Endocrine

THE LEADING MAGAZINE FOR _ ENDOCRINOLOGISTS

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FEBRUARY 2024

The 2024 Transatlantic Alliance Award recipient talks to *Endocrine News* about his pioneering research on two different continents, the significance of this award, and why he became an endocrinologist in the first place.

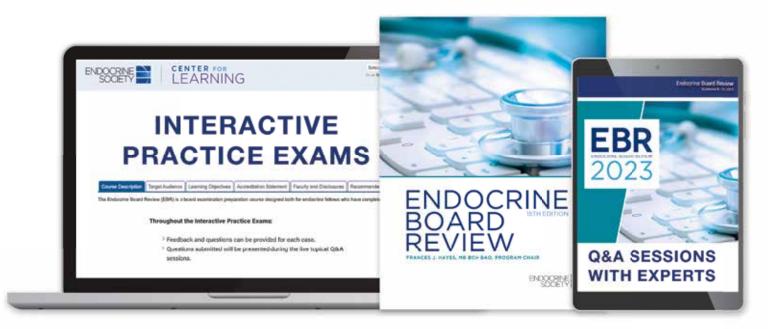
BEATING BURNOUT

Simple tips to make patient encounters more efficient

AN ENDURING DREAM OF SCIENCE

Vincent Prevot, PhD, discusses his passion for neuroendocrinology





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This month marks one year since a devasting earthquake struck at the heart of Turkey, killing tens of thousands. Amidst the rubble and destruction, Endocrine Society member Kemal Agbaht, MD, persevered and continued to practice medicine against seemingly insurmountable odds. He shares his remarkable story exclusively with *Endocrine News*. **BY DEREK BAGLEY**

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How Felix Beuschlein, MD, has advanced adrenal tumor care through transatlantic collaboration

Honored by both the Endocrine Society and the European Society of Endocrinology with the 2024 Transatlantic Alliance Award, Felix Beuschlein, MD, has made significant contributions to endocrine research on both sides of the Atlantic, from Michigan to Switzerland! *Endocrine News* speaks with Beuschlein about what this award means to him, conducting pioneering research on two different continents, and why he became an endocrinologist in the first place.

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John William Honour, PhD, FRCPATH, discusses his recent book on steroids.

An Endocrine Society member since 1979, John William Honour, PhD, FRCPath, used his time in lockdown to write a voluminous tome on steroids. He talks to *Endocrine News* about his recent book, *Steroids in the Laboratory and Clinical Practice*, how it was impacted by the COVID-19 pandemic, and why it may just be the definitive book for endocrine researchers and clinicians alike.

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AN ENDURING DREAM OF SCIENCE: ENDOCRINE NEWS TALKS WITH 2024 ENDOCRINE SOCIETY LAUREATE, VINCENT PREVOT, PHD

When he was only 16, Vincent Prevot, PhD, became the youngest member of the French Society of Herpetology. *Endocrine News* finds out how a teen's fascination with snakes gradually evolved into a passion for neuroendocrinology that resulted in being the recipient of the Endocrine Society's 2024 Edwin B. Astwood Award for Outstanding Research in Basic Science.

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Federal funding for SDP, NIH in jeopardy; Endocrine Society contributes to women's health research initiatives; and Society webinar provides information to help endocrinologists increase Medicare reimbursement.

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We encourage you to vote for our 2024 President-Elect. Visit **endocrine.org/election** to learn more about the candidates and cast your vote.

Questions? Contact election@endocrine.org or +1.202.971.3636 (or toll-free at +1.888.363.6274).

Ballots will be accepted through Thursday, February 29, 2024.



Hormone Science to Health



Society's Journals Remain Premiere Venue for Publishing Endocrine Research ear after year, I am continually impressed with the quality and quantity of research that is published in the Society's suite of scientific journals. As the former co-editor-in-chief, with Andrea Gore, of the Society's basic science flagship journal *Endocrinology*, and editor-in-chief of the Society's other previous basic science journal, *Molecular Endocrinology*, I was privileged to help innumerable scientists from around the world bring their research to light for the benefit of our field, and ultimately, the patients and public we serve.

The continued popularity of our journals can be seen in the more than 2,000 abstract submissions that we received for **ENDO 2024.** All accepted abstracts will be published in our open access *Journal of the Endocrine Society* (JES).

Our journals have long been — and will long remain — the premier place for endocrine research.

In fact, many of our field's seminal scientific discoveries and clinical breakthroughs were first revealed in the pages of our peer-reviewed journals. This goes all the way back to our first journal, *Endocrinology*, launched in January 1917. Today, our suite of journals consists of five mastheads: *Endocrine Reviews, The Journal of Clinical Endocrinology & Metabolism* (JCEM), *Endocrinology, Journal of the Endocrine Society* (JES), and our newest publication, *JCEM Case Reports.* We currently are planning the expansion of our journals' content, starting with JES, in key areas for the Society, including obesity/obesogens, bone/mineral/osteoporosis, neuroendocrinology, reproductive endocrinology, cancer, and EDCs. (All journals can be found online at: www.endocrine.org/journals.)

We were proud to launch *JCEM Case Reports* in August 2022, and publish its first issue in January 2023. Through the end of 2023, it has published 176 case reports and 10 images in endocrinology from 453 submissions from clinicians in 46 different countries. The editors are charged with evaluating the methodologic quality of case reports and working with authors to optimize their submissions with respect to case selection, ascertainment, causality, and reporting.

As you can tell, I'm a major booster of our Society journals. I'm also an active submitter. I've been fortunate to publish more than 16 papers over the years in our journals. I always tell people that, "anybody and everybody who needs to read your paper will find it in an Endocrine Society journal."

In fact, in my experience, the myth that you need to publish in highest "impact" journals to be recognized is just not true. I often point out that my two most highly cited papers ever were in *Endocrine Reviews* and *Molecular Endocrinology*. If you take my top 10 papers published in the Society journals, they average approximately 180 citations per paper. I use my own statistics only as an example, and I am certain more prolific scientists have significantly better numbers! My point is, with the Society journals, you will get a fair and timely review from your peers, and, once published, your paper will be seen by all those who need to see it. What more can you ask for?

To elaborate a little more: Articles published in the Endocrine Society journals are gaining increased notice.

Endocrine Reviews, for example, achieved an impressive Impact Factor of 20.3 in the most recent report released last summer, and we are seeing record numbers of annual citations across all titles. An Impact Factor is a measurement that reflects the number of citations articles in one journal receive in other publications.

Submitting to a Society Journal

Endocrine Society members enjoy significant benefits when submitting to our journals. First and foremost are discounted publication fees, including the waiving of fees for page counts and color figures in *Endocrinology*. Once a paper is submitted to any of our journals, the process can proceed rapidly to publication, with given time frames for acceptance decisions and peer reviews that are done primarily by members of our Endocrine Society community. Accepted papers go online within days, prior to copyediting and page proofs, with a DOI for citation.

We also have taken steps to help our members for whom English is not their first language. The Society has partnered with American Journal Experts (AJE) to offer these members a 10% discount on AJE services, such as Premium English Editing, which includes unlimited free re-edits until the paper is published.

For more information, see our Author Resource Center: https://academic.oup.com/endocrinesociety/pages/author_resource_center.

Best Research Should Tell a Story

Submitting is only half of the battle. What makes a research paper stand out from there rest? Researchers know how exciting it is to discover new and illuminating data through the scientific process. That excitement, however, must be reflected in the paper.

As you prepare to publish, you really want to ask yourself, "How am I going to sell this? I have great data, but how am I going to explain it in a way that the reader is going to be just as excited as I am?" Achieving this requires putting together your story in such a way that draws the reader in. For some helpful tips, please take a look at this editorial from *Molecular Endocrinology*, entitled "Selling Your Science: Where Preparation Meets Genius" (https://www. ncbi.nlm.nih.gov/pmc/articles/pmid/25929265/), as well as this more recent article from *Endocrinology* entitled "Publish



With the Society journals, you will get a fair and timely review from your peers, and, once published, your paper will be seen by all those who need to see it. What more can you ask for?

"

or Perish: Five Steps to Navigating a Less Painful Peer Review," (link here: https://pubmed.ncbi.nlm.nih.gov/33516156/). You can also learn more on our YouTube video "Advice on Getting Published," which can be found at: www.endocrine. org/journals.

Once Published: Outlets for Your Work

Once your paper is published, that's not the end of its journey! The Society has several ways to help share exceptional papers with the field and larger lay audience. These include opportunities to feature articles on the Endocrine Feedback Loop journal club podcast (www.endocrine.org/journals/ endocrine-feedback-loop-podcast-series), as well as through press releases and social media. Your article also may be selected for one of our Thematic Issues (found on our journals page). For more details, see our Why Publish page at: https://academic.oup.com/endocrinesociety/pages/why_publish.

So, to my fellow researchers all over the world, please consider submitting your work to our journals!

Stephen R. Hammes, MD, PhD President, Endocrine Society

FROM THE EDITOR

An Ode to Endocrine Society Members Around the World

s I've often said in this column many times over the past decade, the biggest asset that *Endocrine News* possesses is you, the members of the Endocrine Society. It is an undeniable pleasure to have such a knowledgeable source of information at our fingertips and not only does it make my job easier, but it also adds even more prestige to the stories we present month after month.

To that end, this issue is devoted to the multifaceted membership of the Endocrine Society starting with our cover story on the 2024 Transatlantic Alliance Award recipient Felix Beuschlein, MD. In **"Staying Curious"** on page 24, writers Kelly Horvath and Glenda Fauntleroy Shaw both talked to Beuschlein about what this award — sponsored by both the Endocrine Society and the European Society of Endocrinology — means to him as well as his pioneering endocrine research on adrenal tumors. Beuschlein says that there is a good proportion of endocrinology that you have to understand, but then you can actually use it. "Hormones are quite logical, but they are exciting, and they shape a person down to the bone, literally," he says. "So, it's this combination of very rational aspects — like feedback inhibition and feedforward activation of axes — and physiology, with this other part that is very complex and affects everything in a person."

Moving into quite a different direction, we mark the one-year anniversary of the devastating earthquake that struck at the heart of Turkey, killing tens of thousands, and leaving even more injured and homeless. However, from that rubble arose hope in the form of clinical endocrinologist Kemal Agbaht, MD, who quickly became a caregiver to an entire community as it struggled to come to grips with a startling new reality. In **"Aftershocks: Practicing Endocrinology Amid a Catastrophe"** on page 16, Senior Editor Derek Bagley talks to Agbaht about how he continued to practice among Endocrine news

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



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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.

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the chaos in an *Endocrine News* exclusive. Agbaht tells Bagley how earthquakes are a force of nature that cannot be prevented by mankind; however, "humans could prevent disasters by taking the necessary measures," he says. "Science, conscience, common sense, and respect are all required for a healthier and livable world."

This month's Laboratory Notes column also focuses on one of our European members as we interview Vincent Prevot, PhD, the 2024 Endocrine Society Laureate Edwin B. Astwood Award for Outstanding Research in Basic Science in **"An Enduring Dream of Science,"** on page 36. It is obvious from the interview that Prevot relishes the collaboration with his team of scientists who hail from all over the world. "We work closely with emerging talents from a multitude of international horizons, including Chile, Greece, India, Italy, Mexico, North Africa, and Spain, as well as French nationals," he says. "This eclectic mix of backgrounds, encompassing both medical and basic science expertise, adds a unique flavor to our collaborative efforts."

In **"Word of Honour"** on page 32, Derek talks to one of the Endocrine Society's emeritus members, John William Honour, PhD, FRCPATH, about his recent book, *Steroids in the Laboratory and Clinical Practice*, published last year. He not only discusses his relationship with the Endocrine Society he's been a member since 1979! — but he goes into detail about what readers can expect from his new tome and why he thinks it just might be the definitive book on steroids for researchers and clinicians alike.

It's not hard to see, even from this simple editor's note, how much we appreciate Endocrine Society members around the world. And regardless of where you live, if you have an idea for a story you'd like to share with the global endocrinology community, please contact me at: **mnewman@endocrine.org**.

- Mark A. Newman, Executive Editor, Endocrine News

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INTOUCH

Introducing EndoForum, the Endocrine Society's Rebranded Online Community



fter initially launching in 2022 and growing into a thriving community in 2023, the Endocrine Society's online community in DocMatter is ready to step out into the spotlight with a brand-new name: **EndoForum**!

Why change the name? **EndoForum** is more than just the platform it's on; it is a vibrant and active community of more than 16,000 Endocrine Society members from all walks of life, with interests and experiences that span the entirety of the endocrinology world, both literally and figuratively.

In **EndoForum**, members share challenging cases and new research; collaborate and find answers; offer advice and new perspectives; and connect with peers to expand their network internationally. It is a global forum for endocrinology professionals to keep up with and discuss the latest and most pressing clinical, scientific, and professional topics in their field.

All of the features and support you've come to expect will still be there, including:

Customized filters so you only get the most relevant content.

Personalized notifications to keep you informed.

- Reply to discussions directly from your email.
- A support team to help draft and post messages.
- Professionally moderated forum to ensure the highestquality discussions.
- Informative responses from known experts.

However, with the change in name comes an even more robust experience! Be on the lookout for virtual deepdive discussions of the hottest posts in **EndoForum** with Endocrine Case Talks, expert-led community discussions of new research and topical cases in the Endocrine Feedback Loop Journal Club, and a series of new community events highlighting a variety of topics.

Take a moment to explore what your peers are talking about or start a conversation of your own. Log in and join the EndoForum community at: **endocrine.org/EndofForum**.

We look forward to seeing you in EndoForum!

INTOUCH

Beuschlein Named Editor-in-Chief of *European Journal of Endocrinology*

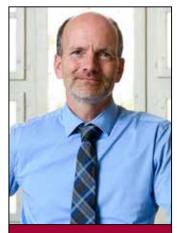
Representation of the European Society member and 2024 recipient of the Transatlantic Alliance Award, Felix Beuschlein, MD, has been named editor-in-chief of the European Society of Endocrinology (ESE)'s flagship journal, the European Journal of Endocrinology (EJE).

He will assume his post in May 2024 when the current editorin-chief and fellow Endocrine Society member, Wiebke Arlt, MD, DSc, FRCP, FMedSci, steps down.

"I am delighted that Felix will be the next editor-in-chief of ESE's flagship journal and will continue to build on the strong foundations laid by his predecessors," says Endocrine



Society member Philippe Chanson, MD, MS, chair of ESE's Publications and Communications Committee. "Felix's internationally recognized work, his large network, and his collaborative and thorough approach to



Felix Beuschlein, MD

research means EJE is in good hands."

Beuschlein is professor of internal medicine/endocrinology and director of the Clinic for Endocrinology, Diabetology, and Clinical Nutrition at the University Hospital Zurich in Switzerland. He received his medical degree from the School of Medicine at the University of Würzburg and completed his medical training in Freiburg, both in Germany. For postdoctoral studies, he joined the University of Michigan in Ann Arbor. Following a professorship for Endocrine Research at the University of Munich in 2017, he was recently elected for a chair position at the University of Zurich.

In November, Beuschlein was awarded the Transatlantic Alliance Award by ESE and the Endocrine Society, which recognizes an international leader who has made significant advancements in endocrine research on both sides of the Atlantic — in Europe and the United States.

"I am thrilled and honored to take on this position within the EJE team to continue on a development of the journal toward its leading position reflecting clinical and translation endocrinology at large," Beuschlein says.



BY DEREK BAGLEY Senior Editor



GLP-1R agonists are an exciting class of medications. given their strong glucose-lowering effects combined with tremendous weight-loss benefits, and they have transformed how we manage diabetes and obesity in the clinic.



Liraglutide Increases Insulin Sensitivity Independent of Weight Loss, Study Shows

iraglutide, the glucagon-like peptide-1 receptor (GLP-1R) agonist used to treat type 2 diabetes and obesity, can lead to rapid improvement in insulin sensitivity, according to a study recently published in *Diabetes*.

"We know that GLP-1R agonists promote weight loss, but we were surprised to find that the GLP-1R agonist liraglutide also has rapid effects on insulin sensitivity, independent from weight loss," says Mona Mashayekhi MD, PhD, assistant professor of medicine in the Division of Diabetes, Endocrinology, and Metabolism at Vanderbilt University Medical Center, Nashville, Tenn., and first author of this study. "This effect requires activation of the GLP-1 receptor, but increasing the body's own endogenous GLP-1 through the use of the DPP4 inhibitor sitagliptin does not achieve similar effects."

"Our research suggests that liraglutide, and presumably other GLP-1R agonists, are having important metabolic effects in a way that's different from increasing endogenous GLP-1 levels, even though they're using the same receptor. Future research will focus on potential mechanisms of how GLP-1R agonists are improving insulin sensitivity independent of weight loss."

Eighty-eight individuals with obesity and prediabetes were randomized for 14 weeks to receive the GLP-1R agonist liraglutide, the dipeptidyl peptidase 4 (DPP-4) inhibitor sitagliptin, or weight loss without a drug using a low-calorie diet.

To further investigate the GLP-1R-dependent effects of the treatments, the GLP-1R antagonist Exendin and a placebo were given in a two-by-

two crossover study during mixed meal tests. Crossover studies allow the response of a subject to treatment A to be compared with the same subject's response to treatment B.

Liraglutide was shown to rapidly improve insulin sensitivity as well as decrease blood glucose within two weeks of beginning treatment and before any weight loss.

"GLP-1R agonists are an exciting class of medications, given their strong glucoselowering effects combined with tremendous weight-loss benefits, and they have transformed how we manage diabetes and obesity in the clinic," Mashayekhi says. "Since the number of medications in this class is rapidly expanding, a deeper understanding of the mechanisms of benefit is crucial so we can design the right drugs for the desired effects in the right patients."

The investigators' prior research demonstrated that liraglutide, but not sitagliptin or diet, improves measures of heart disease and inflammation. This matches the clinical findings of reduced cardiovascular disease with GLP-1R agonist treatment.

Future studies will continue to explore both receptor- and weight-loss-dependent effects of GLP-1R agonists in humans.

TRENDS & INSIGHTS

Women Undergoing Fertility Treatment Who Are Stressed May Have Heart Health Issues during Pregnancy

omen with more stress before pregnancy had higher blood sugar levels during pregnancy, a sign of weaker cardiovascular health, according to a study among women attending a fertility center recently published in the *Journal of the Endocrine Society*.

Researchers point out that people's stress levels have continued to rise over the years, particularly in the last few years due to the COVID-19 pandemic, putting them at risk for serious health issues such as heart disease. Research shows women may experience more stress than men, especially those going through infertility. Maintaining a healthy pregnancy is important for both mothers and their children.

"Here, we investigated whether maternal stress, evaluated during the preconception period, was associated with blood glucose levels during pregnancy among women attending a fertility center," the authors write. "We also evaluated whether the associations varied by mode of conception (natural, intrauterine insemination [IUI] and in vitro fertilization [IVF]) and selected socioeconomic factors (race, education, income)."

The authors analyzed self-reported stress levels in 400 women at the Massachusetts General Hospital Fertility Center in Boston, Mass., before they became pregnant and measured their blood sugar levels in late pregnancy. They found women with high levels of stress before pregnancy were more likely to have high blood sugar during pregnancy. Women who conceived through IUI had higher stress and blood sugar levels than those who conceived through in IVF. During IUI, sperm is injected directly into the uterus. IVF is a multistep reproductive technology that involves egg stimulation, retrieval, lab fertilization, and transfer. The study's first author, Lidia Mínguez-Alarcón, PhD, of Harvard Medical School, Brigham and Women's Hospital and Harvard T.H. Chan School of Public Health in Boston, explains that this may be because IUI is less effective as a fertility treatment, so women undergoing IUI may experience more distress than woman going through IVF.

The researchers also found stress and blood sugar levels were higher among women with high socioeconomic status. Mínguez-Alarcón says the possible reason for this finding could be women with higher incomes and education levels may be employed in demanding, time-intensive jobs. "It has previously been shown that those with a higher education level experience greater levels of job stress, with stronger associations found in women than in men," Mínguez-Alarcón says. "Given that education level is positively associated with salary, it is possible that this explanation applies to women with higher incomes as well. Professional women are often also responsible for balancing demands in the workplace with household duties and childcare."

"We found that maternal stress, evaluated before pregnancy, is negatively associated with cardiovascular health, measured as glucose levels during pregnancy," Mínguez-Alarcón continues. "Our results highlight the importance of considering preconception as a sensitive window of stress in relation to cardiovascular health during pregnancy. A few ways women can lower their stress levels include being more active, avoiding alcohol and drugs, eating healthy, and avoiding isolation."



Our results highlight the importance of considering preconception as a sensitive window of stress in relation to cardiovascular health during pregnancy. A few ways women can lower their stress levels include being more active, avoiding alcohol and drugs, eating healthy, and avoiding isolation.





66 The findings of this study are significant and form a basis on which novel and target-specific intervention measures to curb the risk of [rheumatoid arthritis] in women may be developed.



Early Menopause and HRT Among Hormonal Factors Linked to Increased Rheumatoid Arthritis Risk

arly menopause — before the age of 45 — taking hormone replacement therapy (HRT), and having four or more children are among several hormonal and reproductive factors linked to a heightened risk of rheumatoid arthritis in women, according to a large long-term study published in *RMD Open*.

Researchers at Anhui Medical University in China point out that women are more susceptible to rheumatoid arthritis than men, being four to five times more likely to develop this autoimmune disease before the age of 50, and twice as likely to do so between the ages of 60 and 70. The disease seems to take a greater physical toll on women than it does on men.

While hormonal and reproductive factors are thought to contribute to women's heightened susceptibility to the disease, it's not entirely clear which factors might be particularly influential.

To find out, the researchers analyzed data from 223,526 U.K. Biobank participants whose health was tracked for an average of 12 years. During this time, 3,313 (1.5%) women developed rheumatoid arthritis, and several hormonal and reproductive factors were associated with heightened disease risk, after accounting for potentially influential factors, such as lifestyle, level of social and economic deprivation, ethnicity, and weight.

Starting periods after the age of 14 was associated with a 17% higher risk when compared with starting them at the age of 13, while going through menopause below the age of 45 was associated with 46% heightened risk compared with going through it at the age of 50 - 51 years.

Fewer than 33 reproductive years — defined as the interval between starting periods and going through menopause — was associated with a 39% heightened risk. And compared with having two children, four or more was associated with an 18% higher risk.

Hysterectomy or oophorectomy was associated with 40% and 21% higher risks, respectively, although only a few women had these procedures. While no clear association emerged between the use of oral contraceptive pills and rheumatoid arthritis risk, HRT use, and to a lesser extent, its duration, were associated with, respectively, 46% and 2% higher risks.

This is an observational study and therefore can't establish cause and effect, and the researchers acknowledge various limitations to their findings. For example, the U.K. Biobank is made up of relatively healthy and affluent people of white ethnic backgrounds, so isn't representative of the U.K. population at large.

Nevertheless, the findings prompt the researchers to suggest that hormonal and reproductive factors should be carefully evaluated in women diagnosed with rheumatoid arthritis. "The findings of this study are significant and form a basis on which novel and target-specific intervention measures to curb the risk of [rheumatoid arthritis] in women may be developed," the authors conclude.

DASHBOARD

[F]ind a question that truly excites you, one that holds clinical or scientific significance. This passion will be the driving force behind your work. Early in your career, make an effort to build a robust network. Changing locations and positions might be daunting, but, as I've experienced, it greatly enhances your exposure and opens new opportunities. **Trust in the power of collaboration. These partnerships, often spanning different disciplines and cultures, can lead to groundbreaking discoveries.**"

- 2024 Transatlantic Alliance Award winner, Felix Beuschlein, MD, when asked about what advice he would give to endocrine researchers just starting out in "Staying Curious," on page 24.



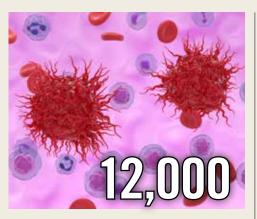
Marie Curie (1867 – 1934) physicist and chemist

"[S]cientific work must not be considered from the point of view of the direct usefulness of it. It must be done for itself, for the beauty of science, and then there is always the chance that a scientific discovery may become like radium: a benefit for humanity."

4 to 6

Number of new acromegaly cases — per million — diagnosed annually. Diagnosis is often delayed because the symptoms develop gradually and the changes often go unnoticed. – source: THE PITUITARY FOUNDATION





The number of people diagnosed with neuroendocrine tumors each year. – source: MD ANDERSON CANCER CENTER



The percentage of patients treated via levothyroxine monotherapy for hypothyroidism who report persistent symptoms despite normal levels of thyroid-stimulating hormone. – source: THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM



The number people admitted to U.S. hospitals each year due to acute pancreatitis.

- SOURCE: WWW.BAYCARE.ORG

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We hope to see you at ENDO 2024, taking place June 1 – 4, 2024, in Boston, Mass. With more than 7,000 attendees, nearly 2,000 abstracts, and more than 200 other sessions, ENDO is the top global meeting on endocrinology research and clinical care. ENDO provides the opportunity to collaborate with an unparalleled list of endocrinologists, healthcare practitioners, and leading scientists from around the world. Through sharing our experience, advice on patient care, and new advances in research, we move the needle forward in hormone health and science. Our outstanding slate of world-renowned speakers will showcase the most cutting-edge advances in research and medicine, with presentations spanning the spectrum of science, clinical care, and social implications. https://www.endocrine. org/meetings-and-events/endo-2024

BPS 2024

Philadelphia, Pennsylvania February 10 – 14, 2024

At the Biophysical Society's BPS 2024, the symposia and workshops are as exciting as ever, with a slate of invited speakers that represent breakthrough biophysics research and who will give a glimpse into what the next generation of our society looks like.



For the first time, we have reserved at least 20% of symposia talks for speakers selected directly from submitted abstracts. Principal investigators will find the new option to self-suggest their abstract describing their latest research for symposia topics. The topics will be varied and stimulating, covering the broad membership of our society. From

staple themes like membrane proteins to venturing into new areas where biophysics is making an impact, such as plant biology and how biological systems adapt to temperature change.

https://www.biophysics.org/ 2024meeting#

AAES 2024 Annual Meeting Dallas, Texas

April 20 – 22, 2024 American Association of Endocrine Surgeons 2024 Annual Meeting attendees can look forward to dynamic speakers, presentations of innovative research,



opportunities to connect with colleagues. and informative panel discussions. This year's pre-meeting Advanced Course in Endocrine Surgery will include outstanding faculty and a wide range of topics. In addition, sponsors will be on site to showcase cutting-edge technological advancements pertinent to the practice of endocrine surgery. The AAES Annual Meeting is dedicated to the advancement of the science and art of endocrine surgery through exchange of knowledge and fostering collaboration. The upcoming 2024 event promises to deliver innovative programming that will enrich attendees' clinical practices, provide networking opportunities, and facilitate scholarly pursuits. We cordially invite you to join us in Dallas for this exciting event. It will be an excellent opportunity to dive into new topics, share expertise, and connect with peers who share similar interests. https://www.endocrinesurgery.org/ 2024-annual-meeting

2024 Lab Manager Leadership Summit Denver, Colorado April 29 – May 1, 2024 The Lab Manager 2024 Leadership Summit will offer actionable advice on

ENDOCRINE ITINERARY



the management, business, safety, and staffing challenges facing today's lab managers. The program's expert speakers will provide you with the tools you need to reach higher levels of engagement and efficiency among your lab teams. Topics will range from dealing with burnout, to incorporating automation into your lab, to lab operations, to effective communication, and much more — an interactive Q&A will follow each session. Attendees will also be able to participate in hands-on workshops and roundtable discussions, where they will receive focused advice and learn from real-life examples of leadership success.

https://www.labmanager.com/labmanager-leadership-summit-30946

19th International Adrenal Meeting Boston, Massachusetts May 29 – 31, 2024

Adrenal researchers and clinicians from around the world will convene for the 19th International Adrenal meeting, which will feature the Keith Parker Memorial Award and Lecture and the Alastair Brownie and Bernie Schimmer Early Career Awards and Lectures. This year's conference will see the addition of pheochromocytoma and paraganglioma to the program along with presentations in each session selected from submitted abstracts.

https://www.eventsquid.com/mobileapp. cfm?id=22293

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ATTD 2024

Florence, Italy/Virtual March 6 – 9, 2024

The 17th International Conference on Advanced Technologies & Treatments for Diabetes (ATTD 2024) is the leading international forum where clinicians, diabetes care providers, researchers, industries, start-ups, investors, reimbursement authorities, regulators, and people with diabetes, assemble with the goal to ameliorate the care of people with diabetes at the fastest possible pace. Presentations and discussions will be given by many distinguished professionals in the field and will include topics such as artificial intelligence–based decision support systems, glucose sensors, closed-loop systems, artificial pancreata, devices for diabetes prevention, new medications for the treatment of diabetes, new insulins and new insulin-delivery systems and pumps, and much more. https://attd.kenes.com/

World Endocrine, Diabetes & Cardiovascular Conference (EDCC24)

Bangkok, Thailand March 9 – 10, 2024

The conference program includes local and international speakers with inspiring insights to share on advancing endocrinology, diabetes, cardiovascular health, and metabolism quality improvement through patient and family experiences. This will be an opportunity to come together, collaborate, and share the latest advancements in the endocrinology field, offering the chance to learn and collaborate across a variety of approaches, disciplines, and specialties, providing engaging on-demand and live sessions.

https://endocrine.episirus.org/bangkok

Diabetes Meet 2024

Rome, Italy/Virtual March 11 – 12, 2024

This Diabetes Meet 2024 Conference invites all the academic scientists, endocrinologists, surgeons, primary healthcare specialists, pediatricians, pharmaceutical industrial delegates, talented young scientists, and student communities across the globe to attend this meeting where all the aspects of diabetes mechanism, disorders, and treatment will be discussed under a single roof.

https://www.diabetesmeet.com

ECE 2024: 26th European Congress of Endocrinology

Stockholm, Sweden May 11 – 14, 2024

Attracting over 4,000 delegates, from more than 100 countries, ECE continues to develop as a world-leading congress for endocrine specialists. Given that our community works on diverse research topics and sees patients with a wide range of conditions, ECE enables access to a comprehensive program, covering the breadth of endocrinology. Whatever your area of interest, there will be sessions that are of direct relevance, as well as extensive networking opportunities.

https://www.ese-hormones.org/events-deadlines/europeancongress-of-endocrinology/ece-2024

AFTERSHOCKS:

Practicing Endocrinology Amid a Catastrophe

This month marks one year since a devasting earthquake struck at the heart of Turkey, killing tens of thousands. Amidst the rubble and destruction, Endocrine Society member Kemal Agbaht, MD, persevered and continued to practice medicine against seemingly insurmountable odds. He shares his remarkable story exclusively with *Endocrine News*.

February 2023, Hatay, Turkey: One of the many scenes of devastation after a 7.8-magnitude earthquake struck the region leaving tens of thousands dead.



Kemal Agbaht, MD

n February 6, 2023, the residents of southcentral Turkey were rudely awakened by a 7.8-magnitude earthquake that violently struck at 4:17 in the morning. A second quake, nearly as strong hit later that afternoon.

These tremors affected roughly 14 million people — essentially 16% of the country's population — with a death toll of close to 60,000 in Turkey alone. And while the magnitude of these quakes was measured via the Richter Scale, the destruction was far more severe, registering as 11 out of 12 on the Mercalli Intensity Scale."

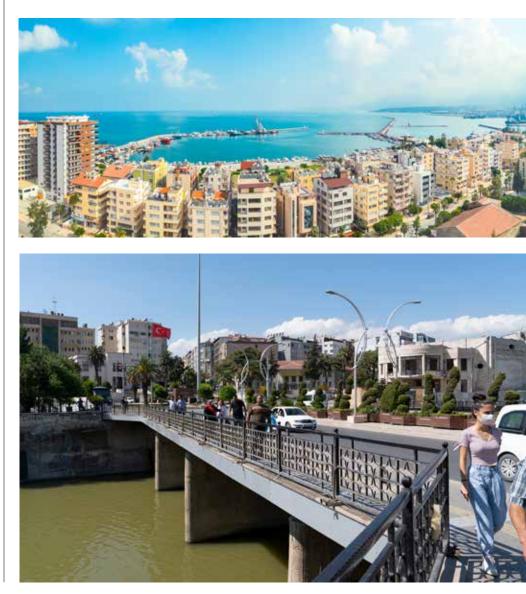
These words begin Kemal Agbaht's gripping first-person account of the 2023 Turkey-Syria earthquakes. Agbaht, MD, is a clinician at Iskenderun Gelisim Hospital in Hatay, Turkey, where he treats a wide spectrum of endocrine disorders. He's on the editorial board of *The Journal of Clinical Endocrinology & Metabolism*; he's a husband and father. But when an earthquake literally rocks your world, your priorities must shift with the tectonic plates.

"Half of those lives lost that day were in Hatay, Turkey, where I've been a practicing clinical endocrinologist since 2008, both living and working in the city center. Overall, around 90% of the buildings in this area either collapsed completely or were significantly damaged," Agbaht writes. "After witnessing so much of the destruction and its aftermath, I wanted to share my story with my endocrinology colleagues around the world." 66

As

physicians, our philosophy is to save lives, to help people overcome their troubles, even in terrible disasters. If a patient has been able to overcome their illness or their disease has been prevented from harming them, and this contributes to their self-perceived well-being; if we, as physicians, have contributed a little to this, it is the greatest source of happiness for us."

Top: Iskenderun in Turkey's Hatay province was a booming industrial port harbor on the eastern Mediterranean Sea prior to the earthquake. Bottom: A bustling day in Hatay as people and cars traverse the Asi River in the city center in 2020.



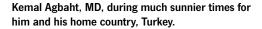


Endocrine News caught up with Agbaht to discuss his diary of the events of the earthquake and the weeks following.

Endocrine News: What compelled you to try to drive to Defne Hospital once you knew your family was safe?

Kemal Agbaht: As physicians, our philosophy is to save lives, to help people overcome their troubles, even in terrible disasters. If a patient has been able to overcome their illness or their disease has been prevented from harming them, and this contributes to their self-perceived well-being; if we, as physicians, have contributed a little to this, it is the greatest source of happiness for us.

Once I knew my family was safe, I wanted to drive to my hospital, with the motivation I could help patients affected by the earthquake. Furthermore, my colleagues in the hospital claimed in the Whatsapp group that they needed help. The hospital collapsed, and the patients on the upper floors (the hospital was an eight-story building) could not be evacuated. I could not get in touch directly with the hospital staff, my co-workers, or the crew on duty in the hospital.



On our way to the hospital, we came across unforgettable and terrible images. The road was almost completely blocked; the limited numbers of ambulances with blaring sirens were trying to move forward on the road using the zipper method, but it was difficult. Meanwhile, those who could save their relatives - especially the children — from the ruined houses were begging to get them to the ambulances, but there was no place to intervene in the ambulances. The anguish on their faces and blood flowing from their bodies ... I thought I could help them if I could only reach the hospital. But it was impossible. Thereafter, we learned that the hospital was unable to provide service, and those hospitalized patients were being evacuated via a crane. Unfortunately, many lives were lost.

EN: Your father-in-law and wife both live with endocrine conditions. Can you talk a little more about caring for them during a disaster, where many basic needs can't even be met?

KA: My father-in-law has had type 2 diabetes and some associated comorbidities for 43 years. He was on a basalbolus insulin regimen, oral antidiabetics, antihypertensives, hypolipidemics, and on vitamin B12 (had been using metformin for a long time), vitamin D, and alpha-lipoic acid supplements. He had neither micro- nor macrovascular complications, but he had sensorineural neuropathy. In 2018, he was diagnosed with urinary bladder cancer, and was cured with surgical management only. He has had the recommended vaccinations on time. He is a compatible, disciplined patient, aware of his chronic diseases and their management.

However, in such an awful disaster, managing these medical conditions was not easy. Even basic requirements can't be managed. There was no drinking water, no fresh foods available, no electricity or gas to cook or even heat the stored food. On the first day of the disaster, we boiled the rainwater on an open fire. On the second day, there was no rain. We went to a nearby natural spring in the mountain and filled

Being a physician is also being able to appeal to the soul of the patient. The biggest challenge was to convince the patients who had psychological breakdowns that they will overcome their disease. Yet, sometimes there is a bidirectional association between endocrine disorders (diabetes, obesity, thyroid dysfunctions, etc.) and mental well-being."

several bottles that served our drinking, cooking, and sanitation needs. We saved food from our home and heated it on the fire. Of course, routine and scheduled meal plans were not possible.

There was no need to inject the rapid-acting insulin, but the basal insulin was given routinely. The cold weather actually helped us preserve stability of the insulin. As expected, my father-in-law required psychological support. Indeed, the truth was not easy to handle; although his core family was alive, he was clearly distressed since many of his relatives were trapped beneath the debris.

My wife also lives with an endocrine condition; she has hypothyroidism as a consequence of destructive chronic thyroiditis. She had been on levothyroxine replacement for more than 10 years. She was euthyroid with no complaint. Sometimes she forgets to take the medicine for a few days, which results in constipation. This symptom reminds her to take levothyroxine, which I always keep within my bag for her.

EN: On that note, can you talk a little about the task of getting medications and treatment to other patients affected by the earthquake?

KA: Some patients living in the neighborhood needed their medication, but they were in extremely short supply since all of the pharmacies had been destroyed or emptied. By the fourth day, charitable organizations and volunteers brought some medications, and I took it upon myself to distribute them. Based on drug classes, for example, if a patient was on a DPP-IV inhibitor, another DPP-IV inhibitor or sulfonylurea was available; in case of any





angiotensin-converting enzyme inhibitors (ACEIs), another ACEI or ARBs, or even another antihypertensive with similar efficacy was used; any basal insulin was considered substitutable in such a situation, which helped prevent any acute metabolic decompensations and hypertensive emergencies.

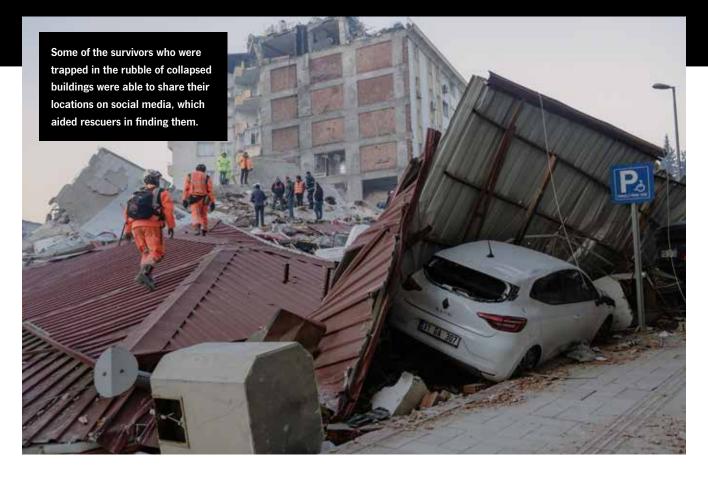
EN: You write about the difficulty finding work, and even the shortage of endocrinologists. You write that the problem was resolved after corresponding with the Ministry of Health. Can you speak a little more to that, and the excitement of helping people impacted by the disaster?

KA: In Turkey, endocrinology is a subspecialty of internal medicine. After completing the five-year internal medicine residency, and obtaining an internal medicine degree, you then must pass an exam to become a subspecialty fellow. Once you complete a three-year endocrinology residency, only then do you receive an endocrinology specialist degree. However, after each degree, you must go into military service for up to two years.

The number of endocrinology specialists in Turkey is insufficient. For example, before the earthquake, there were only four endocrinologists in Hatay, which had a population of approximately 1,700,000. This was due to the strict Ministry of Health policy that limits tenures in private hospitals. As such, you can only have a tenured position in endocrinology rather than internal medicine. There were only two such opportunities in Hatay in two separate private hospitals, which were out of service due to the earthquake. Four months after the earthquake, there was not a single endocrinologist in the entire city of Hatay. However, many patients required treatment, including people with Graves disease, pregnancies with thyroid dysfunctions, hyperglycemic emergencies, and comorbidities. All of these patients were contacting me by phone or e-mail.

While I could have easily found a job in another large city such as Ankara or Istanbul, it would be a hardship for the patients living in a ruined city to travel out of town for medical care. Fortunately, the problem was resolved after about a month and a half when the Ministry of Health allowed for more tenured positions in specialties as well as the subspecialties in the areas most affected by the earthquake once we expressed our concerns.

Being a physician is also being able to appeal to the soul of the patient. The biggest challenge was to convince the patients who had psychological breakdowns that they will overcome their disease. Yet, sometimes there is a bidirectional association between endocrine disorders (diabetes, obesity, thyroid dysfunctions, etc.) and mental well-being. Moreover, most of these endocrine disorders are chronic diseases, and



chronic diseases require determination, perseverance, and a strong will for better management by the patients as well as the healthcare providers. If you choose to be a physician, you have ventured into loving unconditionally. This love includes the love of your job, your patients, and life overall. In the end, love is a beautiful feeling.

EN: You said that your first patient told you that after the earthquake, she understood your value better. Can you speak more to that?

KA: A couple of weeks after I started my new job in Iskenderum, I arrived at the hospital and let the very first patient inside who happened to be an older female patient I had seen at a previous hospital for a variety of chronic conditions (type 2 diabetes, hypertension, dyslipidemia, atherosclerotic heart disease, toxic nodular goiter, osteoporosis, heart failure). Before talking about her medical history, she said, "Sir, I would like to hug you if you let me. After the earthquake, we were so scared that we couldn't reach you, and I swore I would hug you when I first see you again." And she hugged me.

Although she was illiterate, she had the followup files I had given her previously that contained medication usage schedules, the old ECGs, laboratory examinations, previous nuclear medicine treatments, and the reports of radiological

examinations. She made sure to adhere to her medication schedule and even helped me recall some of her medical information that did not transfer to electronic health records! When I reevaluated with the lab results, she told me, "Sometimes we [she and her sister were together] did not apply what you said before. We were doing what we knew, but now we will apply what you said uniformly. May God bless you. After the earthquake, we understood your value better."

EN: We are coming up on the anniversary of the earthquake. Can you reflect on the year since?

KA: As we have learned from geologists, the earthquakes are the truth of our world. Humanity cannot deny such forces of nature. However, humans could prevent disasters by taking the necessary measures. Science, conscience, common sense, and respect are all required for a healthier and livable world, and could help prevent future disasters. By the way, we honor all of the people who died in that horrific disaster. Thank you for giving me the opportunity to share my story with my endocrine colleagues around the world.

– BAGLEY IS THE SENIOR EDITOR OF ENDOCRINE NEWS. IN THE JANUARY ISSUE DEVOTED TO THYROID CANCER, HE WROTE ABOUT VARIOUS OPTIONS FOR TREATING HYPOPARATHYROIDISM AND THE NEED FOR A UNIVERSAL RISK-STRATIFICATION SYSTEM FOR THYROID NODULES.



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BY KELLY HORVATH AND GLENDA FAUNTLEROY SHAW

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Honored by both the Endocrine Society and the European Society of Endocrinology with the 2024 Transatlantic Alliance Award, Felix Beuschlein, MD, has made significant contributions to endocrine research on both sides of the Atlantic, from Michigan to Switzerland! *Endocrine News* spoke with Beuschlein about what this award means to him, conducting pioneering research on two different continents, and why he became an endocrinologist in the first place. Adrenal gland cells under the microscope. IMAGE BY MIKE ROSECOPE/SHUTTERSTOCK

n October, the Endocrine Society and the European Society of Endocrinology (ESE) jointly awarded the 2024 Transatlantic Alliance Award to Professor Felix Beuschlein, MD.

The Transatlantic Alliance Award, which began in 2021, recognizes a leader who has made significant advancements in endocrine research in Europe and the U.S. Beuschlein exemplifies transatlantic endocrine leadership: He joined the University of Michigan in Ann Arbor for his postdoctoral studies in the early 2000s.

On returning to Europe, he took a professorship for Endocrine Research at the University of Munich. He is currently professor of internal medicine/endocrinology and director of the Clinic for Endocrinology, Diabetology, and Clinical Nutrition at the University Clinic Zurich in Switzerland.

Beuschlein has made outstanding and ongoing contributions to the endocrine community's fundamental and clinical understanding of adrenal tumors through his collaborative approach. In February 2020, the Endocrine Society's Annual Meeting Steering Committee met at the Washington, D.C., offices to discuss ENDO 2021, which, unfortunately, never happened in real life but took place virtually. Pictured (I to r) are: Megan Haymart, Bulent Yildiz, Jennifer Richer, and Felix Beuschlein.

Among the honors bestowed on him are the *European Journal* of *Endocrinology* Prize and the Society for Endocrinology (U.K.) European Medal. His accolades extend to the organization of numerous scientific meetings, co-chairing the program organizing committee for a European Congress of Endocrinology(ECE), and heading the Annual Meeting Steering Committee for **ENDO 2021**. Demonstrating a profound commitment to fostering scientific and clinical connections, Beuschlein has actively participated in various national and international initiatives. Noteworthy contributions include coordinating the ENS@T (European Network for the Study of Adrenal Tumors)-CANCER Consortium and engaging in multiple European and international programs.

His involvement spans leadership roles on several boards, encompassing the Annual Meeting Steering Committee of the

Endocrine Society, the Executive Committee of the Swiss Endocrine Society, and a term as the vice president of the German Endocrine Society. Additionally, he played a pivotal role as a founding member, Steering Committee participant, and chairman of ENS@T.

Endocrine News asked Beuschlein more about what inspired his career journey and what, if any, challenges arise from conducting endocrine research on both sides of the pond.

Endocrine News: You are only the fourth recipient of the Transatlantic Alliance Award — that must be quite an honor. What does it mean to you?

Felix Beuschlein: It's a great honor, and it even feels like two awards in one because it's support from two societies across the Atlantic, from both the European and the American Endocrine societies. I'm very grateful that I am among the earlier recipients, and I hope this goes on for at least the next century. It's really fun!

Receiving the Transatlantic Alliance Award was a deeply humbling and gratifying moment for me. It represented not just a personal achievement, but a recognition of the collaborative efforts and advancements we have made in endocrine research across continents. This award symbolizes the importance of international collaboration in scientific research, something I have always passionately advocated for. It serves as a reminder that our collective efforts, bridging diverse perspectives and expertise, are crucial in advancing our understanding and treatment of endocrine disorders.

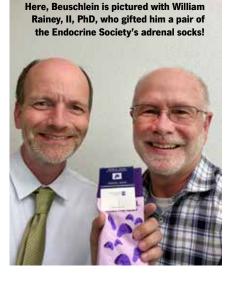
EN: Can you talk about the European Network for the Study of Adrenal Tumors (ENS@T)?

Beuschlein: We are now the second generation of ENS@T; in fact, we recently had a meeting where all the founding fathers returned. I was too junior to be involved from the very beginning, but I've had the honor of heading it for almost a decade. That network is somewhat of a role model in a way — the A5 consortium (American Australasian Asian Adrenal Alliance) was built with the blueprint of ENS@T, so it has an international legacy. But I think the core of it, and something we just reflected about with the founders, is really about trust and collaboration. It also has many personal connections; it helped me build my own network. Many interesting proposals, studies, and projects have come out of ENS@T over the last almost 20 years. It's a very productive scientific network.

EN: How did adrenal tumors become a major area of interest for you?

Beuschlein: Part of it was luck. I met the late Bruno Allolio during my medical school training in Würzburg, Germany, where he had just started his endocrine department. I happened to run into him during a lecture and asked him if there would be a chance to join his group, and he said yes. That was the start, and I never left the field. It could have been something very different, but this was destiny. He really was a very inspiring person.

6 6 There is a good proportion of endocrinology that you have to understand but then you can use it. It's a very rational yet very deep field. I mean, hormones are quite logical, but they are exciting, and they shape a person down to the bone, literally. So, it's this combination of very rational aspects — like feedback inhibition and feedforward activation of axes — and physiology, with this other part that is very complex and affects everything in a person."



In February 2018, Felix Beuschlein gave his inaugural lecture at the University of Zurich. Pictured are (I to r): Martin Fassnacht, MD; Wiebke Arlt, MD, DSc, FRCP, FMedSci; Beuschlein; and Martin Reincke, MD.

ens@t

Beuschlein played a pivotal role as a founding member, Steering Committee participant, and chairman of ENS@T, the European Network for the Study of Adrenal Tumors.

66 To young researchers embarking on their careers, **my advice is to first and foremost find a question that truly excites you**, one that holds clinical or scientific significance. This passion will be the driving force behind your work."

Welcome to the European Network for the Study of Adrenal Tumours (ENS@T) latest pr Join the endocrine community at ECE 2023 in Islandol. 12-16 May 2023 Save the date: Joint 22nd ENS/BT scientific meeting and 2nd e adrenal tun E-ACT tion of ensigh ent can only be achieved by comprises with regard to their class ent can only be achieved by comprising the efforts of research inform serveral countries. To overcome these difficulties and inform progress bonefficing the affected partitions we have one Administ Tumours at a European-eide level. MAPP us@f membership sigt centers of (g) T sims to improve the understanding of the genetics, surrous hypersection in patients with adversal turnours and associates domes, is alway to insprove the prediction of recurrence and the agreement of manipums adversal turnous, which are particularly or y of adversal turnours is likely to reveal new molecular mechanism of the schemes and the second second second second second or second seco ens@t insued guidelines Make a donation to ENS/01T ens@t-cancer fartare. The where the product is likely to reveal here indecase mechanisms of ar growth and provide insight into the role of homomee as the davies of tension (high blood pressure). ensitt-ht ensity activities ENS(8)T was founded in 2002 by puting bogetive three already factorial Adversal Networks (Conste in France, GANIMED in Ge NESGAT in Naky and Iwans from the Unded Kingdom all design Logie to ENSIGT Registry cknowledgements

uropean network for the study of adrenal tumors

EN: Are there other mentors you would care to talk about?

Beuschlein: The second person is Martin Reincke. He was also in that Würzburg group but transferred to another place in Germany and asked me whether I would join. I did so and followed him for quite some time. Now comes the American part. The third person I would mention is Gary Hammer, MD, PhD, past president of the Endocrine Society and a great mentor and friend. When he joined the University of Michigan in Ann Arbor, I was among the first postdocs in his lab. That was due to another friend and colleague — Wiebke Arlt, MD, DSc, FRCP, FMedSci — also a leader in the adrenal field who was in a lab that neighbored Gary's then lab in San Francisco. She told me about this "interesting guy" heading to Ann Arbor and suggested I visit him. I thought that sounded crazy until I realized that Chicago is not that far away from Ann Arbor, and so I got in the car and drove there. I interviewed with him and was quite impressed. It's one of those things in life where you say, "well why not?", and my wife and our then two small children moved there for two years. It was a very active and intensive period, but in hindsight it was good to have this kind of period to concentrate on what you do and then move on. In this case, moving on did not mean that I cut those ties. I'm still in very close contact and collaborate with people from Ann Arbor and many others. So that certainly was an important part of my career, and it was another branch of the network that I'm still feeding on.

EN: You also pay it forward by dedicating yourself to teaching and mentoring young researchers at the University Clinic Zurich and in your many international collaborations. What words of advice do you often share about how you have made your journey from where they are now to your current success?

Beuschlein: To young researchers embarking on their careers, my advice is to first and foremost find a question that truly excites you, one that holds clinical or scientific significance. This passion will be the driving force behind your work. Early in your career, make an effort to build a robust network. Changing locations and positions might be daunting, but, as I've experienced, it greatly enhances your exposure and opens new opportunities. Trust in the power of collaboration. These partnerships, often spanning different disciplines and cultures, can lead to groundbreaking discoveries.

Lastly, maintain your curiosity. The field of endocrinology is continuously evolving, and staying curious is key to adapting and contributing to its growth.

EN: What are you currently working on?

Beuschlein: I got this position in Zurich six years ago, and Switzerland is an amazing and beautiful place, but it is a small country. I realized that I wasn't going to be able to get into large numbers with the diseases I had been involved in like adrenocortical cancer because there are only so many in the whole Swiss population. So, I had to actively shift my focus to more prevalent disorders, and I chose hypertension and obesity. I try to "adrenalize" my work in the regard that with hypertension, primary aldosteronism, and obesity, there are aspects of glucocorticoid action. Now, we have large projects running where we look into the glucocorticoid burden of patients with obesity as the basis of new diagnostic approaches but also as a possibility for personalized treatment approaches. And the same with hypertension - we do try to improve the identification and the treatment of patients with primary aldosteronism. I just recently looked in the data again, and internationally it remains a very underappreciated disease. Hypertension is so very common, and 5% to 8% of hypertension patients have primary aldosteronism. However,

only a very small minority is diagnosed, even if you look into more specific subgroups, like those with hypokalemia. We just did a study where we found that in the range of 50% of patients who once had quite low potassium levels had, in the end, primary aldosteronism. I know from international data that only 2% of this patient group is ever screened - 98% would be good! We're so far away from a decent screening approach that we have to figure out how to improve this, and I think the key will be to make it as simple as possible and maybe even have some automation in the diagnostic procedure. That's an example that we are trying to implement, and this would be something that would change clinical practice. Part of that is teaching and informing students, general practitioners, cardiologists, and everybody else, but another part is the strategies and epidemiological thoughts about how that can be improved.

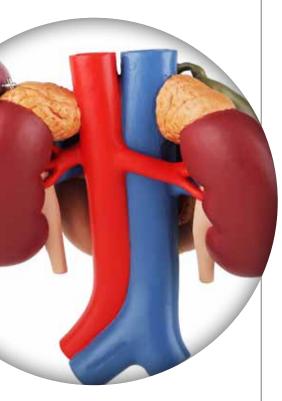
EN: So, is there a clinical guideline in your future?

Beuschlein: I'm just finishing the last touches of the first combined guideline from the Endocrine Society and the European Society of Endocrinology on glucocorticoid-induced adrenal insufficiency. It's a great group across the globe but primarily from Europe and the U.S. That will go out for review shortly, and it will also be presented both in Stockholm at the European meeting and in Boston at **ENDO 2024**. I will have two stages to fill in Boston — one with the guideline and the other with the Transatlantic Alliance Award, which again is a tremendous honor. I do remember my first Endocrine Society meeting a long time ago where I was very honored to give a talk. In my recollection, it was a huge audience, and I was super excited but even more frightened. Giving this talk in front of all these people who probably knew more than I did — that was "adrenal training" for sure!

EN: What drew you to endocrinology in general?

Beuschlein: Well, as I was saying, it was a little bit of good luck, but of course I would have left the field if I had not been turned on by it. I tell this to my students all the time: There is a good proportion of endocrinology that you have to understand but then you can *use* it. It's a very rational yet very deep field. I mean, hormones are quite logical, but they are exciting, and they shape a person down to the bone, literally. So, it's this combination of very rational aspects — like feedback inhibition and feedforward activation of axes — and physiology, with this other part that is very complex and affects everything in a person. A tumor can produce

6 6 Regardless of the geographical location, the underlying questions that drive our research, and the passion for finding answers are universal. We share a common breed of researchers and scientists, and we are peers across borders."



hormones that make a patient sick and change their personality. To this day, I think that's just fascinating. That's part of it, the clinical procedure, but I was also drawn into science and asking questions. I could have done this in other fields, but I like this combination of logic and complexity. I'm very grateful that that I was given this opportunity. I have another dozen years or so before my retirement, and I don't see that this passion is going to change so I'll just stay with it. We're merely scratching the surface.

Another field that I'm actively working on is sensors. If you measure glucose, you can see all these subtle differences, which has revolutionized diabetology. Why not do the same with other hormones and steroids? With this kind of continuous measurement, you are able to find rhythms — sick and not sick, stressed and not stressed, and so on. Continuous measurement is quite interesting, but another way is to measure deep. At one point, measure every single hormone that you can think of and those patterns that come out of it, which we as humans cannot even grasp any longer and need artificial intelligence (AI) for.

EN: Do you use AI as an endocrinologist?

Beuschlein: I helped train an AI for making diagnostics for pheochromocytoma and paraganglioma. There was a training set of a few hundred patients, and, as the expert, I was given information to make a diagnosis. I realized, yes, you can do this, but you're only really concentrating for the first five. After 10, you start feeling tired, and it's really tough to do this over and over again. But for a machine, this is not a problem at all. In the end, we were all worse than the AI in making a diagnosis. So, it's quite clear to me that the diagnostic approaches will change, and part of that is we are not good at repetition. We cannot grasp more than say two or three numbers or hormones or so at the same time. Still, in the end, someone needs to be responsible and to say, "yes I think that's the ground truth", or it's not. There has also been a study that AI is better to deliver news to a patient in comparison to real doctors, at least in written responses. The future is going to stay interesting.

EN: What would you say are the biggest similarities and differences in laboratory research work in the United States versus Switzerland? Do any major challenges occur when you collaborate with peers here in the United States?

Beuschlein: The realms of clinical and laboratory research in the U.S. and Switzerland are more alike than they are different. Regardless of the geographical location, the underlying questions that drive our research, and the passion for finding answers are universal. We share a common breed of researchers and scientists, and we are peers across borders. One notable difference in Europe is the tendency for smaller units or departments that requires multicentric collaboration, which naturally fosters a culture of cooperation. Over time, this approach has proven to be quite successful. Furthermore, there are more funding schemes in Europe that encourage such collaborative efforts.

The major challenges in international collaborations often relate to regulations on data protection and material transfer agreements. While these regulations are essential for ethical research, they can be quite challenging for someone with an impatient disposition like me.

- HORVATH IS A FREELANCE WRITER BASED IN BALTIMORE, MD. IN THE JANUARY ISSUE, SHE WROTE ABOUT A VARIETY OF THYROID CANCER STUDIES. FAUNTLEROY SHAW IS A FREELANCE WRITER BASED IN CARMEL, IND., AND OVERSEES THE "LABORATORY NOTES" COLUMN.

A Plethora of Publications

Beuschlein says that his commitment to studying adrenal tumors came about due to his very first publication in 1994, "and it has been a constant subject in my career ever since."

From the outset, I was captivated by the mechanisms that disrupt adrenocortical growth regulation and lead to endocrine autonomy. While the core of my research interest has remained consistent, the evolution of techniques and models over time has continuously rejuvenated my approach."

That first paper — "Clonal Composition of Human Adrenocortical Neoplasms" — was in *Cancer Research*, and Beuschlein was the first author. "It was, in a way, my doctoral thesis, and it was super exciting," he says. "It wasn't accepted right away, and I remember getting the reviews back and thinking it was terrible, but my mentors suggested some minor revisions and it made it in."

That 1994 article was just the beginning; since then, Beuschlein has published more than 460 scholarly articles. He goes on to discuss some of the ones he personally thinks are most notable, including one from 2014 in *NEJM* where, again, he was first author, this time on a study about cortisol-producing adenomas ("Constitutive activation of PKA catalytic subunit in adrenal Cushing's syndrome") that he says was very exciting even though it was a "two-year fight" to get published. "It was rejected," he says, adding "we rebutted over and over. These kinds of struggles are also character shaping. That was a time when exome sequencing came along and played quite a role. Everybody was rushing to their freezer and taking out tumor samples to try to figure out what the cause of these diseases were."

During the same time, he published "Somatic mutations in ATP1A1 and ATP2B3 lead to aldosterone-producing adenomas and secondary hypertension" in *Nature Genetics*, "so that was kind of a gold rush really," he says. "ENS@T helped very much by having samples and a registry and to connect with other researchers who share this interest. We were very fast getting the data, and that was exciting. You received these results back and then you think about what really the mechanism behind this is, then getting the data out there, and having the papers published appropriately."

For a recent paper Beuschlein was involved with, the process took center stage. "We had several very large consortia internationally where lots and lots of data were necessary and that really made a difference," he explains. "So, for autonomous cortisol secretion as an example, how that could be diagnosed and what comorbidities come with it. I think that will also shape diagnostics and how we treat and follow up with those patients. And, although I might have been only a minor part in that, I like having been part of shifting the boundaries of the known and to see that, in the end, it's changing clinics."

"Figuring out a mechanism is exhilarating, but you get to a point in your career where you also would like to see that you have the full circle, that it comes back to the patient and really does something good," Beuschlein says. "I'm in the position that I have been able to do both basic science translational things and clinical studies that transform clinical practice."



An Endocrine Society member since 1979, John William Honour. PhD, FRCPath, used his time in lockdown to write a voluminous tome on steroids. He talks to Endocrine News about his recent book, Steroids in the Laboratory and Clinical Practice, how it was impacted by the COVID-19 pandemic, and why it may just be the definitive book for endocrine researchers and clinicians alike.

NORD of Honour

John William Honour, PhD, FRCPATH, discusses his recent book on steroids.

ast year, John William Honour, PhD, FRCPath, a retired consultant clinical scientist at University College London Hospitals in the U.K. with more than 45 years of laboratory work in steroid endocrinology, published *Steroids in the Laboratory and Clinical Practice*, a comprehensive reference book that addresses the specificity of steroid determinations that can clarify confusion clinicians face with abnormal laboratory results.

Published by Elsevier, *Steroids in the Laboratory and Clinical Practice* includes all the information needed to understand the key concepts of steroid synthesis, action, and biological effects. When faced with a patient and a steroid-related problem the biological tests, their results, the alternatives, reference ranges, and algorithms leading to a diagnosis of a disorder of the system need to be understood. This is a complex and fast-changing field with many unanswered questions with opportunities open to create future challenges. The book covers both basic and analytical applications of steroids to medicine in one source.

Endocrine News spoke with Honour to talk about his career, how the COVID-19 pandemic impacted his writing process, and why this book should be the "go-to" book for clinicians, researchers, pathologists, laboratorians, analytical biochemists, and students interested in this group of hormones that has fascinated him for half a century.

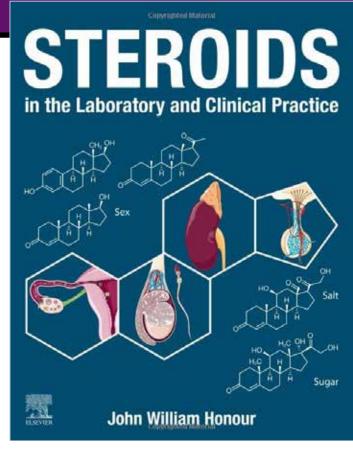
Endocrine News: What first attracted you to biochemistry? From there, what led you to endocrinology and the study of steroids?

BY DEREK BAGLEY

JOHN WILLIAM HONOUR: I came to biochemistry from work experience in bacteriology. Organisms were cultured on petri dishes covered with a layer of agar. If bacteria were present, they multiplied and formed colonies. From there the bacteria could be transferred to a microscope slide and stained with dyes before viewing under the microscope. The bacteria are seen as cocci, rods, spiral, and other shapes. Organisms were also put into sugar solutions to see if they produced gas or a change in color of the solution to indicate formation of acids. I wanted to know about the reactions that caused these changes, which is why I wanted to study biochemistry.

I received a bachelor's degree in applied biochemistry from Bath University in 1972, where I conducted my first research in steroids (with Professor R. Hardisty) by studying changes in enzyme activity of testes of lampreys as they migrated from salt to fresh water to reproduce and die. After graduation, I started my professional life as a senior research officer at the MRC Clinical Research Centre (CRC) in Harrow, England, that was based on the National Institutes of Health (NIH) model. I completed a PhD in biochemistry from the University of London in 1978 supervised by Cedric Shackleton and Professor Vivian James. My education in the application of mass spectrometry (MS) for steroids was due to Cedric who has continued to pioneer studies using MS technology.

Gas chromatography — mass spectrometry (GC-MS) was really new in 1972, and yet remains a powerful analytical tool for steroids with better resolution than high pressure liquid chromatography (LC). The success of LC with MS came when spray techniques at the interface with a mass spectrometer enabled





John Honour, Celso Gomez-Sanchez, and Zig Krozowski taken during a break at the 6th Conference on the Adrenal Cortex held in Ardmore, Okla., in September 1994.

66 These hormones and their metabolites, once considered inert, are now all playing important pivotal functional roles. **My professional** journey provided me with unmatched broad experiences of steroids in clinical practice that enabled me to write the book for others to benefit."

coupling of the two elements. LC-MS does not require derivative formation thus saving valuable time in a hospital laboratory, processing hundreds of samples each day.

EN: Tell us about your more than 40 years of activities with the Endocrine Society.

HONOUR: I am now an emeritus member, but I first joined the Endocrine Society in 1979 and have regularly attended **ENDO**, which afforded me the opportunity for networking with other steroid research "stars" and up-andcoming research stars and provided important opportunities to recognize new research elements and exchange results and ideas. I count many heroes in the Endocrine Society — Cedric Shackleton, PhD, DSc; Walter Miller, MD; Maria New, MD; Bert O'Malley, MD; John Funder, MD, PhD; John Coughlan, AO; Perrin White, MD; and emigrants from the U.K. — Evan Simpson, BSC, PhD; Robert Carey, MD; David Morris, PhD; and others. In the U.K., I have high regard for Sir Christopher Edwards, FRSE, FMedSci; Paul Stewart, MD, FRCP; Stafford Lightman, FMedSci, FRS; and more.

EN: Can you give us an overview of *Steroids in the Laboratory and Clinical Practice* and what readers could expect from it?

HONOUR: The book covers in three parts: basic chemistry, methods for steroid analysis, and clinical application of steroids in a single source. The comprehensive reference book addresses the specificity of steroid determinations to clarify confusion arising from the laboratory results. The book covers important advancements in the field and is a valuable addition to the literature addressing many existing knowledge gaps. I hope the book will be a 'must have' reference for pathologists, laboratorians, endocrinologists, analytical/clinical chemists, and biochemists. The book is particularly useful in three areas:

- Addresses the normal production of steroids and concentrations found in biological fluids and tissues;
- Presents the changes in steroid concentrations at life events as reference points for clinical investigations; and
- Reviews the genetic disorders of steroids in relation to specific enzyme changes and clinical presentation.

The book is somewhat a summary of my broad experience of steroid endocrinology over 45 years. No such book had been published since *Steroid Hormones* by David Gower in 1979, but much has changed since then.

EN: Tell us a little about the process of writing the book.

HONOUR: I started with the 170 papers and 19 book chapters that I authored as well as the lectures given to students and at conferences, so writing the text of the book was not difficult. The biggest problem was getting permissions for copyright content; this was a retrospective exercise. I would now advise any book author to collate that information whilst writing. The book ended up as a 1,000-page monster from nearly 320,000 words, unfortunately as a paperback. There are more than 730 figures and 120 tables to enhance comprehension of wide-ranging and often complex material.

The book was partly written in 2020 and 2021 during the COVID-19 pandemic. Because of health problems, I was placed by the U.K. government into lockdown, which meant not being able to leave the house for nearly 24 months. That time enabled me to focus on writing the book during a period when some people often struggled with the purpose of life when confined to the house.

EN: Can you point to an example or an anecdote of a clinician being stumped by an abnormal lab result. How will this book alleviate that confusion?

HONOUR: I have many examples in which a clinician is stumped by a laboratory result. A biotin diet can affect the performance of steroid assays where a biotin-streptavidin combination is the endpoint of an immunoassay. Having as a pet a mouse, rat, or sheep can lead to a generation of animal antibodies that react with the reagents of steroid immunoassays (heterophilic antibodies). It was always thought that licorice causes hypertension because it acted like aldosterone. We now know that licorice inhibits an enzyme that oxidizes cortisol in the kidney tubules allowing cortisol to act on the aldosterone receptor. Steroid assays based on mass spectrometry are not subject to these interferences although the ability of chromatography to separate components of the test must be confirmed. MS looks at the molecular weight of the analyte so steroids of the same composition must be apart from the steroid under investigation. Clinicians see MS tests as the gold standard that the laboratory must prove.

EN: Finally, what do you hope readers take away from your book?

HONOUR: This should become the go-to book for answers to questions around steroids. These hormones and their metabolites, once considered inert, are now all playing important pivotal functional roles. My professional journey provided me with unmatched broad experiences of steroids in clinical practice that enabled me to write the book for others to benefit.

- BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. IN THE JANUARY ISSUE DEVOTED TO THYROID CANCER, HE WROTE ABOUT VARIOUS OPTIONS FOR TREATING HYPOPARATHYROIDISM AND THE NEED FOR A UNIVERSAL RISK-STRATIFICATION SYSTEM FOR THYROID NODULES.

66 The book covers important advancements in the field and is a valuable addition to the literature addressing many existing knowledge gaps. I hope the book will be a 'must have' reference for pathologists, laboratorians, endocrinologists, analytical/clinical chemists, and biochemists."

Endocrine News Talks with 2024 Endocrine Society Laureate, Vincent Prevot, PhD Dream of SCEENCE

Prevot and researcher Ines Martinez-Corral examine confocal microscope images of fluorescent GnRH neurons from a section of rat brain.

BY GLENDA FAUNTLEROY SHAW

When he was only 16, Vincent Prevot, PhD, became the youngest member of the French Society of Herpetology. Endocrine News finds out how a teen's fascination with snakes gradually evolved into a passion for neuroendocrinology that resulted in being the recipient of the Endocrine Society's 2024 Edwin B. Astwood Award for **Outstanding Research in Basic Science**.

> Discussion around the cryocut with Daniela Fernandois (postdoctoral researcher from Chile), who is cutting up a brain; Ines Martinez-Corral (the last permanent researcher hired by the laboratory, who happens to be a Spanish national); and Nuria Llontop Lopez, a Peruvian doctoral student visiting from the University of San Sebastian in Chile.



t all started with snakes! For Vincent Prevot, PhD, a childhood love of zoology soon grew into a fascination with the lives of snakes and their reproductive cycles. And at age 16, Prevot became the youngest ever member of the French Society of Herpetology. It was there where his passion for science and discovery was cemented, and his intrigue with reproduction has never waned.

The Endocrine Society has bestowed Prevot with the 2024 Edwin B. Astwood Award for Outstanding Research in Basic Science for his significant contributions to the field of mammalian reproduction. He is a research director at Inserm (French National Institute of Health and Medical Research), and laboratory head of Development and Plasticity of the Neuroendocrine Brain at Lille Neuroscience & Cognition, France. His research into neuronal and glial plasticity in the GnRH system is crucial for understanding the onset of puberty and adult fertility.

Endocrine News recently asked Prevot about the research goals he's set for the next five years and more about how a love for reptiles led to where he is today.

Endocrine News: The Laureate Award is named in honor of the late Dr. Edwin Astwood, who's known for his contributions to the treatment of hyperthyroidism. What did news of the recognition mean to you?

VINCENT PREVOT: The news of this recognition is truly humbling and inspiring. I'm also very grateful to the European Society of Endocrinology for proposing my candidacy for the Edwin B. Astwood Award at the Endocrine Society. The Laureate Award holds particular significance for me. Dr. Astwood's pioneering contributions to hyperthyroidism treatment have laid a strong foundation in endocrinology. As someone working in neuroendocrinology with a focus on the hypothalamus, this acknowledgment underscores the interconnectedness of our work within the broader endocrine field. It motivates me to continue pushing the boundaries of knowledge in neuroendocrinology, contributing to the collective progress of understanding the

LABORATORY NOTES



Vincent Prevot, PhD

[The Laureate Award] motivates me to continue pushing the boundaries of knowledge in neuroendocrinology, contributing to the collective progress of understanding the intricate mechanisms that govern hormonal regulation. This is especially crucial in the context of body-tobrain communication in health and disease, as well as the putative involvement of neurohormones in higher brain function."

intricate mechanisms that govern hormonal regulation. This is especially crucial in the context of body-to-brain communication in health and disease, as well as the putative involvement of neurohormones in higher brain function.

EN: Your current work focuses on the brain circuits that control reproduction and metabolism. Can you share your research goals for the next five years?

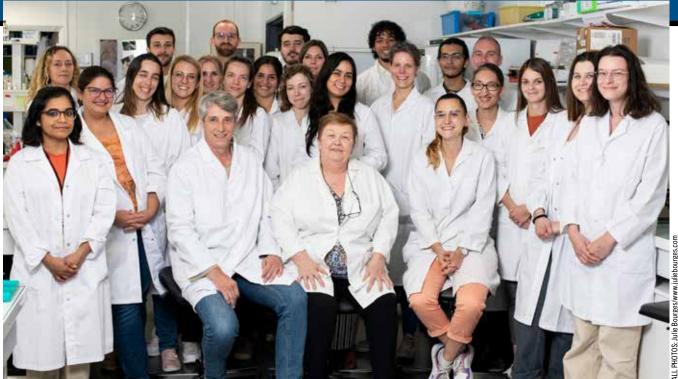
PREVOT: Over the next five years, our research goals center around leveraging our expertise in neuroendocrinology and basic science to address critical aspects of human pathophysiology. We aim to deepen our understanding of the interactions between hypothalamic neuroendocrine systems and peripheral hormones, particularly their role in postnatal brain development. Recognizing the potential consequences of impairments in this interplay, we intend to investigate how such disruptions may contribute to major neurological and psychiatric disorders.

Furthermore, our short-term objectives involve exploring the link between central neurohormone imbalances and the pathophysiology of cognitive processes, including early-onset dementias. We also plan to investigate their connection to metabolic and reproductive disorders such as obesity, type 2 diabetes, and infertility. By unraveling these intricate relationships, we aspire to contribute valuable insights that could lead to the development of innovative diagnostic tools and treatment strategies for patients facing these complex health challenges. Our overarching goal is to translate our knowledge into tangible advancements that can positively impact clinical outcomes in the near future.

EN: How many young researchers make up your laboratory team? What has been the most rewarding part of making discoveries with them?

PREVOT: The most rewarding aspect of making discoveries with our diverse team of young researchers is the collaborative journey itself. We work closely with emerging talents from a multitude of international horizons, including Chile, Greece, India, Italy, Mexico, North Africa, and Spain, as well as French nationals. This eclectic mix of backgrounds, encompassing both medical and basic science expertise, adds a unique flavor to our collaborative efforts.

Furthermore, our lab has become a hub for knowledge exchange, attracting researchers from various parts of Europe who visit for short periods to learn the specialized techniques and approaches that we have mastered. It's fulfilling to witness this cross-



Prevot, pictured here with his laboratory team in 2023, stresses the importance of knowledge exchange from a variety of labs around the world. "It's fulfilling to witness this cross-cultural exchange as we share our expertise, allowing these visiting researchers to transfer valuable skills and insights back to their own labs," he says. "This dynamic collaboration not only contributes to the success of our projects but also fosters a vibrant learning environment."

cultural exchange as we share our expertise, allowing these visiting researchers to transfer valuable skills and insights back to their own labs. This dynamic collaboration not only contributes to the success of our projects but also fosters a vibrant learning environment.

To underscore the impact of our collaborative efforts, it is particularly gratifying to note that several of our former PhD students and postdocs have gone on to establish their own research groups in prestigious institutions across Europe, including France, the U.K., Germany, and Switzerland. This achievement is akin to receiving one of the greatest awards in our field, as it speaks to the enduring legacy of our lab and the significant contributions of our team members to the scientific community on an international scale.

Our work is supported by the transformative funding scheme of the European Union via the European Research Council (ERC) Synergy grant. This grant has enabled us to establish a unique collaboration with the labs of Markus Schwaninger at the University of Lubeck in Germany, and Ruben Nogueiras at the University of Santiago de Compostela in Spain. Under this grant, we function as a single laboratory, breaking down geographical barriers and enhancing our collective ability to make groundbreaking discoveries. This synergy not only

amplifies the impact of our research but also serves as a model for effective international collaboration within the scientific community.

EN: Do you recall what sparked your early curiosity in science?

PREVOT: From an early age, my ambition to become a scientist was crystal clear — it was my enduring dream. A deep passion for zoology steered me toward the fascinating realm of the intricate ecophysiology of snakes, where I explored their captivating life and reproductive cycles. At the age of 16, I achieved a significant milestone by becoming the youngest member of the French Society of Herpetology. This extraordinary experience served as a gateway, seamlessly connecting the academic and amateur worlds. Immersing myself in the intricacies of breeding reptiles in captivity, I encountered the scientific approach, unraveling the complexities of reproduction, metabolism, and the profound influence of environmental factors such as light and temperature on these processes. This pivotal experience not only provided insights into the world of reptilian physiology but also ignited a lifelong curiosity for scientific exploration.

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

Beating Simple Tips to Make Patient

Encounters More Efficient

BY MICHAEL MORKOS, MD, MS, MHI, ECNU

he patient encounter is the core of clinical physician practices. That's why we went to medical school in the first place. The excitement and passion for seeing sick patients and helping them on their healing paths is a lofty ambition indeed.

One obvious skill set is to be a good clinician. However, there is a much-needed skill set that often gets overlooked, and that is to have the ability to ensure an efficient workflow. Here, I would like to highlight some tips for documentation, placing orders, and optimizing the electronic health record (EHR) workflow. All of these can be challenging, but hopefully some of these tips can help you in your practice.

The Eyes Have It

Different physicians can have many different approaches to documentation. Here are some of the many I saw:

- ► TALKING TO THE PATIENT WITH EYES GLUED TO THE COMPUTER SCREEN. Efficient? Yes. Pleasing bedside manner? Not so much. The satisfaction scores may need improvement, too. Continuous eye contact is critical.
- **TALKING TO THE PATIENT THROUGHOUT THE VISIT AND DOCUMENTING AFTERWARD.** While the patients are frequently happier, the physicians are usually behind with their documentation and might even postpone their notes till the end of the day, especially on busy days when they're already behind. They will reason that patient care is more important than documentation.
- **DICTATING IN FRONT OF THE PATIENT.** Although efficient, I see it as a bit less professional and interferes with the basics of good communication.



Michael Morkos, MD, MS, MHI, ECNU

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This workflow facilitates going to the clinic 5 to 10 minutes earlier and leaving when the last patient does. Isn't it great? I almost always leave the office by that time with finished notes, charges, and a clean inbox."

- MICHAEL MORKOS, MD, MS, MHI, ECNU

away, I II lorget them, which can be a big problem. I also like to have good communication with my patients. That's why I love touch typing. I'll talk to the patients and maintain eye contact while my hands are typing the notes. Sometimes, I need to look at my screen for a few seconds, like when placing orders or renewing medications. I'll mention it, and I won't be conversing at that point, but I make my best effort to maintain continuous eye contact during active discussions.

I requested an adjustable cart and a laptop in each clinic to achieve this. Sitting comfortably or standing in the exam rooms and facing the patient during clinical encounters would be optimal. Many room designs need to have the computer set up that way. Commonly, you'll have to rotate

TIPS FOR OPTIMAL PATIENT CARE

- Draft your note before seeing the patient.
- Maintain eye contact (touch typing is a valuable skill).
- Get an adjustable cart and a laptop.
- Place all future orders to be done before the next visit.
- Provide detailed printable instructions.
- Finalize your note upon finishing the encounter.

your neck 45 to 180 degrees to face the patient while typing on the pre-installed desktop, which can be murder on your back.

Doctor's Orders

Endocrinology is a lab-heavy specialty; I can only adjust the many medication doses I manage based on lab results. Frequently, the results impact my questions during the patient's visit. For example, if a patient had a recent TSH of 1.5, the visit would likely be straightforward, and I'd continue the present management. On the other hand, a previously controlled hypothyroid patient presenting with a TSH of 30 mcU/mL may cause me to ask many questions about supplements, compliance, tablet colors, medicine administration, weight changes, last refill, and so on.

Therefore, that's why I order all the needed future labs during the patient's visit, set the time for their visit, and clearly ask the patient to complete the labs before I see him or her again. I provide specific instructions on fasting status, time of the day, and how many days before the visit to get the tests completed based on what labs I'm getting: Collagen type I C-telopeptide and procollagen 1 intact N-terminal propeptide, bone turnover markers can take up to two weeks to get results at my institution, while TSH and free T4 will take fewer than 24 hours.

Thankfully, most of my patients follow my instructions, which makes life easier for all concerned. I'm happy to have all the needed data during the visit, ask all the relevant questions, and have a clear and detailed plan for the patient. This makes the patient happy, and he or she can leave my office with a clear plan of action.

EHR Workflow During the Encounter

By the time I enter a patient's room, I have the old note (for existing patients) copied to a new note, and I have already selected the labs and parts of the imaging and pathology reports to include. I would also take snippets of the radiology images or insulin pump/continuous glucose monitor reports and include them in the note. As I talk to the patient, asking about the interim events and how they're doing, I'll fill that in the (Interval History) under the HPI (history of patient illness).

I'll review the outside records for the new patients before the visit. This was a tricky issue; previously, it was scanned in the chart, and reviewing it was difficult. Imagine being

WEBINAR: AN EFFICIENT CLINIC, RIGHT WORK IN RIGHT TIME

On Saturday, March 9, 2024, from 2 PM to 3 PM (EST), Morkos will further discuss best practices for the efficient workflow management of the clinic to best improve the productivity and decrease burnout. Learn how you can start on time, leave on time, and have no residual work to be done at home.

For more information and to register: https://www.endocrine.org/ourcommunity/special-interest-groups/ early-career.





only able to see a page at a time; I couldn't scroll through the pages, and it wouldn't be easy to go back and forth with your notes in the EHR. I worked hard to update the protocol, educate the staff, and have them attached as PDFs that I can have side by side with the EHR note. You can easily adjust your screen size by pulling the title bar down and using any corner to resize it. I can scroll through the PDF on one half of the screen while having my note on the other half and typing or dictating directly before the visit.

I'll usually maintain eye contact with the patient while touch-typing whatever is relevant as we go through their history. Next, I'll edit the physical exam based on my findings, and then I usually stand by the patient's side and show them what I have in the labs, imaging studies (frequently pulling the pictures), or glucose reports. The patients are usually eager to be involved in my data assessment and actively participate in the analysis and conclusions. It also makes it easier to agree on a shared plan.

Afterward, I edit the assessment and plan accordingly, then I'll type while saying it out loud to the patient. I usually start by saying: "Let me tell you what I'll write down. You can access it through the portal." This way, they know that I'm not hiding anything. I usually write in the plan what I'll copy and paste under patient instructions. I'll order all the needed work-up to be done soon, if necessary, and before the upcoming follow-up visit, along with reconciling the medications. I'll finalize the instructions afterward with all these details.

When the patient leaves, I'm ready to finalize the note, place the charge, and prepare for the next patient. This is the usual rule that I do almost all the time. By the time the last patient leaves, I'm done with all the notes and charges for that day. In between patients, I go through the inbox, messages, and results, and aim to finish them by that time.

This workflow facilitates going to the clinic 5 to 10 minutes earlier and leaving when the last patient does. Isn't it great? I almost always leave the office by that time with finished notes, charges, and a clean inbox.

That's why the clinic, especially an endocrinology clinic, is a beautiful practice with a low chance of burnout. Building an efficient practice is a learning curve, and it's 100% worth it!

Morkos is codirector of the IUH Thyroid and Parathyroid Center, and assistant professor of clinic medicine in the Department of Endocrinology, Diabetes, and Metabolism at the Indiana University School of Medicine, in Indianapolis. An Endocrine Society member since 2015, he is an active member of the Society's Early-Career Special Interest Group. Feel free to contact him at: info@MDEfficacy.com.

TAKE ACTION

As this issue of *Endocrine News* went to press, Congress passed another short-term funding bill that averted a government shutdown scheduled to begin January 19 and would fund at current levels part of the government



through March 1, and the National Institutes of Health and other programs through March 8. The Endocrine Society is working to prevent expiration of Special Diabetes Program and a federal government shut down and encourages its U.S.-based members to join our online campaigns (visit **www.endocrine.org/takeaction**) to help us advocate.

For the latest information, please visit: **www.** endocrine.org/advocacy-in-action.

Endocrine Society Contributes to Women's Health Research Initiatives

s a leader in the field of women's health research, the Endocrine Society is currently engaged in high-level strategies to identify opportunities for the federal government to drive innovation and address research gaps to improve women's health.

On November 13, President Biden announced the first-ever White House Initiative on Women's Health Research; the initiative will deliver



As a leader in the field of women's health research, the Endocrine Society is currently engaged in high-level strategies to identify opportunities for the federal government to drive innovation and address research gaps to improve women's health.

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recommendations that the administration can take to improve the conduct of women's health research, set priority areas for investments, and explore new public-private partnerships to drive innovation. Following a review of the mission and goals of the initiative, our members developed a detailed comment letter sent to the White House Gender Policy Council identifying priority research areas in endocrine science as well as policy opportunities to improve the conduct of research to drive solutions more effectively to women's health issues. We are encouraged that the initiative has already mentioned opportunities consistent with our suggestions, such as research on menopause and cardiovascular disease in women.

Meanwhile, the National Academies of Sciences, Engineering, and Medicine (NASEM) have convened a committee to "develop a framework for addressing the persistent gaps that remain in the knowledge of women's health research across all NIH Institutes and Centers (ICs)." While focused on research priorities, the consensus committee will also evaluate workforce and training issues, along with extra- and intramural processes and systems that could be improved to "optimize women's health research." We have also shared our priorities with the committee in a letter, and as this article was written, we have been invited to deliver public comments at a future meeting of the committee.

We strongly believe including endocrine expertise is fundamental to the success of these important projects and look forward to partnering with the Biden administration and the NASEM to advance women's health through research. We encourage members to examine our comment letters, which are posted on the Society's advocacy webpage. You are also welcome to share suggestions to further inform our engagement on these projects via e-mail to Joe Laakso, PhD, director of Science Policy at: **jlaakso@endocrine.org**.



Society Webinar Provides Information to Help Endocrinologists Increase Medicare Reimbursement

n January 29, the Endocrine Society hosted a webinar to educate members on a new complex care reimbursement code that endocrinologists can use in their practices.

On January 1, 2024, the Centers for Medicare and Medicaid Services (CMS) finalized the implementation of G2211, a complex add-on code that can be used by endocrinologists to pay for complex care services delivered by a provider with an ongoing relationship with the patient. Practicing endocrinologists are eligible to bill using this code for some of their patients. During the webinar, participants had the opportunity to learn about this new code and ask questions about how it can be implemented at their practice.

The Endocrine Society strongly supported the creation of this code which has resulted in increased physician reimbursement for endocrinologists. If you were unable to attend the webinar, a recording is available at the Center for Learning on the Endocrine Society's website.



END

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