of women with diabetes.

She's participated in Endocrine Society Hill Days and served as a Society spokesperson on insulin affordability. She currently serves on five Endocrine Society committees, including the Clinical Practice Guideline Task Force and the EndoCares Steering Team. She was previously a member of the Society's Research Affairs Core Committee.

Endocrine EXPLORERS

Encouraged by their principal investigators and mentors, 14 young scientists intent on exploring careers in endocrine research were awarded participation in the Endocrine Society's 2021 Research Experiences for Graduate and Medical Students (REGMS) program — an opportunity they say has shaped their career trajectory.

REGMS, formerly known as the Summer Research Fellowship program, includes participation in collaborative research in global laboratories, dedicated mentorships, and networking opportunities that can have a tremendous impact on both the professional and personal lives for these early-career scientists.

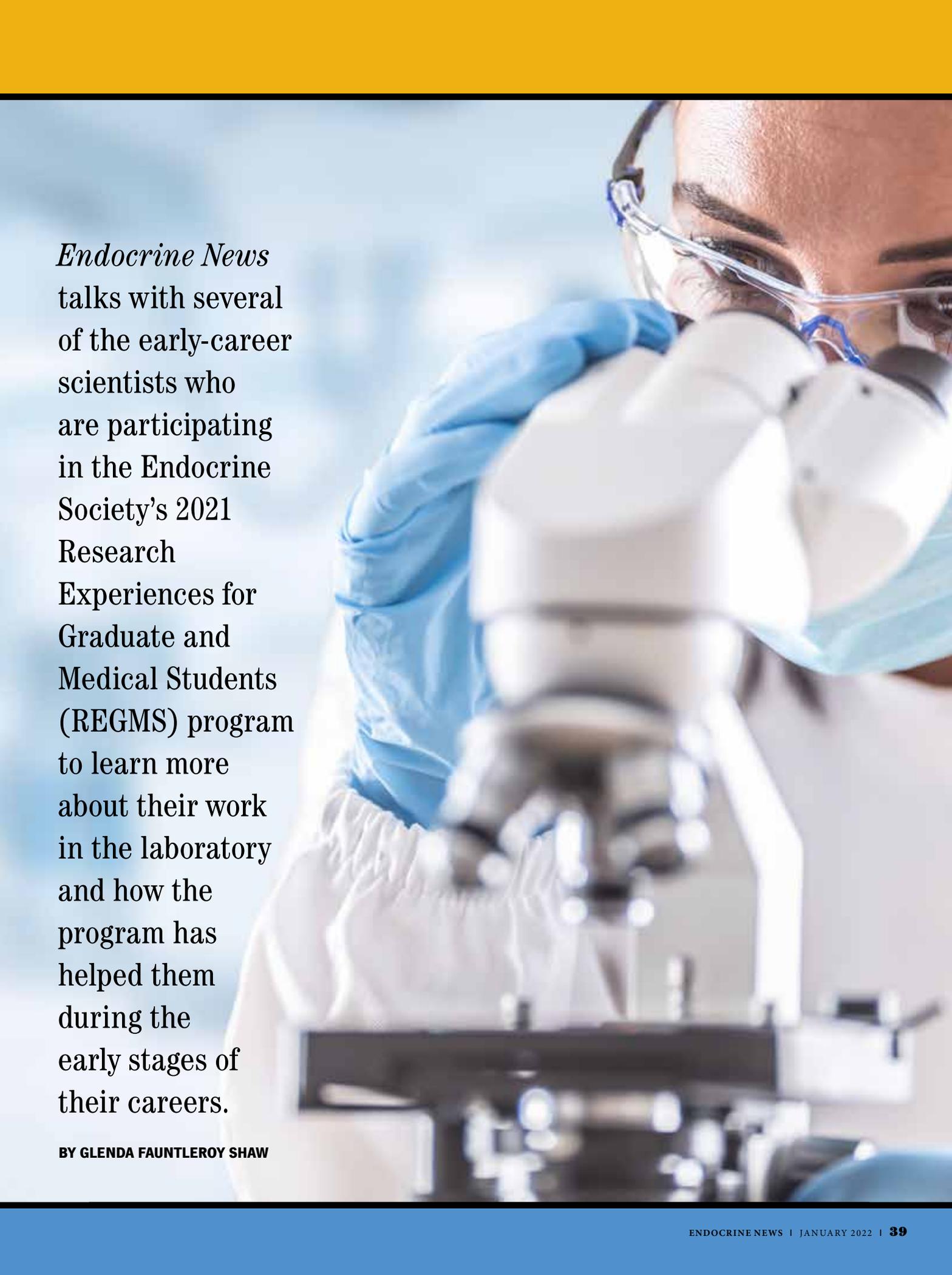
The 2021 REGMS awardees are: **Taylor Baker**, PhD, graduate student at Case Western Reserve University; **Shruti Bendre**, PhD, graduate student at the University of Illinois; **Angie Chen**, medical student at Northwestern University; **Annapurna Chitnavis**, medical student at Arizona State University; **Pratyusa Das**, PhD, graduate student at Southern Illinois University School of Medicine; **Ethiopia Getachew**, medical student at Harvard Medical School; **Ashley Herdman**, PhD, graduate student at the University of Arkansas for Medical Sciences; **Steven Hobbs**, PhD, graduate student at the University of Illinois; **Nimisha Nandankar**, PhD, graduate student at Rutgers University; **Angela Olvera**, medical student at the University of Wisconsin-Madison; **Parleen Pander**, PhD, graduate student at the University of Northern British Columbia; **Tanya Pierre**, PhD, graduate student at the University of Alabama at Birmingham; **Samuel Plaska**, medical student at the University of Michigan; and **Kathryn Walters**, PhD, graduate student at the University of Colorado, Anschutz.

We spoke with most of the awardees to learn more about their research interests and thoughts on how the program has made an influence in their work.

Endocrine News: Who or what influenced you to apply for the REGMS program?

Baker: My PI, Dr. Ruth Keri, told me about the REGMS program when I started in her laboratory last January. At that point, I did not have a project or specific

Catching
up with
the 2021
REGMS
Participants



Endocrine News talks with several of the early-career scientists who are participating in the Endocrine Society's 2021 Research Experiences for Graduate and Medical Students (REGMS) program to learn more about their work in the laboratory and how the program has helped them during the early stages of their careers.

BY GLENDA FAUNTLEROY SHAW



Shruti Bendre, PhD,
graduate student
University of Illinois, Urbana-
Champaign, Ill.

“

Learning about all the trainees’ research in the spotlight seminars made me aware of the immense work going on in the field of endocrinology. The REGMS program served as a steppingstone and did a great job at introducing me to all the potential careers in endocrinology.

”



Nimisha Nandankar, PhD,
graduate student
Rutgers University,
New Brunswick, N.J.

“

With all the opportunities I have been given through this award, the strong emphasis on networking with individuals in the field of endocrinology was the most beneficial one.

”



Steven Hobbs, PhD,
graduate student
University of Illinois,
Urbana-Champaign, Ill.

“

I am fairly early in my graduate career, so I believe it is very imperative for me to seek out opportunities for me to develop as a well-rounded scientist.

”



Ashley Herdman, PhD,
graduate student
University of Arkansas for
Medical Sciences, Little Rock, Ark.

“

The Endocrine Society scientists and physicians who worked with us over the summer went out of their way to help us navigate scientific communication and networking in the virtual age. This provided me with new insight and direction, and really speaks to the commitment those in our field have for mentoring young scientists.

”

direction I hoped to go. However, I expressed my interest in understanding drug resistance in hormone-responsive breast cancer early on. Her involvement in the Endocrine Society and expertise in the field pointed me toward the REGMS program as an excellent opportunity to jumpstart a project encompassing my interest while also being immersed in the Society.

Bendre: My biggest influence was my advisor Dr. Erik Nelson. He encouraged me to apply for the REGMS fellowship. Having joined the lab just a couple months previously, he introduced me to Endocrine Society and helped me understand the importance of a professional network and enhancing professional development skills early in your career.

Chen: I applied to the program to be part of a community of students and researchers working toward discoveries in the same field. I believe that science is done best when sharing ideas

with like-minded people, not to mention that it’s so inspiring to learn about others’ work.

Getachew: My PI and mentor, Dr. Elizabeth Lawson, recommended I apply for the REGMS program given my interest in endocrinology and research. I had previously attended and presented abstracts at the past two Endocrine Society conferences, so I was excited to be even more involved with the Society while also expanding my clinical research skills. The program’s focus on early-career professional development training was another plus, as I was hoping to learn more about how I can integrate my clinical training with my burgeoning interest in research.

Herdman: In the early spring, I applied for the REGMS program after hearing about it from my mentor, Dr. Angela Odle. From the time I joined Dr. Odle’s lab, she has been



“The REGMS program is an incredible opportunity to connect with other students and researchers, allowing me to expand and diversify my skillset as a student researcher.”

– Parleen Pander, PhD

extremely supportive and encouraged me to get involved with the Endocrine Society. Dr. Odle always makes time to help me learn about the field, experiment with new research ideas, and pursue professional opportunities, like the REGMS program.

Hobbs: I am fairly early in my graduate career, so I believe it is very imperative for me to seek out opportunities for me to develop as a well-rounded scientist. My PI, Dr. Sayee Anakk, is familiar with the Endocrine Society and strongly recommended I apply to the REGMS program, as it is the perfect developmental opportunity that I was seeking.

Nandankar: I am fortunate that my mentor, Dr. Sally Radovick, consistently encourages me to pursue opportunities that further my career. I previously was intimidated at the thought of applying for prestigious awards or fellowships because of a fear of failure. Like many trainees, especially women in science,



Tanya Pierre, PhD,
graduate student
University of Alabama at
Birmingham, Birmingham, Ala.

“

Of all the program elements, I think I benefited the most from the advice provided by the diverse group of program mentors. I enjoyed receiving guidance about dealing with the stressors of graduate school, networking jitters, and life in academia versus industry from people with different backgrounds and perspectives.

”



Taylor Baker, PhD,
graduate student
Case Western Reserve University,
Cleveland, Ohio

“

My involvement in the REGMS program provided me with a unique opportunity to network with and learn from various members of the Endocrine Society across the nation, strengthening my connection to scientists outside of Case Western Reserve University.

”

I suffered from “imposter syndrome.” It is in those moments of self-doubt that Dr. Radovick never fails to be both a reassuring voice and my inspiration as a leading female scientist.

Pandher: The REGMS program is an incredible opportunity to connect with other students and researchers, allowing me to expand and diversify my skillset as a student researcher. I felt like I was lacking the networking opportunities that come with attending in-person conferences while studying toward my graduate degree during the COVID-19 pandemic, but the REGMS program and its virtual nature allowed me to make meaningful connections with others in the endocrine field that I otherwise would not have been able to. My biggest influence in applying for the REGMS program was my graduate supervisor, Dr. Sarah Gray. Throughout my studies, Dr. Gray has pushed me to expand my critical thinking and research skills, and she encouraged me to apply for this prestigious international award.



“I discovered the REGMS program and was drawn to the ability to perform research and attend seminars to help build my professional career outside of medicine.”
– Samuel Plaska

Dr. Gray is a talented scientist and mentor who serves as a role model for me as a female researcher in endocrine physiology, and with her guidance and support in my application, I was fortunate enough to receive a place in the REGMS program.

Plaska: Between my first and second year of medical school, I was motivated to find opportunities for research and specifically a program that could help develop my professional skills at the same time. I discovered the REGMS program and was drawn to the ability to perform research and attend seminars to help build my professional career outside of medicine. Dr. Rainey, the principal investigator, and my mentor helped me refine ideas for a project for the summer, grow as a researcher, and ultimately give me the confidence to apply for the REGMS program.

Pierre: I was encouraged to apply by both my mentor and my lab sister. Once I read the program description, I was further motivated to apply because of the career forum.

Walters: My graduate advisor is a member of the Endocrine Society and has encouraged me to be involved. He passed on the information about the program to me as a way to be involved in the Endocrine Society and meet other students who also have similar interests. The pandemic has made it very difficult to meet others in the field, and this program seemed like a perfect opportunity to build a network in the endocrinology community. Both my current research advisor

and undergraduate research advisor have been tremendous influences on my interest in endocrinology.

EN: Can you briefly describe your research work?

Baker: My work investigates mechanisms of resistance in tamoxifen- and palbociclib-resistant luminal A breast cancer cell lines. Both tamoxifen and palbociclib disrupt the G1 phase of the cell cycle, and I am investigating if resistant cells display other weaknesses of the cell cycle that are targetable by various small-molecule inhibitors.

Bendre: Our lab focuses on studying metastatic breast cancer. Our goal is to elucidate the effects of metabolites and the endocrine system on cancer progression and metastasis. We have found that cholesterol metabolism plays a critical role in tumor progression by impacting the immune cells found in the tumor microenvironment. My research work focuses on studying how cholesterol and its metabolites affect tumor progression and impact cancer metastasis. Our final goal is to develop novel immunotherapeutics against cancer progression.

Chen: Polycystic ovary syndrome (PCOS) affects approximately 1 in 10 females of childbearing age in the U.S. However, there is still a significant challenge in diagnosing PCOS due to the varying clinical presentations in patients of different demographics and weight categories. This results in delayed

diagnosis and overall patient dissatisfaction. We hypothesize that there is more than one biological mechanism that can cause PCOS, and understanding those mechanisms is key to improving diagnosis and treatment for millions of affected women in the U.S. My project is a multi-site, retrospective study investigating clinical and hormonal phenotypes in lean versus obese girls at the time of diagnosis, ultimately contributing to better understanding of the mechanisms underlying PCOS.

Herdman: I'm currently studying gonadotrope cellular networks and the potential role of leptin in facilitating these connections. We have a new model that allows us to use calcium imaging to observe and analyze the effect of different drugs, including leptin, on gonadotrope activity both individually and at the population level. We plan to use this technique to study the developmental regulation of this network and define some of the pathways involved.

Hobbs: I work on elucidating the mechanisms of the scaffold protein, IQGAP1, in liver proliferation.

Getachew: This summer my research focused on understanding sex differences in the neurobiology of avoidant/restrictive food intake disorder (ARFID) in children and adolescents. ARFID is an eating disorder that is characterized by low interest in feeding, fear of aversive consequences related to food intake (e.g., choking and vomiting), and avoidance based on sensory characteristics. Primarily, I looked at the role of appetite-regulating hormones and brain circuitry on sex differences. Based on prior data on sex differences and the currently understood neurobiological underpinnings of ARFID, I studied the orexigenic hormone Ghrelin and anorexigenic hormones Peptide YY and Cholecystokinin. For the brain circuitry, I studied blood-oxygen-level-dependent (BOLD) activation in response to visual food stimuli in the right hippocampus, lateral prefrontal cortex, and orbitofrontal cortex through an established fMRI food paradigm.

Nandankar: My research primarily focuses on understanding the reproductive and metabolic functions of kisspeptin neurons in the arcuate nucleus of the hypothalamus. This population of neurons is a potent regulator of the hypothalamic-pituitary-gonad axis and has been implicated in human disorders such as



Ethiopia Getachew,
medical student
Harvard Medical School,
Boston, Mass.

“

I was excited to be even more involved with the Society while also expanding my clinical research skills. The program's focus on early-career professional development training was another plus, as I was hoping to learn more about how I can integrate my clinical training with my burgeoning interest in research.

”



Angie Chen,
medical student
Northwestern University,
Chicago, Ill.

“

I applied to the program to be part of a community of students and researchers working toward discoveries in the same field. I believe that science is done best when sharing ideas with like-minded people, not to mention that it's so inspiring to learn about others' work.

”

hypogonadotropic hypogonadism, infertility, and amenorrhea. Earlier this year, I published a first author manuscript that describes the phenotype of our novel transgenic mouse model that bears a conditional deletion of kisspeptin in these neurons.

Pandher: The Gray lab studies a hormone called pituitary adenylate cyclase-activating polypeptide (PACAP), which is a highly conserved neuropeptide that has been shown to be important in the regulation of the stress response, including regulation of energy balance under metabolic stress. Specifically, PACAP is shown to regulate thermogenesis, an energy burning process regulated by the sympathetic nervous system. My research focuses on characterizing the presence of PACAP and its receptors at the ganglia innervating brown adipose tissue, the main thermogenic organ in mammals. While part of the REGMS program this past summer, I was able to detect PACAP receptor expression in these ganglia.



Parleen Pander, PhD,
graduate student
University of Northern British
Columbia, Prince George,
British Columbia

“

I feel that I have gained skills in mentorship, learned how to advocate for myself as a researcher, and learned how to balance my personal life and mental health with an eventful career in research.

”



Kathryn Walters, PhD,
graduate student
University of Colorado,
Anschutz, Aurora, Colo.

“

The pandemic has made it very difficult to meet others in the field, and this program seemed like a perfect opportunity to build a network in the endocrinology community.

”



Samuel Plaska,
medical student,
University of Michigan,
Ann Arbor, Mich

“

I believe understanding mentorship and how to find good mentorship has been extremely beneficial as I grow and develop my medical career.

”

“The program provided me the tools and role modeling to present my research in a more engaging manner. The educational webinars taught me to be a better mentee and even inspired me to continue working toward a career in endocrinology.”
– Angie Chen

Pierre: My project is focused on elucidating the role of an epigenetic modifier in pancreatic beta cell development and function.

Plaska: This summer we studied the genetic control of aldosterone synthase (CYP11B2) expression in the zona glomerulosa of the adrenal gland. We utilized immunofluorescence to assess whether LEF1, a transcription factor that helps signal as part of the Wnt/CTNNB1 pathway, is actively signaling in the same cells that express CYP11B2. We characterized this relationship by capturing images of LEF1 fluorescence in the nucleus of zona glomerulosa cells that highly express CYP11B2 and compared LEF1 fluorescence in zona glomerulosa cells that lowly express CYP11B2. Interestingly, qualitative LEF1 expression on fluorescence was relatively similar, and this was confirmed with quantitative polymerase chain reaction between samples of high CYP11B2 and low CYP11B2 expression.

Walters: I study how RNA binding proteins regulate adrenal steroidogenesis. Specifically, I am studying a protein called Musashi-2, which seems to promote aldosterone production.

EN: What about your participation in REGMS has benefited you most?

Chen: The program provided me the tools and role modeling to present my research in a more engaging manner. The educational webinars taught me to be a better mentee and even inspired me to continue working toward a career in endocrinology.

Baker: My involvement in the REGMS program provided me with a unique opportunity to network with and learn from various members of the Endocrine Society across the nation, strengthening my connection to scientists outside of Case Western Reserve University. I have been implementing their advice and life lessons early on in my career in endocrinology



and breast cancer research, and I am excited to continue growing as a scientist within the Endocrine Society.

Bendre: With the help of REGMS fellowship, I was able to work toward the primary aims of my project that will form the basis of my PhD thesis. Apart from the unique experience in lab, the seminar series included in the REGMS program helped me gain invaluable insight into aspects of networking and communication. The webinar on how to choose a good mentor and be a good mentee helped me gain insightful knowledge and understand perspectives from both sides of the table. The tips on managing work life balance to avoid exhaustion given during the talk on COVID-19 resilience and perspectives, were invaluable. Learning about all the trainees' research in the spotlight seminars made me aware of the immense work going on in the field of endocrinology. The REGMS program served as a steppingstone and did a great job at introducing me to all the potential careers in endocrinology.

Herdman: The most helpful part of the program has been the career building and networking opportunities. I graduated college and began graduate school during the pandemic, which has made forming professional connections difficult. The Endocrine Society scientists and physicians who worked with us over the summer went out of their way to help us navigate scientific communication and networking in the virtual age. This provided me with new insight and direction, and really speaks to the commitment those in our field have for mentoring young scientists.

Hobbs: The aspect of REGMS that benefited me the most is the seminars. The seminars were very informative, as they gave much advice on how to set yourself up for success in a scientific career.

Getachew: REGMS allowed me to have dedicated time to explore my research interests and learn about different research methodologies and statistical analysis. It was an extra special experience because my coursework at Harvard Medical School this summer covered endocrinology, GI, and neurology, which coincided well with my research interest in neuroendocrine and eating behavior. I was able to integrate the knowledge I was gaining from my coursework with the latest literature in the field and my own investigations into appetite-regulating hormones and brain circuitry.

Nandankar: The REGMS award means so much to me because it is the first award I have received since beginning my graduate studies. I was excited by the unique structure of the award. However, with all the opportunities I have been given through this award, the strong emphasis on networking with individuals in the field of endocrinology was the most beneficial one. As an early-career trainee, connecting with professionals and peers seemed daunting at first glance. However, through the encouragement and opportunities to meet these individuals by the REGMS program leaders, it has been surprisingly easy to establish these interpersonal relationships. Now, I am eager to continue developing both these skills and the relationships I have fostered through the program.

Pandher: The program relieved some of the financial burden from my studies and allowed me to focus on my research this past summer, and for that I am very grateful. I thoroughly enjoyed hearing from the many wonderful speakers during the webinars. I feel that I have gained skills in mentorship, learned how to advocate for myself as a researcher, and learned how to balance my personal life and mental health with an eventful career in research. From the many honest personal accounts



shared by each of the speakers during the webinars, I feel inspired to continue a career in endocrine research.

Pierre: Of all the program elements, I think I benefited the most from the advice provided by the diverse group of program mentors. I enjoyed receiving guidance about dealing with the stressors of graduate school, networking jitters, and life in academia versus industry from people with different backgrounds and perspectives.

Plaska: The REGMS program has provided webinars and learning opportunities that have given me skills that I now utilize to increase my involvement around my medical school and in extracurriculars that will aid in my future endeavors as a physician. I believe understanding mentorship and how to find good mentorship has been extremely beneficial as I grow and develop my medical career.

Walters: The REGMS program has provided several benefits. I've attended seminars where we discuss skills essential to success as a graduate student, I've met peers who have similar interests, and I've been given a chance to interact with faculty Endocrine Society members in a small group setting. This program has expanded my network and allowed me to promote my research within the Society. I am very grateful for the REGMS program and thankful to the coordinators for running such a great program.

Since the 2021 REGMS participants' internships took place during the COVID-19 pandemic and the accompanying lockdowns, the program proved to be an even more valuable experience. During a time when too much isolation could easily impact not only research findings, but a researcher's well-being, the program's various webinars and events provided much-needed camaraderie, professional outreach, and a host of mentors to help them on their scientific journey.

Endocrine News looks forward to reporting on their future discoveries very soon! 

"I've attended seminars where we discuss skills essential to success as a graduate student, I've met peers who have similar interests, and I've been given a chance to interact with faculty Endocrine Society members in a small group setting."

– Kathryn Walters, PhD

Interested in REGMS?

Full-time first-year medical students and first- or second-year graduate students who are considering a career in endocrine research are encouraged to apply to the Research Experiences for Graduate and Medical Students (REGMS) program. Awardees participate in an 8-to-10-week summer research project in a lab under the guidance of an Endocrine Society member and receive a \$2,500 honorarium to help with costs incurred during the summer research period.

Read the full eligibility and application requirements at: <https://www.endocrine.org/awards-REGMS-application-requirements>

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

New Requirements for All Physicians and Facilities Resulting from Surprise Billing Act

“

The Endocrine Society has argued that these requirements will create significant burden for physicians, but until this can be changed, we want to make sure our members are aware.

”

Beginning January 1, 2022, healthcare providers and facilities must provide a good faith estimate (GFE) of expected charges to uninsured consumers and self-pay individuals (insured consumers who do not plan to have their health plan cover the costs of the service) when scheduling a service or when requested by the potential patient. Providers will be required to do the following:

- ▶ Inquire if the potential patient is enrolled in a group health plan, group or individual health insurance coverage offered by a health insurance issuer, a federal healthcare program or a federal employees health benefit plan;
- ▶ Inform individuals who are not enrolled in a health plan or coverage, or not seeking to file a claim with their health plan or coverage, both orally and in writing of the opportunity to receive a GFE* of expected charges; and
- ▶ Deliver the GFE to uninsured and self-pay patients in writing before the scheduled service or item.

The Endocrine Society has argued that these requirements will create significant burden for physicians, but until this can be changed, we want to make sure our members are aware of how to prepare their offices to comply.

Please visit <https://www.endocrine.org/improving-practice/macra> to find our resources. 

**Information regarding the availability of a GFE must be prominently displayed on the provider's and facility's website and in the office where on-site scheduling or questions about the cost of healthcare occur. The Centers for Medicare and Medicaid Services has provided an example of the information that should be communicated in these notices. To access this information, please go to: <https://www.endocrine.org/improving-practice/macra>.*



Advocacy Victory: EU Effectively Bans BPA in Food Contact Materials



The European Food Safety Administration (EFSA) issued a draft opinion in December that lowers the "tolerable daily intake of BPA in food contact materials by six orders of magnitude — effectively a ban on BPA and an advocacy victory for the Endocrine Society. We have called for better regulation of endocrine-disrupting chemicals (EDIC) in food contact materials.

The Endocrine Society will provide supporting comments to the EFSA that will highlight recent science that backs this decision, discusses the issue of regrettable substitution, and

the importance of not replacing BPA with another harmful chemical. The Society thanks the EFSA for its leadership on this important public health matter. We have worked on this issue for five years, and, under the leadership of our European Union EDC Task Force, we shared comments and several scientific references with the EFSA.

This opinion is a significant step in better regulation of EDCs and is a contract to the U.S. Food and Drug Administration's CLARITY-BPA decision.

Congress Approves Continuing Resolution to Fund NIH Through February 18

Editorial credit: DCStockPhotography/Shutterstock.com



With just hours to spare before its December 3 deadline, Congress averted a government shutdown and passed a continuing resolution (CR) that will fund the government at the previous year's level through February 18, 2022. We appreciate the Endocrine Society members who participated in our online campaign, which helped avoid a destabilizing shutdown and ensured that Congress understood the consequences of a CR for the endocrine research community.

However, our work is not done.

The CR is a temporary funding measure that allows the government to keep operating, but for most federal programs, including the National Institutes of Health (NIH), funding is held to this year's level and there are no increases. To ensure that the NIH receives the funding increases that the House and Senate have previously agreed to, the Endocrine Society will continue to advocate for Congress to pass a final appropriations bill for the remainder of FY22 with an increase for the NIH before the February 18 deadline.

Be on the lookout at the beginning of 2022 as we launch a new online campaign. With continued advocacy by our members, we believe we can influence Congress to support research funding.

Please see endocrine.org/takeaction for more details.

In December, Congress passed legislation to avert a series of Medicare cuts that would have resulted in an almost 10% reduction in Medicare payments to physicians.

The Endocrine Society has been a vocal advocate for Congress to avert these alarming cuts, which were scheduled to occur in 2022, and we were pleased to see action taken to mitigate these cuts. During the past several months, the Society met with the Centers for Medicare and Medicaid Services (CMS), met with congressional offices, shared information with congressional leaders, used social media to call attention to this issue, and launched an online advocacy campaign in which our member physicians could share their concerns with their congressional delegations.

The legislation passed by Congress would avoid a 9.75% cut in Medicare physician fees in 2022, replacing it with a 0.75% cut beginning in January. The 0.75% cut will gradually increase by as much as 2.75% by the fourth quarter of 2022 and would increase further in 2023, unless Congress takes additional action. The legislation mitigates the overall 9.75% cut by delaying a 4.00% across-the-board cut to Medicare reimbursement, preventing a 2.00% sequestration cut from taking effect at the beginning of the year, and by replacing the 3.75% increase in physician fees in 2021 with a 3.00% temporary increase in 2022.

While a major cut has been avoided, physicians will see a minimal cut of less than 1.00% beginning in 2022 that will gradually increase unless Congress takes further action. This means that our work is not done, and we will continue work with Congress and advocate for long-term reforms in Medicare payment. We strongly believe that endocrinologists and physicians in general should not have to fight these payment battles on an annual basis. We look forward to continuing to advocate for a long-term solution that ensures that endocrinologists are adequately reimbursed for the important work they do.

Please stay tuned for more information about our work on this important issue at: www.endocrine.org/advocacy.

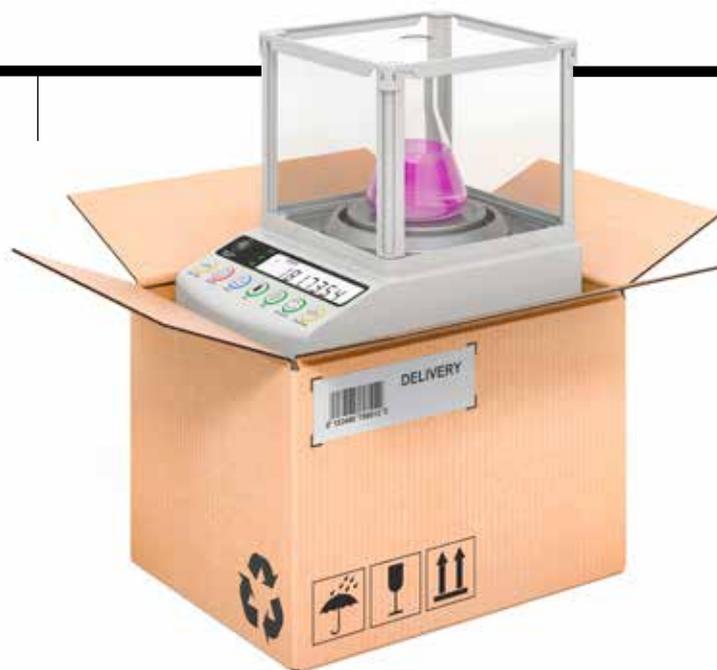
Advocacy Victory: Congress Passes Legislation Averting Medicare Cuts

“

We look forward to continuing to advocate for a long-term solution that ensures that endocrinologists are adequately reimbursed for the important work they do.

”





The Weakest Link:

How Supply Chain Shortages Are Creating Challenges at the Bench

COVID-19 has impacted the healthcare world for almost two years now, but the aftershocks continue to ripple outward. As factories slowly reopen and scientists return to their labs, the lack of materials needed for research is slowing down science.

BY GLENDA FAUNTLEROY SHAW

We are still assessing the total impact the COVID-19 pandemic had around the globe. Beyond the human toll, the damaging ripples on business sectors such as travel, entertainment, and healthcare are still reverberating as we approach the two-year mark of the first shutdowns of March 2020. Medical research laboratories have also been impacted in countless ways, including how lab managers have altered their supply purchases and budget spending.

“Supply chain issues seem to be popping up everywhere from the grocery store to the car sales lot!” says Joy Wu, MD, PhD, vice chair, Basic and Translational Science, Department of Medicine, Stanford University School of Medicine, Stanford, Calif., adding that she is starting to notice the supply chain problems in her lab as well as seemingly random supplies are suddenly difficult to find. “For example, we have had trouble locating Eppendorf tubes, which we use for everything from isolating RNA to performing PCR genotyping of our mice.”

Wu adds that her husband, also a physician-scientist, and his laboratory have had a hard time ordering pipette tips and certain reagents and media used in cell cultures.

In its 2021 Purchasing Trends Survey, *Lab Manager* examined how the COVID-19 pandemic may have changed the course of their readers’ laboratory purchases. Survey responders included mostly managers or supervisors working in small- to medium-size labs — with more than 40% of those labs

belonging to larger institutions, with more than 1,000 people. The trends revealed where most respondents spent money differently in the past year:

- ▶ 42.30% said they are stockpiling supplies and reagents;
- ▶ 61.26% are purchasing additional safety equipment and personal protective equipment (PPE);
- ▶ 41.08% plan to restructure the lab space to allow for more physical distancing; and
- ▶ 20.90% were investing in software to accommodate employees’ remote work.

Many of the survey respondents (38%) felt that the past year’s pandemic has negatively impacted their business conditions. And while stockpiling supplies and purchasing additional safety equipment are unplanned budget challenges, lab managers are dealing with the even bigger challenges of actually finding the supplies to stock their labs. Supply stockpiling has even made it worst in some areas.

Supply Chain Woes

Global supply chain shortages have impacted healthcare in the U.S. extremely hard, and labs around the country are not immune. Everything from chemicals, pipettes, and glove





“ Industry experts say fixing the supply and demand woes will take time. Most predict that the shortages of medical supplies, such as semiconductors, will last well into the end of 2022. **Long-term planning and ordering early may be the best way to cope in the meantime.**”

boxes to hundreds of drugs in hospital pharmacies are in short supply.

Taylor Lofton, research technician in the Stan Andrisse Lab at Howard University College of Medicine in Washington, D.C., says supply issues hit their lab earlier in the pandemic as they tried to acquire personal protective equipment (PPE), especially gloves. “The items that are in short supply now are pipette tips especially smaller tips,” she says. “We have ordered tips from multiple scientific companies as far back as April 2021, and the orders are still on back order until this day with no estimated restock date and no alternatives.”

Lofton adds that the majority of the experiments her lab performs require the use of measuring small quantities “and since we have not been able to receive tips, we have had to be very mindful of the number of experiments we do and how many tips we have left. Luckily, we have been able to borrow tips from another lab to continue our research.”

One important supply bottleneck was shared in late October when the CEO of ResMed, the San Diego-based company that creates ventilators, sleep apnea machines, and other respiratory equipment, sounded another alarm. He pleaded with makers of semiconductor chips to prioritize providing the scarce electronic component to medical devices ahead of “another cellphone, another electric car, another cloud-connected refrigerator.”

In addition to ResMed’s products, the semiconductor chip technology is used in a variety of medical equipment that impact the lives of millions of patients who depend on chip-powered equipment and devices, including:

- ▶ Magnetic resonance imaging
- ▶ Blood pressure monitors
- ▶ Glucose, ECG, and EEG monitors
- ▶ Implantable pacemakers
- ▶ Applications for clinical diagnostics

A huge problem with supplying the shortage of the semiconductors, however, is that manufacturing of the chips is now concentrated in Taiwan, South Korea, and China. Just 12% are manufactured in U.S. factories, a sharp decline

in the past decade or so. Getting shipments from Asian countries is yet another catastrophe of the pandemic.

Shipping Container Woes

The disruptions started at the beginning of the pandemic. Factories where a lot of the world's manufacturing capacity are located — China, South Korea, Vietnam, and Germany — shuttered their doors or cut production way back. When demands for supplies skyrocketed, the problems of getting shipping container ships to their destinations began.

Images of huge container ships from China and other Asian ports sitting in traffic jams off the California coast waiting to dock are major news stories. And the average container ship can hold about 14,000 containers, so a huge supply of merchandise is not moving.

There has also been a huge jump in shipping costs that have crippled the supply chain. Businesses just can afford to restock their shelves. Before the COVID-19 pandemic, shipping a container from southern China to the U.S. west coast cost about \$3,000, according to an October *Forbes* article. That same container now costs as much as \$20,000

to ship — an enormous jump of more than 650%. And once the containers do make it into port, the nationwide shortage of truck drivers makes it a crisis for clearing the docks and moving the supplies to where they are needed most.

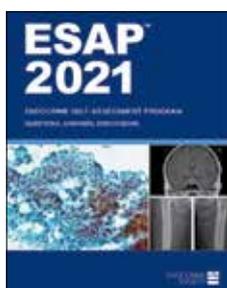
Industry experts say fixing the supply and demand woes will take time. Most predict that the shortages of medical supplies, such as semiconductors, will last well into the end of 2022. Long-term planning and ordering early may be the best way to cope in the meantime.

Wu admits that so far, supply chain issues have been relatively minor inconveniences for her lab, adding that recently her team had a scare when both CO₂ and liquid nitrogen were backordered. “Our university closes to deliveries over the winter break, and failure to deliver CO₂ and/or liquid nitrogen before the closure would have caused major disruptions to the lab,” she explains. “Thankfully both were eventually delivered in time, but we were starting to think about contingency plans.” ^{EN}

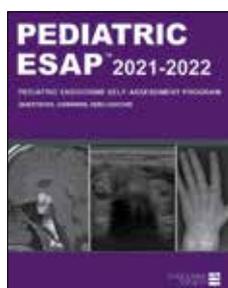
— SHAW IS A FREELANCE WRITER BASED IN CARMEL, IND. SHE IS A REGULAR CONTRIBUTOR TO *ENDOCRINE NEWS*.

WORLD-CLASS CLINICAL EDUCATION

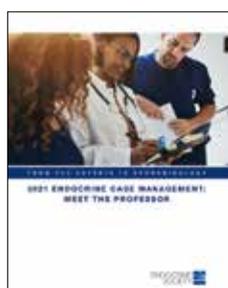
KEEP YOUR KNOWLEDGE UP-TO-DATE WITH OUR PREMIER PRODUCTS



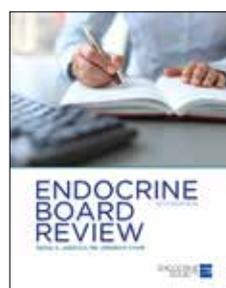
ESAP™ 2021
CME: 40.0
ABIM MOC: 40.0



PEDIATRIC ESAP™
2021-2022
CME: 40.0
ABIM MOC: 40.0



2021 ENDOCRINE
CASE MANAGEMENT:
MEET THE PROFESSOR
CME: 30.0

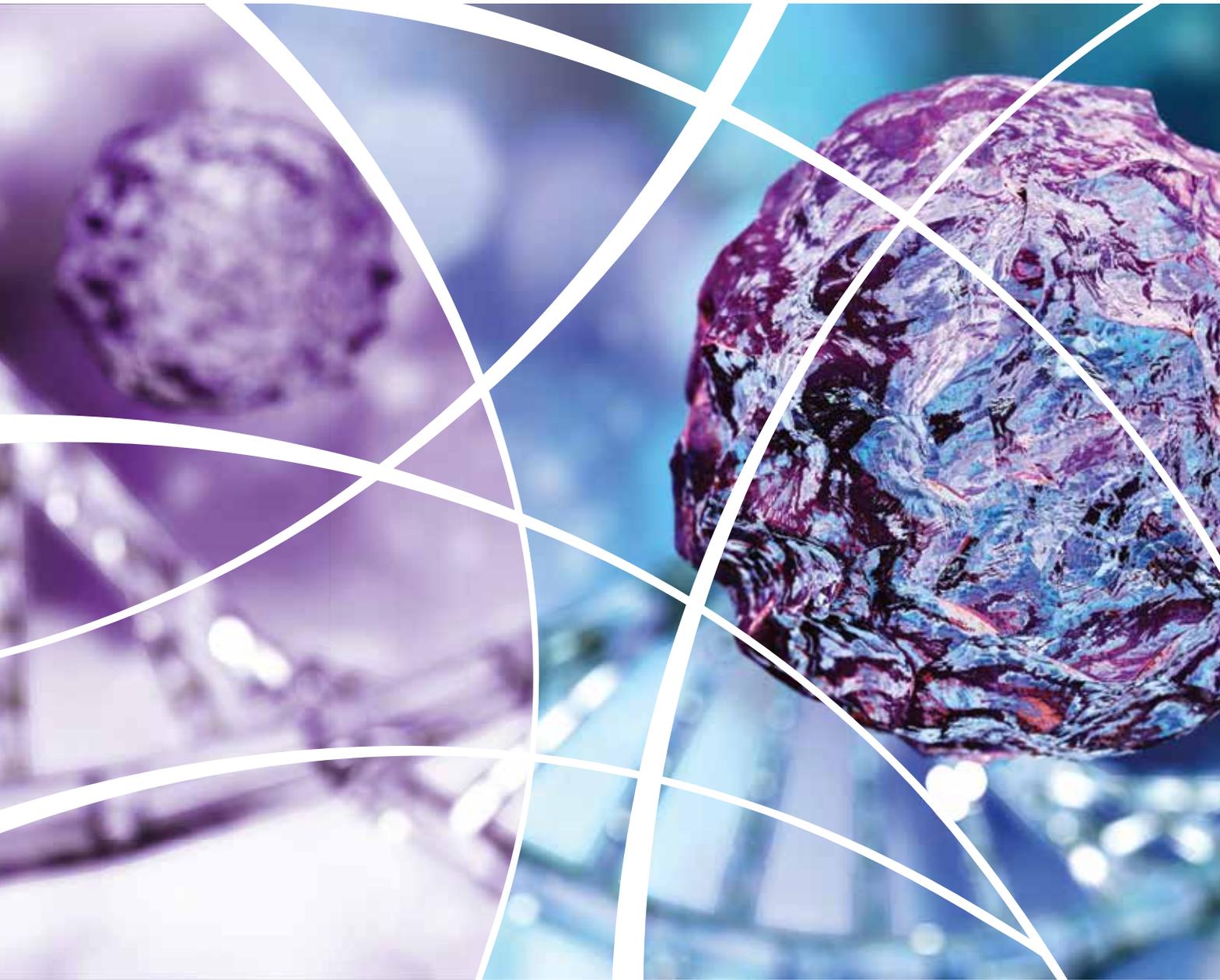


ENDOCRINE BOARD
REVIEW 12TH
EDITION (2020)
CME: 21.0
ABIM MOC: 21.0



CEU 2020 SESSION
RECORDINGS
CME: 28.75
ABIM MOC: 28.75
AANP: 27.95 (including 15.35
hours of pharmacology)

ORDER TODAY AT [ENDOCRINE.ORG/STORE](https://www.endocrine.org/store)



ENDO2022

JUNE 11-14, 2022 ATLANTA, GEORGIA

SHOWCASE YOUR RESEARCH

SUBMIT YOUR ABSTRACT BY JANUARY 17, 2022!

[ENDOCRINE.ORG/ABSTRACTS](https://endo.org/abstracts)