DON'T MISS ENDOON Ine 2020 JUNE 8 - 22, 2020

Encoenne

THE LEADING MAGAZINE FOR _____ ENDOCRINOLOGISTS

PANDEMIC

news

Practice During a

MAY 2020

Endocrinology Practice & Science Address the COVID-19 Crisis

Why hospitalized diabetes patients with COVID-19 need a different standard of care.

JCEM editors recommend treatment protocols for COVID-19 patients with underlying endocrine disorders.

How hyperglycemia can increase mortality rates for some COVID-19 patients.

A recommendation for "physical distancing" to save more lives

ENDO ONLINE 2020 PREVIEW:

A look at the year in pituitary research and treatment

RESEARCHERS ROUNDTABLE:

A discussion with the 2020 Early Investigator Award Winners



Hormone Science to Health

Endocrine

THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

2020 - 2022 EDITORIAL ADVISORY BOARD

Henry Anhalt, DO Bergen County Pediatric Endocrinology

Sally Camper, PhD Department of Human Genetics University of Michigan Medical School

Rodolfo J. Galindo, MD Assistant Professor of Medicine Mount Sinai School of Medicine

Christian M. Girgis, MBBS, PhD, FRACP Royal North Shore and Westmead Hospitals University of Sydney, Australia

> Andrea Gore, PhD Division of Pharmacology and Toxicology University of Texas

Daniel A. Gorelick, PhD Baylor University, Houston, Texas

M. Carol Greenlee, MD, FACP Western Slope Endocrinology Grand Junction, Colo. (Faculty for Transforming Clinical Practice initiative [TCPi])

Gary D. Hammer, MD, PhD Millie Schembechler Professor of Adrenal Cancer, Endocrine Oncology Program University of Michigan

Robert W. Lash, MD Chief Professional & Clinical Officer, Endocrine Society

> Karl Nadolsky, DO Assistant Clinical Professor of Medicine, MSU College of Human Medicine SHMG Endocrinology

Joshua D. Safer, MD, FACP Executive Director, Center for Transgender Medicine and Surgery Mount Sinai Health System Professor of Medicine

Icahn School of Medicine at Mount Sinai New York, NY

> Shehzad Topiwala, MD, FACE Endocrinology Department SevenHills Hospital, Mumbai, India

Kristen R. Vella, PhD Beth Israel Deaconess Medical Center Harvard Medical School

Christina Wang, MD UCLA Clinical and Translational Science Institute Harbor – UCLA Medical Center

Mihail "Misha" Zilbermint, MD

Division of Endocrinology, Diabetes and Metabolism, Johns Hopkins University School of Medicine; Endocrinology, Diabetes and Metabolism, Suburban Hospital; Johns Hopkins Community Physicians PEDIATRIC ESAP[®]2019-2020

PEDIATRIC ENDOCRINE SELF-ASSESSMENT PROGRAM QUESTIONS, ANSWERS, DISCUSSIONS

EXAMINE YOUR EXPERTISE WITH PEDIATRIC ESAP™ 2019-2020

ENDOCEIVE

PEDIATRIC ESAP OFFERS 100 NEW CASES TO TEST YOUR PEDIATRIC ENDOCRINOLOGY KNOWLEDGE AND PREPARE YOU FOR THE 2019 EXAM.

- Interactive online module and printed reference book
- Peer-review comparisons for each question
- Detailed overall performance report
- Lab values in conventional and SI Units
- 40 ABP MOC Part 2 points and 40.0 AMA PRA Category 1 Credits[™]

Advance your pediatric endocrinology practice. Order online at endocrine.org/store

ENDOCRINE

© 2019 ENDOCRINE SOCIETY

IN THIS ISSUE

MAY 2020



34 Advise & Consult: How Endocrinologists Can Respond to COVID-19

Endocrine-related disorders can put many patients at risk for severe COVID-19 complications. An editorial in *The Journal of Clinical Endocrinology & Metabolism* provides recommendations for the specialists who treat these patients to ensure optimal care.

BY ERIC SEABORG

16 | Pandemic Parallels: Glycemic Control in COVID-19 Patients

As the COVID-19 pandemic continues to roil the world's healthcare systems, endocrinologists may have unique insights that could save lives and improve outcomes in these patients who present with elevated glucose levels and other underlying comorbidities such as obesity and diabetes.

BY DEREK BAGLEY

22 | Laboratory Leaders: Talking to the 2020 Early Investigator Award Winners

Each year the Endocrine Society recognizes endocrinologists who are in the early stages of their research careers by giving out the Early Investigator Awards. *Endocrine News* spoke to the five researchers from around the world to find out more about their award-winning research, the award's potential impact, as well as how they are coping with the COVID-19 outbreak.

BY GLENDA FAUNTLEROY SHAW

28 Master Class on the Master Gland: The Year in Pituitary Research

When the Endocrine Society launches **ENDO Online 2020** in June, attendees will be treated to Mirjam Christ-Crain, MD, PhD, from the University of Basel, Switzerland, who will discuss the top pituitary research studies in her session, "The Year in Pituitary: Clinical and Research Breakthroughs."

BY KELLY HORVATH

40 From a Distance: Encouraging Physical Distancing to Slow COVID-19

Endocrine News spoke with J. Larry Jameson, MD, PhD, editor-in-chief, *Journal of the Endocrine Society*, about his March editorial in the *New York Times* that urged physical distancing in order to save lives. He discusses the editorial's impact, as well as how the field of endocrinology could be forever changed by COVID-19.

BY DEREK BAGLEY

2 | PRESIDENT'S VIEWPOINT

Rising to the Challenges of Our Time

4 FROM THE EDITOR Adjusting to the New Normal

6 | TRENDS & INSIGHTS

Testosterone supplementation prevents ghrelin increase without suppressing appetite in healthy men with energy deficit; Larger thighs associated with lower risk of heart disease in obesity.

BY DEREK BAGLEY

8 I INTOUCH

Robert A. Gabbay, MD, PhD, takes on new role at ADA; Carol A. Lange, PhD, named new editor-inchief of *Endocrinology*; Teresa K. Woodruff, PhD, named provost at MSU and honored by AAAS.

12 | ENDOCRINE ITINERARY

Scientific meetings of interest to endocrinologists from around the world

15 | DASHBOARD Highlights from the world of endocrinology

44 | ADVOCACY

Endocrine Society scores advocacy wins in legislation, regulation, and White House policy; Endocrine Society advocates virtually to urge Congress to support researchers, clinicians, and patients; and NIH adapts to COVID-19 pandemic.

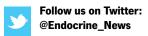
48 | ENDOGEAR

Staying Safe in the Lab & Practice BY COURTNEY CARSON 50 | CLASSIFIEDS

Career opportunities

51 | HORMONE HEALTH NETWORK COVID-19 Information for Patients

www.endocrine.org







Rising to the Challenges of Our Time

n the past couple of months, I have been in awe at the way in which our organization has responded during this unprecedented pandemic that has and will continue to change how we do what we do — personally and professionally. The Endocrine Society is adapting and will continue to rise to the challenges of our time, engaging deeply — and increasingly online — with all of you. I would like to share some of the steps our organization has taken in response to COVID-19.

ENDO Online 2020

I am very pleased to announce the launch **ENDO Online 2020**, which will take place from June 8 through June 22 with a mix of both on-demand and live programming. This is our first foray into a virtual meeting, and we hope that this will open doors to future opportunities in this emerging virtual meeting arena. We owe a huge debt of gratitude to Immediate Past

66

The Endocrine Society is adapting and will continue to rise to the challenges of our time, engaging deeply — and increasingly online with all of you. I would like to share some of the steps our organization has taken in response to COVID-19.

"

President Dale Able, MD, PhD, overall chair of **ENDO 2020** Carolyn Smith, PhD, and her 2020 Annual Meeting Steering Committee (AMSC) team working with staff leaders to put together this amazing program. We have received enthusiastic feedback from many of our endocrine investigators, clinicians, and trainees who have indicated a strong desire to continue to advance clinical knowledge and exposure to emerging science. **ENDO Online 2020** will feature on-demand sessions focused on clinical topics, live sessions dedicated to basic science oral presentations, continuing medical education sessions, programming for early-career professionals, and a digital exhibit hall. We are also working with the Trainee & Career Developing Core Committee to include leadership and professional development sessions during the virtual meeting. This will represent the largest virtual meeting to date ever held for endocrine researchers and clinicians. Moreover, we are offering this program free to the world community with over 10,000 registrants to date and more signing up daily.

Advocacy Response

I am proud of what Endocrine Society advocacy has been able to accomplish in response to COVID-19. Our advocacy team has been very quick to join other organizations in the medical and research communities and to act alone to advocate for provisions that will support researchers, clinicians, patients, medical practices, and 501c3 charitable organizations. Our advocacy has yielded some important accomplishments that will greatly benefit our members:

- We successfully advocated to the Centers for Medicare and Medicaid Services (CMS) to expand coverage for telehealth, waive the requirement for a three-month, in-person visit for patients using an insulin pump, and to allow practice of telehealth across state lines.
- We successfully advocated to Congress to fund the Special Diabetes Program and include financial protections for physician practices and 501c3 organizations in the CARES Act.
- We successfully advocated the White House to follow the advice of medical experts and not relax social distancing recommendations until experts call for that.

We conducted a "Virtual Hill Day" April 14, so that key congressional offices would hear from us as they are developing a fourth stimulus package. Our asks are to: Alleviate the shortage of personal protective equipment (PPE); increase payments for telephone-only telehealth visits; support additional funding for the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); provide people with diabetes access to a 90-day supply of test strips; and to eliminate patient cost sharing for insulin during the health emergency.

COVID-19 Member Community

We have created online resources of curated links to support our members during this unique time: www.endocrine.org/ covid19.

We reached out to endocrine division chiefs and program directors to learn more about their needs and how we can help. This section of our website will continue to be updated as we obtain more input from our members.

A new members-only online discussion group has been launched for exchange of information. If you would like to join, go to: https://community.endocrine.org/.

Working with the European Society of Endocrinology (ESE), we will coordinate a session on COVID-19 Emergency Response during **ENDO Online 2020**. We are also exploring ways to work with the ESE, the Society for Endocrinology, and the Brazilian Society of Endocrinology and Metabolism on how we can support the global trainee community during this time of disruption.

Our Journals

Submissions to our journals about COVID-19 are fast-tracked through the reviewing and publication process, and accepted articles are made free to view and placed in a special Oxford University Press repository of related content (a JCEM Editorial by Ursula Kaiser, Raghavendra Mirmira, and Paul Stewart is available here: www.endocring.org/jcemcovid19). In addition, associate editors and editorial board members have been offered support in the event their availability for handling manuscripts is restricted because of the crisis (as well as the opportunity to handle extra manuscripts if they have extra

66

While nothing is close to "business as usual," we will continue to be nimble and adapt to the needs of our members, our patients, and the world as we move forward. I firmly believe that our courage and resilience will get us through this difficult time, and we will come out stronger.

??

time). Associate editors have been asked to bear in mind that additional experiments are now often not possible, and so to limit requests for extra work to cases where this is unavoidable. Past editorial board members have been contacted and asked if they can back up current ones who are pulled away.

While nothing is close to "business as usual," we will continue to be nimble and adapt to the needs of our members, our patients, and the world as we move forward. I firmly believe that our courage and resilience will get us through this difficult time, and we will come out stronger.

I wish you all well, and please stay safe. If you have any questions or comments, please contact me at: **president@** endocrine.org.

Gary D. Hammer, MD, PhD President, Endocrine Society FROM THE EDITOR



Adjusting to the New Normal

ypically, the feature of the May issue of *Endocrine* News would be a multi-page wrap up of **ENDO** highlighting the science and practice breakthroughs presented to an audience of thousands of endocrinologists from around the world.

But, like all of you, we are adjusting to the "new normal" we find ourselves in amidst the COVID-19 outbreak. For our part, senior editor Derek Bagley and I have been working remotely since Monday March 16, as have the rest of the Endocrine Society staff. This new normal has found us all busier than ever, and, like many of you, we've all become pros at teleconferencing!

As the COVID-19 pandemic continues, it has affected the healthcare world far and wide, from hospitals and practices to research labs and classrooms. *Endocrine News* reached out to a number of members to get their stories about what they have been dealing with over the past couple of months in their labs and practices. In this issue, we are featuring three articles highlighting how Endocrine Society members are faring during this crisis:

 "Advise & Consult: How Endocrinologists Can Respond to COVID-19" by Eric Seaborg (p. 46). This article is based on the recent editorial from *The Journal of Clinical Endocrinology & Metabolism*, "Our Response to COVID-19 as Endocrinologists and Diabetologists," that offers approaches clinicians can take to make sure patients with underlying endocrine conditions receive optimal care.

From a Distance: Encouraging Physical Distancing to Slow COVID-19" by Derek Bagley (p. 52), a Q&A with *Journal of the Endocrine Society* editor-in-chief J. Larry Jameson, MD, who discusses his New York Times editorial from March, which encourages national leaders to keep physical distancing measures in place to save lives.

"Pandemic Parallels: Glycemic Control in COVID-19 Patients" by Derek Bagley (p. 26), which details why endocrinologists may have unique insights that could save lives and improve outcomes in COVID-19 patients who present with elevated glucose levels and other underlying comorbidities such as obesity and diabetes. **MAY 2020**



THE LEADING MAGAZINE FOR ENDOCRINOLOGISTS

Editor: Mark A. Newman mnewman@endocrine.org

Senior Editor: Derek Bagley dbagley@endocrine.org

Art Director/Production: Anthony S. Picco

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

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

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

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



President: Gary D. Hammer, MD, PhD president@endocrine.org

President-Elect: Carol H. Wysham, MD chwysham@comcast.net

Past-President: E. Dale Abel, MD, PhD dale-abel@uiowa.edu

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

Chief Communications Officer: Aaron Lohr alohr@endocrine.org

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

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

Print ISSN 2157-2089 Online ISSN 2157-2097 Copyright © 2020 by the Endocrine Society. All rights reserved.

 Please send letters to the editor, comments, and suggestions for Endocrine News* to mnewman@endocrine.org.

- Product print and product online display advertising, by Pharmaceutical Media, Inc., contact Joe Schuldner, jschuldner@pminy.com, or John Alberto, jalberto@pminy.com
- For classified print advertising by Pharmaceutical Media, Inc., Dan Simone, dsimone@pminy.com
- · For classified online advertising by endocareers@endocrine.org

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

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



The Endocrine Society's Marketing & Communications Department mastering Zoom during one of its weekly teleconference meetings, the "new normal" since March.

Despite the lack of ENDO 2020 taking place in real life, we are all excited about the virtual ENDO Online 2020, which has been overwhelmingly well received by the endocrine community around the world. To that end, we are providing a preview of what is sure to be a popular session, "The Year in Pituitary: Clinical and Research Breakthroughs" with an article by Kelly Horvath on page 40. She spoke with Mirjam Christ-Crain, MD, from the University of Basel in Switzerland, who will be conducting the session that highlighted over a dozen pituitary studies from the past year. "I tried to cover the different fields in pituitary," Christ-Crain says. "On the anterior pituitary side, I chose studies dealing with non-functioning pituitary adenomas, and tumors like prolactinoma, Cushing disease, and growth hormone deficiency. On the posterior pituitary side, I chose studies dealing with oxytocin on one side and vasopressin on the other side."

If you have stories you would like to share with *Endocrine News* about your experiences or even helpful ideas in dealing with the COVID-19 crisis, please feel free to email me at: **mnewman@endocrine.org**. Until next time, stay healthy and safe!

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

Pharmacological Management of Osteoporosis in Postmenopausal Women

A STANDARD FOR CARE UPDATE

CLINICAL

RACTICE GUIDELINES

Improve patient care with our new guideline update which recommends romosozumab under selective criteria as another pharmacological therapy to prevent osteoporosis and reduce fracture risk in postmenopausal women.

READ THE GUIDELINE UPDATE AT ENDOCRINE.ORG/2020OSTEOPOROSIS

© 2020 ENDOCRINE SOCIETY





BY DEREK BAGLEY Senior Editor



This effect, if present in non-obese men during severe energy deficit, may have the unintended and undesirable consequence of blunting energy deficit-induced increases in ghrelin and, subsequently, appetite.



Testosterone Supplementation Prevents Ghrelin Increase without Suppressing Appetite in Healthy Men with Energy Deficit

TRENDS & INSIGHTS

estosterone supplementation prevents an increase in circulating ghrelin but does not appear to affect appetite or energy intake in healthy men who are suffering from a severe, short-term energy deficit, according to a study recently published in the *Journal of the Endocrine Society*.

Researchers led by J. Philip Karl, PhD, RD, and Stefan M. Pasiakos, PhD, FACSM, both of the Military Nutrition Division at the U.S. Army Research Institute of Environmental Medicine in Natick, Mass., point out that severe energy deficits are common in military personnel during training, since these personnel are unable or unwilling to match such incredible energy expenditures. When this happens, they lose total body mass (TBM) and fat free mass, and their physical performance declines. The authors go on to write that substantial reductions in circulating testosterone likely contribute to these losses.

Energy deficits cause adaptive responses in order to stimulate the appetite and promote regaining TBM, and the authors note that ghrelin is thought to be an endocrine mediator of this response. Circulating ghrelin concentrations may also be regulated by testosterone, the authors write, since ghrelin is expressed in human testes, and testosterone supplementation suppresses circulating total ghrelin in pre-pubertal boys and weight-stable, non-obese, eugondal men. "This effect, if present in non-obese men during severe energy deficit, may have the unintended and undesirable consequence of blunting energy deficit-induced increases in ghrelin and, subsequently, appetite," the authors write.

The researchers sought to explore the relationship among testosterone, ghrelin, appetite, TBM, and

body composition during severe energy deficit and TBM recovery. Fifty healthy, physically active men with normal testosterone levels completed a randomized, double-blind trial that consisted of three phases. For Phase 1, the participants carried on their normal lives, but ate a TBMmaintaining diet for 14 days. Immediately following Phase 1, Phase 2 saw the participants admitted to an inpatient unit for 28 days, where they were assigned to two treatment groups either receiving testosterone supplementation or placebo.

Phase 3 began on day 43 of the study, during which participants returned to their normal diet and exercise routines. The participants were followed for another 14 days, and if by day 56 they had regained $\pm 2.5\%$ of TBM, end-of-study measurements were initiated. If participants had not met that threshold, they were followed until they regained $\pm 2.5\%$ TBM or day 84, whichever came first.

The researchers found that the participants taking placebo saw their ghrelin concentrations increase during their energy deficit and returned to Phase 1 values by the end of the study. Those taking testosterone saw no changes in their ghrelin concentrations.

Findings: "Testosterone supplementation therefore appears unlikely to appreciably influence appetite or energy intake in nonobese young men, to include military personnel, during and following periods of unavoidable severe energy deficit," the authors conclude. "However, observations strengthen evidence of testosterone-ghrelin interactions, and provide additional insight into endocrine factors potentially linking energy homeostasis and male reproductive function."

Larger Thighs Associated with Lower Risk of Heart Disease in Obesity

larger thigh circumference may be associated with lower blood pressure and a reduced risk of heart disease in people with obesity, according to a study published in *Endocrine Connections*.

In overweight and obese Chinese men and women, larger thigh circumferences were associated with lower blood pressure. These findings suggest that carrying more weight on the thighs may be a marker of better heart health in Chinese obese and overweight people, who are at a greater risk of heart disease. Thigh circumference may be useful for targeting obese and overweight people for earlier detection of high blood pressure.

Researchers led by Zhen Yang, MD, PhD, of the Shanghai Jiao Tong University School of Medicine, point out that many people are unaware they have high blood pressure as it rarely has noticeable symptoms. Therefore, identifying high-risk individuals early and employing intervention strategies such as monitoring diet or increasing exercise may help prevent further damage to blood vessels and the heart.

Circumference measurements are easy, low cost, and previously effective at evaluating risk of certain diseases — a large waist circumference is well known to be associated with elevated blood pressure, and a small thigh circumference is associated with diabetes. However, there are currently no studies that examine the potential of thigh circumference as an indicator of high blood pressure in people with obesity.

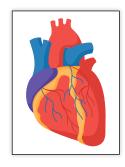
Yang investigated the association between thigh circumference and blood pressure in a population of 9,250 Chinese men and women ages 40 and older, of which 5,348 were overweight and obese, and 4,172 were normal weight.

A significant link between larger thigh circumference (more than 55 cm in men and 54 cm in women) and lower prevalence of high blood pressure was observed consistently in both men and women, independently of age, body mass index, and waist circumference. Whereas those with a small thigh circumference (less than 50cm for women and 51cm for men) were more likely to have elevated blood pressure.

"In contrast to stomach fat, leg fat may be beneficial for metabolism. The most likely cause of this association is that there is more thigh muscle and/or fat deposited under the skin which secretes various beneficial substances that help keep blood pressure in a relatively stable range," Yang says.

Findings: These findings suggest that thigh circumference could potentially be used as a convenient and inexpensive indicator for earlier detection and prevention of high blood pressure and other related complications, such as heart disease, in obese or overweight people. However, due to large differences in thigh circumferences among different races and different physical activity groups, the thigh circumference sizes in this study may not be a reference for other populations.

Yang now plans to further investigate this association by measuring body composition including thigh fat mass, thigh muscle mass, thigh bone mass, and thigh proteins. Different proportions of these components may provide clues to the association between thigh circumference and blood pressure and may help us develop future treatments.



In contrast to stomach fat. leg fat may be beneficial for metabolism. The most likely cause of this association is that there is more thigh muscle and/ or fat deposited under the skin which secretes various beneficial substances that help keep blood pressure in a relatively stable range.

"

Lange named Editor-in-Chief of Endocrinology

arol A. Lange, PhD, professor of medicine at the University of Minnesota in Minneapolis, Minn., has been named editor-in-chief of *Endocrinology*, the flagship basic science journal of the Endocrine Society.

"I'm honored to join *Endocrinology*'s mission to be the leading source of emerging hormone science and to share this knowledge in a meaningful way with scientists, clinicians and the public," Lange says. "I've dedicated my entire career to understanding the molecular and biochemical underpinnings of hormone action, and I look forward to continuing the journal's commitment to publishing fascinating original research and molecular mechanistic studies on endocrine pathways, cells, systems, and diseases."

Her three-year term as editor-in-chief begins July 1, 2020.

Lange has attended every annual meeting of the Endocrine Society since she joined in 1996, and has routinely chaired sessions, reviewed abstracts, judged posters, and led "Meet the Expert" discussions. She is a past Endocrine Society Vice President of Basic Science and currently serves on the Society's Nominating Committee.

Lange received a 2020 Laureate Award for her distinguished service and mentorship to the Endocrine Society and the field of endocrinology.

"My vision for *Endocrinology* is to be the go-to journal for basic scientists," Lange says. "I am excited to lead and foster the continued stability, success, and future growth of the journal."

Lange is a professor in the Departments of Medicine and Pharmacology at the University of Minnesota. Her research is focused on the role of steroid hormone receptors (SRs) in breast and ovarian cancers. She received her PhD from the University of Colorado School of Pharmacy in 1991. She holds the Tickle Family Land Grant Endowed Chair of Breast Cancer Research, has served on several NIH Study Sections, and is currently on the Board of Scientific Advisors to the National Institute of Environmental Health Sciences.

Endocrinology is the Endocrine Society's flagship basic science journal, a global leader in hormone science and research with more than 43,000 citations and 1.9 million article downloads a year. With continuous online-only publication and monthly issues, the first eight pages free for members, no color charges, and article-level Open Access options, *Endocrinology* accepts format-neutral manuscript submissions and pre-submission inquiries. Endocrinology can be accessed online at: https://academic.oup.com/endo.



My vision for Endocrinology is to be the go-to journal for basic scientists. I am excited to lead and foster the continued stability, success, and future growth of the journal.

66

99



Robert A. Gabbay Named ADA Chief Scientific & Medical Officer

obert A. Gabbay, MD, PhD, has been named chief scientific & medical officer (CSMO) by the American Diabetes Association (ADA) where he will oversee a new era of scientific progress and innovative care for people with diabetes.

"This new role is an exciting once-in-a-lifetime opportunity for me as an endocrinologist and someone who has moved along the continuum of greater and greater potential impactful roles in diabetes," Gabbay says. "Endocrinologists are the front-line specialists caring for those with diabetes, and many of the scientific discoveries and new treatments have come from my endocrine colleagues. COVID-19 has taught us the importance of innovating care to ensure that our expertise can be translated across the world of diabetes."

Gabbay chaired the Endocrine Society's Task Force for Innovative Models of Diabetes Care and led the "Diabetes Innovative Models of Care: Taking Back Your Practice with Innovation" sessions at **ENDO 2019** where he discussed burnout in more detail and shared useful tips with attendees. Gabbay, along with three of his fellow presenters from this session, were featured in the November 2019 *Endocrine News* cover story, "Practice Pioneers."

Since 2014, Gabbay has served as the chief medical officer and senior vice president at Joslin Diabetes Center, and associate professor at Harvard Medical School. He oversaw the clinical care of over 25,000 people living with diabetes and focused on fostering innovation as well as the education and care programs Joslin delivers nationally, regionally, and internationally.

His research focuses on new models of diabetes care to enhance patient outcomes and experiences. He has also explored better patient communication tools, creating the first broad-scale diabetes registry, designing and implementing a care management training program, leading Pennsylvania's statewide implementation of the patient-centered medical home (PCMH), and defining the medical neighborhood and the role of centers of excellence.

INTOUCH

Teresa K. Woodruff, PhD, Named Provost at MSU; Honored by AAAS



ndocrine Society past-president, Teresa Woodruff, PhD, has been named as Michigan State University's provost and executive vice president for academic affairs.

As provost, Woodruff will be the chief academic officer for the university, providing leadership for academic programs, research and outreach involving faculty, students and staff. Woodruff also will be an MSU Foundation Professor of obstetrics gynecology, reproductive biology, and biomedical engineering.

"I'm delighted to take on the role of provost at Michigan State University, a strong and vibrant AAU institution," Woodruff tells *Endocrine News.* "I look forward to my partnership with faculty and students to enable a great environment for teaching, learning, and discovery."

An expert in ovarian biology and reproductive science, Woodruff coined the term "oncofertility" to describe the merging of two fields: oncology and fertility in 2006. Oncofertility is now globally recognized as a medical discipline. In addition, she is an advocate for women in science and led efforts to change federal policy to mandate the use of females in fundamental National Institutes of Health research.

Woodruff, currently the dean of the graduate school and associate provost for graduate education at Northwestern University in Chicago, will also be wrapping up her tenure as editor-in-chief of the Society's flagship basic science journal, *Endocrinology*, on July 1. She will be succeeded as editor-in-chief by Carol A. Lange, PhD, professor of medicine at the University of Minnesota in Minneapolis, Minn.

Woodruff was recently announced as one of the 276 honorees by the American Academy of Arts & Sciences, which is both an honorary society that recognizes and celebrates the excellence of its members and an independent research center convening leaders from across disciplines, professions, and perspectives to address significant challenges.

66

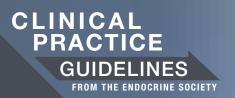
I look forward to my partnership with faculty and students to enable a great environment for teaching, learning, and discovery.

??

Woodruff joins the company of Academy members elected before her, including Benjamin Franklin and Alexander Hamilton in the eighteenth century; Ralph Waldo Emerson and Maria Mitchell in the nineteenth; Robert Frost, Martha Graham, Margaret Mead, Milton Friedman, and Martin Luther King, Jr. in the twentieth; and — in the past two decades — Antonin Scalia, Michael Bloomberg, John Lithgow, and Judy Woodruff.

Widely recognized for her commitment to teaching and mentoring, Woodruff was presented with the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring by President Barack Obama in an Oval Office ceremony in 2011. She holds 14 U.S. patents and is an elected fellow of the National Academy of Medicine, the National Academy of Inventors, the American Institute for Medical and Biomedical Engineers, and the American Association for the Advancement of Science.

Woodruff begins her new position at MSU on August 1, 2020.



Pharmacological Management of Osteoporosis in Postmenopausal Women

A STANDARD FOR CARE UPDATE

Improve patient care with our new guideline update which recommends romosozumab under selective criteria as another pharmacological therapy to prevent osteoporosis and reduce fracture risk in postmenopausal women.

READ THE GUIDELINE UPDATE AT ENDOCRINE.ORG/2020OSTEOPOROSIS



ENDOOnline2020

ENDO Online 2020 • June 8 – 22, 2020

The Endocrine Society will host its largest-ever online meeting in June to ensure endocrine researchers and clinicians continue to have access to the latest scientific information, despite the COVID-19 pandemic. **ENDO Online 2020** will feature a mixture of on-demand and live programming for both clinical and research audiences.

Sessions will address a wide-ranging variety of endocrine topics. There will be both clinical and basic science content, as well as professional development sessions.

www.endocrine.org/END00nline2020



2020 Clinical Endocrinology Update/ Endocrine Review Board

CEU East/EBR: Miami, Florida Sept. 8 – 12, 2020 CEU West: San Diego, California Oct. 23 – 25, 2020

Every year, the Endocrine Society holds Clinical Endocrinology Update (CEU), which brings together hundreds of endocrine clinicians for a unique learning experience and opportunities to network with expert faculty and colleagues. This year, CEU will once again be offered on two dates — and on the East and West coasts.

CEU 2020 East will be held in Miami, Fla., on September 10 – 12, 2020. CEU 2020 West will be held in San Diego, Calif., October 23 – 25, 2020.

CEU offers an opportunity to stay up to date on the newest breakthroughs in clinical endocrinology. Expert faculty deliver a comprehensive three-day program covering a range of clinical practice areas using interactive, casebased learning.

Endocrine Board Review (EBR) 2020 will take place in conjunction with CEU on September 8 – 9, 2020, in Miami. EBR is a case-based course designed as a mock exam, with rapid-fire questions emulating the format and subject matter of the ABIM's Endocrinology, Diabetes, and Metabolism Certification Examination. EBR provides a consolidated review for endocrine fellows planning to take the upcoming 2020 endocrine board exam and offers an early start for trainees preparing for the 2021 exam. It is also an ideal tool for practicing physicians preparing to re-certify or for those seeking an intensive knowledge assessment.

Learn more about these can't-miss events at: **www.endocrine.org**/ **meetings-and-events/ceu**.



ENDOCRINE **ITINERARY**

Before you make any travel plans, check with the sponsoring organization to make sure the events are taking place as scheduled.

American Diabetes Association's 80th Scientific Sessions: A Virtual Experience

June 12 - 16, 2020

The Scientific Sessions offers researchers and healthcare professionals an opportunity to share ideas and learn about the significant advances in diabetes research, treatment, and care. Experience major lectures, symposia, Interest Group discussions, oral abstract presentations, ePosters, and a virtual exhibit hall. Receive continuing education credits for physicians, international physicians, physician assistants, nurses, pharmacists, dietitians, and certified diabetes care and education specialists.

professional.diabetes.org/scientific-sessions

Nonalcoholic Fatty Liver Disease (NAFLD): Mechanisms and Novel Therapeutics – Virtual Event

June 30, 2020, 8 AM – 6 PM

The Nutrition Obesity Research Center at Harvard's 21st Annual Symposium presents Nonalcoholic Fatty Liver Disease (NAFLD): Mechanisms and Novel Therapeutics. This educational all-day event will feature internationally recognized speakers addressing the topic of NAFLD and the genetics behind the disease, the global and clinical burden, and mechanisms and novel therapeutics for NAFLD. Registration is free of charge and required for access to livestream link.

www.norch.org

Heart in Diabetes New York, New York

August 7 – 9, 2020

This CME conference is a unique medical meeting that brings clinical leaders in diabetes and cardiovascular disease and practicing clinicians together to improve the care of patients at a high risk of cardiovascular, metabolic, and kidney diseases. This program is designed to evaluate the clinical science aspects of diabetes, obesity, and cardiovascular disease, focusing on the heart and kidney in diabetes. The goal is to develop appropriate, comprehensive clinical management plans aligning endocrinologists, cardiologists, nephrologists, and all other interested clinicians in their understandings of the impact of diabetes and CVD outcome trials on the clinical management of these very high-risk patients.

INTERNATIONAL ITINERARY

4th Online World Congress on Diabetes and Obesity May 25 – 26, 2020

Now a virtual event, the 4th Annual World Congress on Diabetes and Obesity 2020 will provide a platform for the diabetologists, endocrinologists, and experts both from industry and academia working in various subdomains of diabetes, obesity, endocrinology, and metabolism. This meeting will include new research prospects that focus on subjects including nanotechnology in diabetes treatment, stem cell therapy in diabetes, challenges of diabetes healthcare, diabetes in young adults, cardiovascular risks in obese patients, clinical researches in diabetes, physiotherapy in diabetes, bariatric surgery, and endocrine glands and hormones apart from the broad areas of research in the field.

https://diabetesconference.euroscicon.com/

ICE 2020: 19th International Congress of Endocrinology

Buenos Aires, Argentina October 4 – 7, 2020

19th International Congress of Endocrinology (ICE 2020), 4th Latin American Congress of Endocrinology (CONLAEN), and 13th Congress of the Argentine Federation of Endocrinology Societies (FASEN) are organized by MCI Group – Argentina. Topics to be discussed include: big data and its impact in health, human diseases, artificial intelligence, and big data mining; thyroid cancer diagnosis and treatment; advances in pheochromocytomas and paragangliomas; the tsunami of diabetes in lowerand middle-income countries; preserving reproduction in cancer patients; and so much much more.

www.ice-2020.com

EndoBridge 2020

Antalya, Turkey

October 22 - 25, 2020

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

www.endobridge.org

ENDOOnline2020

JUNE 8-22 COMPLIMENTARY REGISTRATION NOW OPEN

ENDOCRINE.ORG/ENDOONLINE2020



DASHBOARD

None of the available glucose-lowering therapies we have for type 2 diabetes have been 'road tested' or thoroughly studied in the context of active coronavirus infection. There are special considerations for many of the drug classes, ranging from discontinuation to dose-adjustment, in regard to hypoglycemia, declining renal function, and ketoacidosis, that must be considered, particularly in ill patients, and in those hospitalized."

DANIEL J. DRUCKER, MD, professor of medicine, Lunenfeld-Tanenbaum Research Institute, Mt. Sinai Hospital, University of Toronto, Ontario, Canada,
 commenting on treating COVID-19 patients with glucose-lowering drugs in "Pandemic Parallels" on page 26.

MEMBER SPOTLIGHT



Bulent Yildiz, MD

Bulent Yildiz, MD, is a professor of endocrinology and metabolism at Hacettepe University of Medicine in Ankara, Turkey. His current

research focuses on obesity and neuroendocrine regulation of food intake and body weight as well as androgen excess disorders in women, particularly with polycystic ovary syndrome. Yildiz has worn many hats as a leader with the Endocrine Society - he is currently an associate editor of the Journal of the Endocrine Society and a member of the Nominating Committee. He also was a significant contributor to the Annual Meeting Steering Committee (AMSC). Yildiz is also the founder and president of EndoBridge. In 2011, he first imagined the opportunity to bridge the East and West, past and future, tradition and contemporary across the endocrinology space. Through Yildiz's hard work, EndoBridge turned from a dream into a reality, with the first event held in Antalya, Turkey, in 2013. Since its inaugural year, EndoBridge has grown substantially, hosting more than 500 physicians from across 41 countries with more than 90 cases presented. EndoBridge is cohosted by the Endocrine Society, the Society of Endocrinology and Metabolism of Turkey, and the European Society of Endocrinology.

For more member stories, go to: www.endocrine.org/member-spotlight.

By The Numbers: The Cost Of Healthcare

57 billion The impacts of people living in sociawl isolation add almost \$7 billion a year to the cost of Medicare.

- SOURCE: AARP THE MAGAZINE

The Part D Senior Savings Model will cap beneficiaries' copays at \$35 for a 30-day supply of insulin for the entire benefit year.

> - SOURCE: CMS'S CENTER FOR MEDICARE & MEDICAID INNOVATION

\$0.77 billion The global thyroid cancer drugs market was valued at about \$0.4 billion in 2018 and is expected to grow to \$0.77 billion through 2022.

- SOURCE: THYROID CANCER DRUGS GLOBAL MARKET REPORT 2020

\$1,264.7 million The

market for artificial intelligence in diabetes management will reach up to \$1,264.7 million by 2024.

- SOURCE: ARTIFICIAL INTELLIGENCE IN DIABETES MANAGEMENT MARKET GLOBAL INDUSTRY ANALYSIS



"We get this every time two of our scientists have to share the Noble."



Endocrine News was featured in a viral video from #EndTheDisparity, which encourages more representation in healthcare from the Latinx community. Ricardo Correa, MD, assistant professor of medicine, Division of Endocrinology, University of Arizona College of Medicine in Phoenix, can be seen reading his copy of Endocrine News in the video as well as showing his thyroid plushie, courtesy of the Endocrine Society's online store. Correa is a native of Panama and an alumni of the Endocrine Society's FLARE program. The complete #EndTheDisparity video can be viewed at: https://youtu.be/ TF54kUqy3pc.

As the COVID-19 pandemic continues to roil the world's healthcare systems, endocrinologists may have unique insights that could save lives and improve outcomes in these patients who present with elevated glucose levels and other underlying comorbidities such as obesity and diabetes.

Pandemic Pandemic Parallels:



COVID-19

Patients

hen this issue goes to press, the U.S. will likely still have the most cases of COVID-19 in the world, with more than 900,000 cases and 50,000 deaths. It's nothing new to call this a global pandemic, a catastrophe that has forced many people to make some very tough decisions, all while retaining hope that we'll come through this yet.

Diabetes was already a global pandemic in its own right — more than 10% of the U.S. population has diabetes, and while endocrinologists have been studying and treating diabetes for decades now, the novel coronavirus has added some novel complications for patients with diabetes.

Patients with diabetes and obesity are already at an increased risk for infections, and that includes COVID-19. What's worse, these patients are also at a higher risk of hospitalization and more severe clinical illness should they contract the coronavirus. New research even suggests that patients with *no history of diabetes* hospitalized with COVID-19 could develop hyperglycemia in the hospital, increasing their mortality risks.

Endocrinology has long been at the crossroads of many other specialties, and the COVID-19 pandemic has created some opportunities and challenges for physicians and researchers to look at how the biology of the coronavirus and diabetes might intersect, as well as how glucose-lowering therapies for hospitalized patients could save lives. The coronavirus pandemic has impacted virtually every facet of life, including treatment for patients with diabetes, and while the information (and misinformation) about this rampant infection is capricious at best, some evidence about how to care for some of our most vulnerable patients is beginning to emerge.

Insulin: "Your 99-Year-Old Friend"

Last month, Daniel J. Drucker, MD, of Mount Sinai Hospital in Toronto, published a paper in *Endocrine Reviews* entitled "Coronavirus infections and type 2 diabetes-shared pathways with therapeutic implications," that looked at how the pathophysiology of diabetes and obesity might intersect with COVID-19 biology and found key shared pathways and mechanisms linked to the development and treatment of type 2 diabetes. "Cells within the lung and gut are major sites for coronavirus entry and inflammation," Drucker says. "These cells express key proteins like Angiotensin Converting Enzyme

BY DEREK BAGLEY



2 (ACE2) and Dipeptidyl Peptidase-4 (DPP4) that are also present in the development of type 2 diabetes."

Drucker has been studying the biology of gut hormones and DPP4 for years now and found that glucagon-like peptide-1 (GLP-1) controls inflammation and DPP4 is actually a coronavirus receptor for MERS-CoV. However, in his review, Drucker points out that DPP4 is not a receptor for SARS-CoV-2 (COVID-19; this novel coronavirus), and therefore can't conclude that a DPP4 inhibitor might modify the course of critically ill patients with coronavirus infection. "My interpretation of the available data on DPP4 inhibitors does not support a unique possible benefit, nor any safety concern, when using these drugs in someone with active infection," he says.

But, Drucker isn't ruling anything out. Clinical trials could show promise for DPP4 inhibitors, but many more studies are needed before the medical community thoroughly understands the risks and benefits of using these diabetes medications in patients with coronavirus infections severe enough to require hospitalizations.

"None of the available glucose-lowering therapies we have for type 2 diabetes have been 'road tested' or thoroughly studied in the context of active coronavirus infection," Drucker says. "There are special considerations for many of the drug classes, ranging from discontinuation to dose-adjustment, in regard to hypoglycemia, declining renal function, and ketoacidosis, that must be considered, particularly in ill patients, and in those hospitalized. Some people with SARS-CoV2 have gastrointestinal symptoms that may impair absorption of ingested food or oral tablets. So lots to think about."

For now, for patients with diabetes in the hospital with coronavirus, the classics are hard to beat. As Drucker (who is prolific on social media) tweeted: "Insulin is your 99-yearold friend."

CGMs in the Hospital

The stress of contracting an infection and then being hospitalized with said infection can be a lot for anyone to handle, and that stress can wreak havoc on a body's metabolism. According to David Klonoff, MD, medical director of the Diabetes Research Institute at Mills-Peninsula Medical Center in San Mateo, Calif., the body then produces hormones that cause resistance to insulin, leading to hyperglycemia.



"These people might not have any diabetes once their illness is over, but while in the hospital, they are said to have uncontrolled hyperglycemia," Klonoff says. "They should be treated with insulin to normalize their glucose levels, just like people with a history of diabetes should be treated with insulin to get their blood glucose down to a safe target range."

Klonoff and his colleagues from Glytec and the Atlanta Diabetes Associates last month published a paper in the *Journal of Diabetes Science and Technology* that concluded patients with diabetes or uncontrolled hyperglycemia hospitalized with

Much of what I have written [in my review] is based on theory, and as noted, we obviously don't have years of learnings from clinical randomized controlled trials studying SARS-CoV-2 and diabetes. **So many of my colleagues may have different perspectives, hypotheses, and opinions. I will always listen and try and learn.**"

- DANIEL J. DRUCKER, MD, PROFESSOR OF MEDICINE, LUNENFELD-TANENBAUM RESEARCH INSTITUTE, MT. SINAI HOSPITAL, UNIVERSITY OF TORONTO, ONTARIO, CANADA

COVID-19 had an in-hospital mortality rate of 29% — four times higher than patients without diabetes or hyperglycemia. The Glytec-initiated study evaluated 1,122 COVID-19 patients between March 1 and April 6, 2020, using data transmitted to the Glytec database from 88 hospitals in 11 states, representing every part of the U.S. All patients had a laboratory-confirmed diagnosis of COVID-19, and 451 patients (40%) were designated as having diabetes, uncontrolled hyperglycemia, or A1C \geq 6.5%. For this study, uncontrolled hyperglycemia was defined as two or more blood glucoses > 180 mg/dl within any 24-hour period after admission.

"Patients with COVID-19, who are admitted with diabetes or who develop elevated glucose levels during hospitalization, have a greater risk of increased length of stay and mortality," Klonoff says. "In general, bringing elevated blood glucose levels down to normal or near-normal significantly improves a person's odds of surviving a serious hospitalization."

But that may not always be so easy. Klonoff and his colleagues write in the discussion section of their paper that hospitals are already buckling under the weight of this



AT A GLANCE

- Patients with diabetes who contract COVID-19 are at a higher risk for hospitalization and even mortality.
- The biology of diabetes shares some pathways with that of COVID-19, so it's worth investigating which drugs help stabilize glycemic control in patients with diabetes or even hyperglycemia who are hospitalized with the coronavirus. For now, insulin continues to be the preferred drug for glycemic control among these patients.
- COVID-19 continues to devastate the country, but endocrinologists are uniquely positioned to save lives and improve outcomes in patients with elevated glucose levels hospitalized with this rampant infection.

pandemic, especially with the scarcity of personal protection equipment (PPE), which can cause some hospital workers to fear they might also catch COVID-19. "As a result, the medical team might try to reduce caregiver-patient contact, with attendant risk of decreasing the frequency of BG assessments and avoiding IV insulin," the authors write.

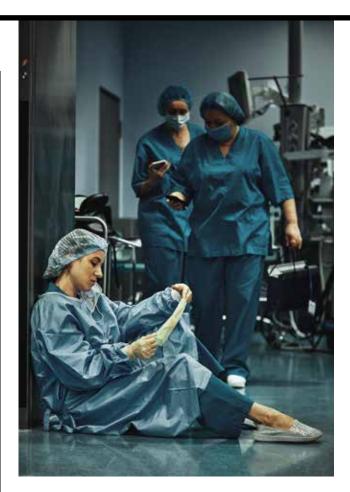
Things may be looking up on that front. In April, the FDA announced during the current pandemic that they would not object to the use of certain continuous glucose monitors in the hospital (where these products have traditionally not been cleared for use) to make decisions for insulin dosing. "That decision will free up nurses from doing so much glucose testing at the bedside and will save a lot of time, effort, and supplies of PPE," Klonoff says. "In the ICU, patients with elevated glucose levels usually require intravenous insulin, and in the wards, they usually require subcutaneous basal-bolus therapy."

Listening & Learning

Again, what we know about COVID-19 and what it means for these strange days has become a fierce torrent that's sometimes tempting to get swept up in. "The rapid flow of new clinical information stemming from the SARS-CoV-2 epidemic requires ongoing scrutiny to understand the prudent use, risks and benefits of individual glucose-lowering agents and related medications commonly used in subjects with diabetes at risk of, or hospitalized with coronavirus-related infections," Drucker writes in the conclusion of his review. "Moreover, the current

The answers to many of our key questions will come from solid science, from the laboratory to randomized clinical trials. It has never been more important to respect and invest in science. It is the foundation for our future on this planet."

 DANIEL J. DRUCKER, MD, PROFESSOR OF MEDICINE, LUNENFELD-TANENBAUM RESEARCH INSTITUTE, MT. SINAI HOSPITAL, UNIVERSITY OF TORONTO, ONTARIO, CANADA



pandemic highlights the importance of opportunities for continuing and expanding innovative delivery of diabetes care, through use of wearable and portable monitoring devices, and regular communication between people with diabetes and their healthcare providers."

"Much of what I have written [in my review] is based on theory," Drucker says, "and as noted, we obviously don't have years of learnings from clinical randomized controlled trials studying SARS-CoV-2 and diabetes. So many of my colleagues may have different perspectives, hypotheses, and opinions. I will always listen and try and learn."

Klonoff says that data from hospitalized patients is being analyzed at this time to look for associations between effectively treating elevated glucose levels and improved outcomes. He tells *Endocrine News* that there are methods for retrospectively following the course of a hospitalization using real-world evidence (RWE) to look for a relationship between lowering glucose levels and improved survival. When the number of patients being studied with a carefully constructed RWE analysis is very large, and the variables of the treatment intervention are limited (which will be the case with this type of COVID-19 data analysis), then researchers will be able to reach conclusions. Patients with COVID-19, who are admitted with diabetes or who develop elevated glucose levels during hospitalization, have a greater risk of increased length of stay and mortality. In general, bringing elevated blood glucose levels down to normal or nearnormal significantly improves a person's odds of surviving a serious hospitalization."

> - DAVID KLONOFF, MD, MEDICAL DIRECTOR, DIABETES RESEARCH INSTITUTE, MILLS-PENINSULA MEDICAL CENTER, SAN MATEO, CALIF.

"I believe that in the case of hyperglycemia treatment during COVID-19, it will not be necessary to determine a relationship with a potentially expensive and time-consuming randomized control trial (RCT)," Klonoff says. "Furthermore, there would be ethical concerns if intensive insulin therapy were to be withheld from some patients in an RCT because this approach is so well-established for other causes of hyperglycemia in the hospital besides COVID-19."

Still, everyone agrees that optimal glycemic control is crucial to the care of these patients. Careful, thoughtful adjustments to insulin dosing should be considered, and physicians should anticipate challenges with dehydration, because again, the stress of simply being in the hospital can take enough of a toll on the body to lead to poorer outcomes, Drucker says.

"The first step in improving outcomes for people with diabetes is to recognize that there is a problem with being admitted with COVID-19 and diabetes or uncontrolled hyperglycemia," Klonoff says.

The next step is to determine whether treating the elevated glucose levels brings down the excess risk. Klonoff believes the existing data already justifies the need to bring down elevated

glucose levels in the hospital in patients with COVID-19, since elevated glucose levels lead to poor outcomes for other diseases. "The second step of the research project will likely demonstrate for COVID-19, not only that there is benefit from lowering elevated blood glucose levels, but exactly how much benefit can be attained by lowering elevated blood glucose levels," he says.

Science: The Foundation of Our Future

Since the coronavirus pandemic swept over the world, a popular refrain has been, "We're all in this together" — an affirmation of community even as people are separated by the walls of their homes and social distancing policies. It's no different for all those on the front lines of delivering healthcare, even if there may be some disagreement about research conclusions or study parameters. This is a hectic time for everyone, and for now, clinical trials will continue, as well as the hope we'll be on the other side of this soon.

"Most of us take one day at a time, try to stay healthy, and accomplish as much as we can, given major constraints on our activities," Drucker says. "My own lab will try and learn much more about infection, diabetes, and interactions with gut hormone therapies."

Endocrinologists are especially uniquely positioned to save lives and improve outcomes in patients hospitalized with COVID-19. Close to half of patients in intensive care have elevated blood glucose levels or a history of diabetes. "Endocrinologists understand the risks of abnormal blood glucose levels and have the knowledge and experience to use insulin and other drugs to safely bring elevated blood glucose levels down to normal while avoiding excessive therapy that can lead to low blood glucose levels," Klonoff says.

But it's not over yet. At press time, the COVID-19 death toll stands at around 2,000 a day, even as some ignore or outright reject scientific evidence and demand to "reopen the country," even at the cost of more human lives.

"The answers to many of our key questions will come from solid science, from the laboratory to randomized clinical trials," Drucker says. "It has never been more important to respect and invest in science. It is the foundation for our future on this planet."

- BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. HE WROTE THE PROFILE OF INCOMING ENDOCRINE SOCIETY PRESIDENT GARY D. HAMMER, MD, PHD, IN THE APRIL ISSUE.

Endocrine News spoke to 2020 Early Investigator Award recipients to find out more about their award-winning research, the award's potential impact, as well as how they are coping with the COVID-19 outbreak. Laboratory shaw Laboratory Laboratory TALKING TO THE 2020 EADLY

TALKING TO THE 2020 EARLY INVESTIGATOR AWARD WINNERS

ach year, the Endocrine Society bestows several researchers in the blossoming stages of their careers with the Early Investigators Award. The award was created to help in the development of early-career investigators and to spotlight their accomplishments in endocrine-related research.

The 2020 award winners are: Mehmet Furkan Burak, MD, of Brigham and Women's Hospital in Boston; Dionysios Chartoumpekis, MD, PhD, of the University of Patras in Patras, Greece; Hisham Mohammed, PhD, of Oregon Health Sciences University in Portland; Hongxia Ren, PhD, of Indiana University School of Medicine; and Domenico Trico, MD, of the University of Pisa, Italy.

Endocrine News spoke with the five researchers to learn more about what the award means for their work.

Endocrine News: To get an idea of who comprises our "early investigators," at what stage are you in your academic fellowship or year as faculty? **Mehmet Furkan Burak:** I am a newly appointed faculty at the Brigham and Women's Hospital, Harvard Medical School, starting on July 1 upon completion of my three-year clinical endocrinology fellowship at the same institution.

Dionysios Chartoumpekis: I am a physician-scientist currently in the third year of my clinical and research fellowship in endocrinology in the Department of Internal Medicine, Division of Endocrinology, University of Patras, Greece.

Hisham Mohammed: I am in my first year of my appointment as an assistant professor [at the Oregon Health Sciences University in Portland]. My family and I recently moved from the UK to start this position.

Hongxia Ren: I joined the faculty rank as assistant professor in July 2016. I have been an independent investigator at Indiana University School of Medicine for a little over three years.

Domenico Trico: I am in my first year as an assistant professor of internal medicine at the University of Pisa (Italy).



Mehmet Furkan Burak, MD, Brigham and Women's Hospital, Boston, Massachusetts



of medical school, I have been fascinated by the impact of hormones on the entire human body. Due to my interest, I have been closely following the inspiring work of the Endocrine Society for hormone science.





Dionysios Chartoumpekis, MD, PhD, University of Patras, Patras, Greece



The ultimate goal of my research is to identify novel pathophysiologic mechanisms of insulin resistance and target them with new or repurposed drugs, or dietary supplements so as to combat obesity and type 2 diabetes.



Hisham Mohammed, PhD, Oregon Health Sciences University, Portland, Oregon







We focus on understanding how hormones such as estrogen and androgens regulate diseases breast and prostate cancer. I invented RIME, a method that allows identification of cofactors of hormone receptors. Using this approach, we attempt to understand how receptors can function in different ways under different settings. More recently, we have been working on using several different single-cell sequencing approaches to understand the dynamics of hormone response and how underlying genetic and epigenetic heterogeneity can impact this.

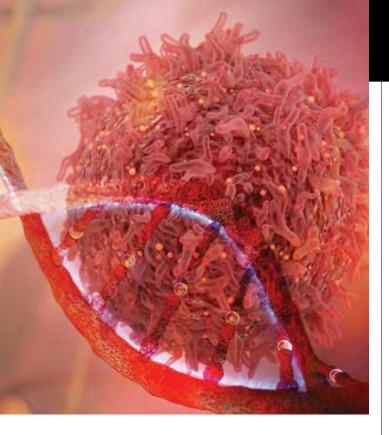
- HISHAM MOHAMMED

EN: What inspired you to apply for the award? What was your reaction when you learned the good news?

Burak: Since the beginning of medical school, I have been fascinated by the impact of hormones on the entire human body. Due to my interest, I have been closely following the inspiring work of the Endocrine Society for hormone science. It was an honor and a great joy to receive this prestigious award in the field of hormone science to which I have been passionately dedicated for many years. I deeply appreciated receiving this exciting news of major recognition of my work by my peers, mentors, and colleagues.

Chartoumpekis: When I decided to apply for this award, I had just started a six-month exchange fellowship supported by the

European Union of Medical Specialists, as part of my training, in Lausanne University Hospital in Switzerland. Having been a member of Endocrine Society for almost seven years and knowing its outstanding programs and awards to support early investigators, I was thrilled to apply for this award to get recognized for my contributions to endocrine science starting from my PhD years at the University of Patras, to the post-doc years at the University of Pittsburgh and to my current position. When I received the e-mail that informed me about the award, I was very happy to be among excellent colleagues from American and European universities who received the award this year and felt honored and humbled at the same time. I could also not wait for ENDO 2020 and the special "Excellence in Endocrinology" event and award ceremony that were unfortunately cancelled this year due to the coronavirus pandemic.



Mohammed: Despite over a decade of endocrine research, I have had limited exposure to the Endocrine Society, and hence saw this as an opportunity. I was very pleased to learn that I was awarded.

Ren: I have been a member of the Endocrine Society since my days in graduate school. Over the years, I have benefited from the years of mentored training in the endocrine field, the Endocrine Society Annual Meetings to disseminate research findings in the endocrine community, Endocrinology with its rigorous peer-review process to strengthen our publication, and the collegial support from colleagues in the Endocrine Society. I was inspired to apply for this Early Investigator Award because it provides support to assist in the development of early-career investigators and recognition of their accomplishments. I was super excited when I learned the good news. I really appreciate that Dr. Carmella Evans-Molina, who has been a mentor and role model since I joined the faculty rank at Indiana University, nominated me for this prestigious award. I am very pleased to accept the award and look forward to continuing to build and grow in the field of endocrine research. I am honored and humbled to be among the distinguished colleagues who received this award.

Trico: The Endocrine Society's award is well known among early-career investigators as it can provide worldwide recognition of your research and a career boost in the critical



Hongxia Ren, PhD, Indiana University School of Medicine, Indianapolis, Indiana



The overarching goal of our research is to characterize key molecular players in the endocrine system that function to maintain glucose and energy homeostasis. We conduct basic research by using transgenic animal models and a combination of cellular. molecular. and physiological methodologies.

77



Domenico Trico, MD, University of Pisa, Pisa, Italy

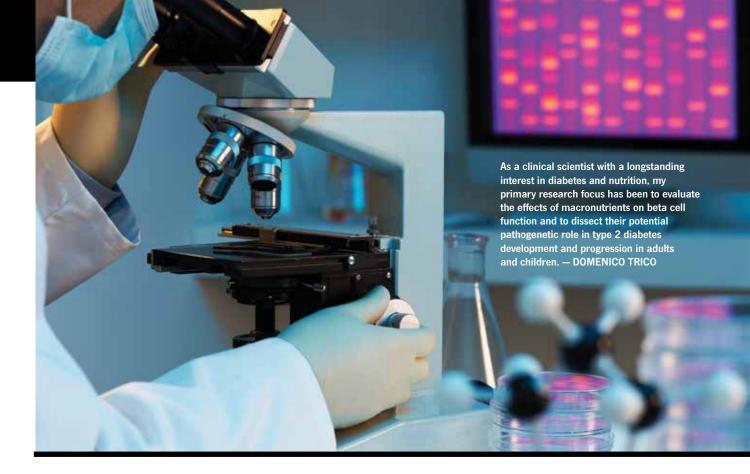




phase of transition from a postdoctoral to a tenured faculty position. For these reasons, I was excited and honored to be chosen as a recipient among other distinguished colleagues.

EN: Can you explain your research in a few sentences?

Burak: My research focuses on the role of fatty acid binding protein 4 (FABP4/aP2) in obesity-related immunometabolic diseases such as diabetes, fatty liver disease, and asthma. We are developing new therapeutic strategies against those diseases using anti-FABP4 agents. We think that FABP4 plays a critical role in the pathogenesis of metabolically driven chronic low-grade inflammatory diseases, such as obesity, diabetes, asthma, fatty liver disease, and atherosclerosis, which share similar lipid derangements and immune-metabolic underpinnings.



Chartoumpekis: My research mainly revolves around the role of druggable stress-response pathways in obesity and type 2 diabetes with main focus on Keap1/Nrf2 antioxidant pathway in liver and adipose tissue and its crosstalk with other metabolic modulators and processes, such as Fgf21, Notch, gluconeogenesis, and lipogenesis. The ultimate goal of my research is to identify novel pathophysiologic mechanisms of insulin resistance and target them with new or repurposed drugs, or dietary supplements so as to combat obesity and type 2 diabetes.

Mohammed: We focus on understanding how hormones such as estrogen and androgens regulate diseases such as breast and prostate cancer. I invented RIME, a method that allows identification of cofactors of hormone receptors. Using this approach, we attempt to understand how receptors can function in different ways under different settings. More recently, we have been working on using several different single-cell sequencing approaches to understand the dynamics of hormone response and how underlying genetic and epigenetic heterogeneity can impact this.

Ren: The overarching goal of our research is to characterize key molecular players in the endocrine system that function to maintain glucose and energy homeostasis. We conduct basic research by using transgenic animal models and a combination

of cellular, molecular, and physiological methodologies. We have also developed translational research programs through productive collaborations with basic and clinical researchers in the endocrine field.

Trico: As a clinical scientist with a longstanding interest in diabetes and nutrition, my primary research focus has been to evaluate the effects of macronutrients on beta cell function and to dissect their potential pathogenetic role in type 2 diabetes development and progression in adults and children.

EN: How, if at all, has your research been impacted by the COVID-19 pandemic?

Burak: Unfortunately, we had to close our lab, suspend our animal work and cellular experiments. I am currently focused more on the patient care to fight against COVID-19.

Chartoumpekis: My research program has been halted due to social distancing measures that were implemented the last two months. Mouse colonies had to be reduced and experiments had to be postponed for months. I am trying to retain part of my productivity by teleconference and finalizing some pending writing and review work. I understand that this is an international crisis, and there is a need to increase competitive funding in science worldwide in response to this pandemic.

Mohammed: Our labs are fully shut down. However, we are using this time to analyze sequencing datasets, write manuscripts, and other work that can be done in a non-lab setting. Importantly, at this point we all do our bit to minimize the spread of this disease.

Ren: The Indiana Stay-At-Home Order took effect on March 24. Our campus was shut down with classes going as a web-based format and research activities halted. Our research, which is almost entirely wet lab based, has been greatly disrupted.

Trico: Italy has been affected earlier and harder by the spreading of [COVID-19] than other countries. As an internist, I immediately quit my research activities to give priority to the full-time care of coronavirus patients.

EN: How do you hope the award will support your goals?

Burak: I hope that this award will give me the opportunity to reach out to other endocrine scientists from all over the world and facilitate more collaboration. Also, I am working on a unique complication of obesity, namely asthma. The obese asthmatics do not respond well to conventional therapies. I hope that this award will help to raise an awareness on this condition which urgently demands developing novel therapeutics.

Chartoumpekis: I hope that this award will increase my visibility as a physician scientist in the Endocrine Society, in the research community and academia in general, and will help me towards my goal of a tenure-track academic position. Most importantly, this award gives me strong motivation to continue being dedicated to my research projects and for my patients.

Mohammed: As a junior investigator, awards like these are important in not only boosting morale, but also increasing chances of winning research grants. Being recognized and gaining exposure to peers in the field of endocrinology is an important first step for an early investigator.

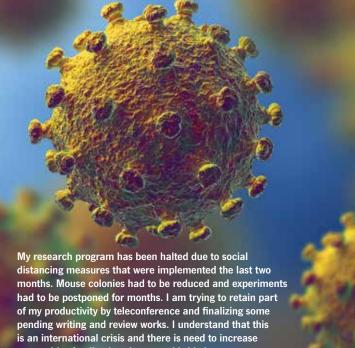
Ren: I really appreciate the support that comes with the Early Investigator Award, which includes the monetary award, the one-year complimentary membership to the Society, the one-year complimentary access to the Society's online journals, public recognition of research accomplishments in various Society platforms and an invitation to attend the *Excellence*

EARLY INVESTIGATOR AWARD

Among the benefits of the Early Investigator Award are a monetary gift and one-year complimentary membership to the Society.

> Additional information on this award and the recipients is located at: www.endocrine.org/awards/ early-investigators-awards.

The new application cycle opens in September 2020.



competitive funding in science worldwide in response to this pandemic. – DIONYSIOS CHARTOUMPEKIS

in Endocrinology event at **ENDO** (though, unfortunately, this has been cancelled). All of these will facilitate my career development as an academic researcher in the general endocrine field.

Trico: Receiving public recognition of my research accomplishments by the Endocrine Society adds weight to my research and provides fundamental support to my career advancement as a clinical scientist.

- SHAW IS A FREELANCE WRITER BASED IN CARMEL, IND. SHE IS A REGULAR CONTRIBUTOR TO *ENDOCRINE NEWS* AND WROTE ABOUT HOW THE COVID-19 OUTBREAK IS AFFECTING ENDOCRINE RESEARCH LABS IN THE APRIL ISSUE.

ENDOOnline2020

Master Class on the Master Gland:

ENDOOnline2020



When the Endocrine Society launches ENDO Online 2020 in June, attendees will be treated to Mirjam Christ-Crain, MD, PhD, from the University of Basel, Switzerland, who will discuss the top pituitary research studies in her session, "The Year in Pituitary: Clinical and Research Breakthroughs."

BY KELLY HORVATH

The Year in **PITUITARY RESEARCH**

or such a miniscule structure, the pea-sized hypophysis plays an outsized role in regulating many vital human body functions as well as general well-being.

Because the pituitary gland is a topic of such importance for endocrinologists, this June, **ENDO Online 2020** will feature "The Year in Pituitary: Clinical and Research Breakthroughs" to explore some of the latest studies to move the field forward. Indeed, the so-called "master gland" is a fitting area of emphasis for the Endocrine Society's first-ever, all-digital **ENDO** conference.

Hosted by Mirjam Christ-Crain, MD, PhD, deputy chief of endocrinology and co-head of the Department of Clinical Research at the University of Basel, Switzerland, "The Year in Pituitary: Clinical and Research Breakthroughs" will run the gamut of all things pituitary — taking a look at new treatments and diagnostic

- ► Ho K et al, "A tale of pituitary adenomas: to NET or not to NET: Pituitary Society position statement," *Pituitary*, **December 2019**
- ► **Neou M et al**, "Pangenomic Classification of Pituitary Neuroendocrine Tumors," *Cancer Cell*, **December 2019**
- Sbiera S et al, "Driver mutations in USP8 wild-type Cushing's disease," Neuro-Oncology, October 2019
- ► Batista R et al, "Cabergoline in the Management of Residual Nonfunctioning Pituitary Adenoma: A Single-Center, Open-Label, 2-Year Randomized Clinical Trial," *Am J Clin Oncol*, February 2019
- ► Vazquez-Borrego M et al, "A somatostatin receptor subtype-3 (SST3) peptide agonist shows antitumor effects in experimental models of Nonfunctioning Pituitary Tumors," *Clin Cancer Res*, October 2019
- ► **Dogansen SC et al**, "Dopamine Agonist-Induced Impulse Control Disorders in Patients with Prolactinoma: A Cross-Sectional Multicenter Study," *JCEM*, **July 2019**
- ► **De Sousa S et al,** "Impulse Control Disorders in Dopamine Agonist-Treated Hyperprolactinemia: Prevalence and Risk Factors," *JCEM*, **October 2019**
- Fleseriu M et al, "Efficacy and safety of levoketoconazole in the treatment of endogenous Cushing's syndrome (SONICS): a phase 3, multicentre, open-label, singlearm trial," *Lancet Endocrinology and Diabetes*, November 2019
- ► Johannsson G et al, "Once-weekly Somapacitan is Effective and Well Tolerated in Adults with GH Deficiency: A Randomized Phase 3 Trial," *JCEM*, February 2020
- Sävendahl L et al, "Once-Weekly Somapacitan vs Daily GH in Children with GH Deficiency: Results from a Randomized Phase 2 Trial," *JCEM*, January 2020
- Matsumoto R et al, "Congenital pituitary hypoplasia model demonstrates hypothalamic OTX2 regulation of pituitary progenitor cells," J Clin Invest, December 2019
- Winzeler B et al, "Arginine-stimulated copeptin measurements in the differential diagnosis of diabetes insipidus: a prospective diagnostic study," Lancet, July 2019
- ► **Refardt J et al**, "A Randomized Trial of Empagliflozin to Increase Plasma Sodium Levels in Patients with the Syndrome of Inappropriate Antidiuresis," *J Am Soc Nephrol*, **February 2020**
- ► Aulinas A et al, "Low Plasma Oxytocin Levels and Increased Psychopathology in Hypopituitary Men with Diabetes Insipidus," *JCEM*, August 2019
- ► Eisenberg Y et al, "Oxytocin alterations and neurocognitive domains in patients with hypopituitarism," *Pituitary*, April 2019

MENU OF STUDIES

ENDOOnline2020

"I did find the impulse control disorders with prolactinoma treatment very clinically relevant because we endocrinologists did not know much about this side effect. It's nice to now have more data from the two quite large cross-sectional studies to see the prevalence and maybe also to think about how we could act with our patients."

--- MIRJAM CHRIST-CRAIN, MD, PHD, DEPUTY CHIEF, ENDOCRINOLOGY; CO-HEAD, DEPARTMENT OF CLINICAL RESEARCH, UNIVERSITY OF BASEL, BASEL, SWITZERLAND

tests, uncovering previously unknown drug side effects that will aid clinicians in making treatment decisions, and elucidating hormone signaling pathways gone awry.

An Abundance of Research

Among any number of studies published in the past year, Christ-Crain was tasked with selecting those she most wanted to discuss during her virtual presentation. "It's quite challenging," she explains, "because the aim of the talk is to provide an overview of the most interesting papers in the field of pituitary, but there are so many interesting papers!"

With such an abundance to choose from, she opted to provide a little taste of just about everything: "I tried to cover the different fields in pituitary. On the anterior pituitary side, I chose studies dealing with non-functioning pituitary adenomas, and tumors like prolactinoma, Cushing disease, and growth hormone deficiency. On the posterior pituitary side, I chose studies dealing with oxytocin on one side and vasopressin on the other side." The neurohypophysis is, in fact, a special area of interest for Christ-Crain.

She was also intentional about featuring research groups from all over the world. "So, we have papers from Europe, United States, Australia, and Asia, and I also want to cover both basic research and clinical research. So that's a big overview," she says.

AT A GLANCE

- Mirjam Christ-Crain, MD, PhD, will present "The Year in Pituitary: Clinical and Research Breakthroughs" at ENDO Online 2020, the Endocrine Society's first-ever all-digital ENDO conference.
- Christ-Crain's talk will highlight 15 exciting pituitary discoveries published between March 2019 and March 2020.
- These 15 selections are subjective choices intended to whet the audience's appetite during the overview presentation and encourage attendees to read the full papers at their leisure.

46 I tried to cover the different fields in pituitary. On the anterior pituitary side, I chose studies dealing with nonfunctioning pituitary adenomas, tumors like prolactinoma, Cushing disease, and growth hormone deficiency. On the posterior pituitary side, I chose studies dealing with oxytocin on one side and vasopressin on the other side."

> — MIRJAM CHRIST-CRAIN, MD, PHD, DEPUTY CHIEF, ENDOCRINOLOGY; CO-HEAD, DEPARTMENT OF CLINICAL RESEARCH, UNIVERSITY OF BASEL, BASEL, SWITZERLAND

"This Talk Is Really Meant as an Appetizer"

Her roughly 50-minute presentation will focus on a total of 15 studies that were published from about March 2019 through March 2020. In such a relatively short amount of time available to present, explaining each study in depth is not possible. Instead, she says, "It's important for the people who listen to the talk to know that I will not go into detail for all of these papers. This talk is really meant as an appetizer." In other words, if audience members find a certain paper particularly interesting during Christ-Crain's presentation, they should circle back to the full course — the whole paper — to read later.

If Christ-Crain's presentation is the appetizer, then here is the "amuse bouche": "What I chose to highlight includes a couple of papers about the new genomic classification of pituitary tumors from the basic research side. I will also talk about new treatment options, for example, in non-functioning pituitary adenomas, but also highlight treatment with levoketoconazole for Cushing disease and the new long-acting growth hormone for growth hormone deficiency. I will also highlight the only relatively recently known side effect of dopamine agonists for prolactinoma, which is impulse control disorder. And, concerning the posterior pituitary, I will show the data about new diagnostic tests for diabetes insipidus, and discuss the controversial question whether there is oxytocin deficiency in patients with diabetes insipidus."

A Clinician's Perspective

Although it's easy to see how each of these investigations will contribute to greater understanding among the clinical and research communities, which will ultimately translate to better care for patients with endocrinopathies, Christ-Crain is quick to point out that her choices are inherently subjective — they are what happened to catch her eye, as a clinician.

"There were so many interesting and challenging studies; the choices I made are what I particularly like," she says. "Of course, it's very subjective to make such choices, and it's difficult to say which was the top study for me. However, I did find the impulse control disorders with prolactinoma treatment very clinically relevant because we endocrinologists did not know much about this side effect. It's nice to now have more data from the two quite large cross-sectional studies to see the prevalence and maybe also to think about how we could act with our patients. That's something I really like about those papers — I'm a clinician and a clinical researcher myself, and therefore the clinical research papers are somehow closer to my daily routine."

Attendees of "The Year in Pituitary: Clinical and Research Breakthroughs" will get a big picture of some of the pituitary-related discoveries scientists have made, as presented by Christ-Crain. These inviting studies are sure to tempt the audience to delve afterward into the details of how these discoveries were made.

– HORVATH IS A FREELANCE WRITER BASED IN BALTIMORE, MD. SHE WROTE ABOUT THE UNINTENDED EFFECTS OF CANCER THERAPY ON THE BONES IN THE APRIL ISSUE.



A Health eCareers Partner

A PLACE TO EXPLORE NEW CAREER OPPORTUNITIES

FIND JOBS, CAREER ADVICE, AND MORE AT ENDOCAREERS.

SEARCH hundreds of endocrine jobs nationwide and in your city.

SET JOB ALERTS to save time and ensure you don't miss out on your dream job.

UPLOAD YOUR RESUME to make applying to jobs easier—and activate it to make sure employers can find you.

STAY INFORMED with news and career advice.

BROWSE JOBS NOW AT ENDOCRINE.ORG/ENDOCAREERS



Endocrine-related disorders can put many patients at risk for severe COVID-19 complications. An editorial in *The Journal of Clinical Endocrinology & Metabolism* provides recommendations for the specialists who treat these patients to ensure optimal care.

> he special needs of COVID-19 patients with endocrine-related disorders must be championed lest they be overlooked in the crush of patients needing treatment, according to the lead editors of *The Journal of Clinical Endocrinology & Metabolism*. Many endocrine patients are at high risk of developing severe symptoms, so the physicians who know them best must step up to ensure that they receive appropriate care.

Editor-in-chief Paul M. Stewart, MD, and deputy editors-in-chief Ursula B. Kaiser, MD, and Raghavendra G. Mirmira, MD, co-authored a special editorial, "Our Response to COVID-19 as Endocrinologists and Diabetologists," laying out some special concerns and considerations for treating patients with endocrine-related conditions to "highlight a few areas where our discipline-specific contribution can deliver a major impact."

"These are unusual times, and unusual times call for unusual actions," says Mirmira, who is a professor of medicine at the University of Chicago. "A substantial fraction of people with active COVID disease who are in the hospital have an endocrine-related disease, and their endocrine problems will impact their treatment."

COVID-19 patients who take corticosteroids for a pre-existing condition are at high risk and need to be identified — keeping in mind that the reason a patient has been receiving steroids will influence their COVID-19 treatment.

Adrenal or Inflammatory Conditions?

Patients receiving glucocorticoids for adrenal insufficiency are generally under the direct care of an endocrinologist, who should emphasize to them the need to follow their "sick day rules" — adjustments for when patients begin to feel ill. In the era of COVID-19, the editorial notes that any patients who develop a dry continuous cough and fever "should double their daily oral glucocorticoid dose and continue this regimen until their fever has subsided." If their symptoms worsen, they should seek urgent medical care — and their providers need to be made aware of their underlying conditions and the potential need for parenteral glucocorticoids.

BY ERIC SEABORG



666 A substantial proportion of this population will have adrenal suppression/adrenal insufficiency as a result of their glucocorticoid treatment **and may be vulnerable to acute stress requiring 'stress dose steroids.''**

URSULA B. KAISER, MD, DEPUTY EDITOR, *THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; CHIEF, ENDOCRINOLOGY DIVISION, BRIGHAM AND WOMEN'S HOSPITAL, BOSTON, MASS.

"But the more worrying patients are those taking glucocorticoids whom we don't see as endocrinologists," says Stewart, a professor at the University of Leeds in the U.K. As many as 5% of the general population take exogenous steroids to treat a host of conditions, such as asthma, polymyalgia, arthritis, inflammatory bowel disease, and other immune disorders, with the express purpose of suppressing their immune systems. "The whole reason these drugs are given is to dampen down inflammation, so we know that these drugs are immunosuppressive," Stewart says. "These patients may not be able to mount a normal stress response, leaving them more susceptible to COVID-19 infection."

Many of these patients may not be receiving their steroids in consultation with an endocrinologist, and perhaps not receiving adequate advice on how their medications may affect their immune response or in-depth guidance about how to react to illnesses. And it is critical that their treatment be individualized, with their dosage and reason for receiving the medication taken into account.

To Give and Not to Give

"A substantial proportion of this population will have adrenal suppression/adrenal insufficiency as a result of their glucocorticoid treatment and may be vulnerable to acute stress requiring 'stress dose steroids," says Kaiser, who is chief of the endocrinology division at Brigham and Women's Hospital in Boston. "On the other hand, which patients this may apply to may be difficult to ascertain — those on low doses of corticosteroids may not have adrenal suppression/adrenal insufficiency, while those on supraphysiologic doses may already be on sufficient doses that their baseline dose is already equivalent to 'stress dose' levels, but these immunosuppressive doses may increase susceptibility to COVID-19. Therefore, we should consider all patients on corticosteroid treatments to be vulnerable."

In general, although COVID-19 is an acute inflammatory condition that might be thought to respond to steroid treatment, the experience with related viruses indicates otherwise. In SARS and MERS patients, glucocorticoid therapy was without benefit and even associated with higher rates of ventilator use and

666 These are unusual times, and unusual times call for unusual actions. A substantial fraction of people with active COVID disease who are in the hospital have an endocrinerelated disease, and their endocrine problems will impact their treatment."

- RAGHAVENDRA G. MIRMIRA, MD, DEPUTY EDITOR, THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM; PROFESSOR OF MEDICINE, SECTION OF ENDOCRINOLOGY, DIABETES AND METABOLISM, UNIVERSITY OF CHICAGO, CHICAGO, ILL.



The entire editorial, "Our Response to COVID-19 as Endocrinologists and Diabetologists," can be found at: **www.endocrine.org/** jcemcovid19.

mortality, leading the World Health Organization guidance to recommend against prescribing large doses of glucocorticoids to these patients. "Physiological stress doses of hydrocortisone (50–100 mg intravenously t.i.d.), not pharmacological doses of other corticosteroids, should be given," the editorial recommends.

Neuroendocrine Considerations

Another category of patients of particular concern are those with pituitary or other neuroendocrine diseases. For example, patients with hypopituitarism often have secondary adrenal insufficiency that requires glucocorticoid treatment, so should receive the same treatment as patients with primary adrenal insufficiency. But an additional consideration for these patients is that many of them also have diabetes insipidus, which can greatly complicate the management of their fluid and electrolyte balances in a flu-like illness that can feature fever, shortness of breath, vomiting, and diarrhea.

Diabetes Mellitus

The endocrine patients who are receiving more attention as the pandemic spreads are those with diabetes mellitus, obesity, and related conditions and comorbidities. These patients are not necessarily more susceptible to COVID-19 infection, but they are at much higher risk for severe complications. A Centers for Disease Control and Prevention report found that 78% of COVID-19 patients admitted to intensive care units (ICUs) and 71% admitted to hospitals had an underlying condition — with diabetes as the leading underlying condition associated with ICU care and hospital admission. The death rate in New Orleans is reportedly several times that of New York City, with Louisiana health officials attributing much of the difference to conditions such as obesity, according to Reuters. Some 97% of those who have died in Louisiana had a pre-existing condition, with diabetes and obesity the most prominent.

The danger of developing more severe cases of COVID-19 underlines the importance for these patients of following social distancing, avoiding family members with influenza-like symptoms, and other measures to avoid exposure. Mirmira says that his healthcare system, like many others, is responding to this need by replacing nonurgent office visits with telemedicine where possible and limiting contact through mechanisms like drive-up testing. Patients needing medications might be reminded to use drive-thru pharmacies and noncontact delivery options.

A Role for Endocrinologists

Mirmira noted that a rough estimate at his hospital found that some 30% to 40% of inpatients with COVID-19 have an endocrine-related disease: "When these people

AT A GLANCE

Cortisol

- Patients receiving glucocorticoids as everyday treatment are at risk for severe symptoms from COVID-19, but the reasons they receive the drugs should influence their COVID treatment. Endocrinologists should ensure that these patients' needs are considered in critical care protocols.
- Many patients who receive glucocorticoids to combat inflammatory conditions may not be under the care of an endocrinologist and aware of how their steroid treatment can affect their COVID-19 susceptibility and treatment.
- Patients with diabetes mellitus and related conditions are not more susceptible to COVID-19 infection, but they are at much higher risk for severe disease.



666 The whole reason [glucocorticoids] are given [in some patients] is to dampen down inflammation, so we know that these drugs are immunosuppressive. **These patients may not be able to mount a normal stress response, leaving them more susceptible to COVID-19 infection.**"

- PAUL M. STEWART, MD, EDITOR-IN-CHIEF, THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM; EXECUTIVE DEAN AND PROFESSOR OF MEDICINE, UNIVERSITY OF LEEDS, LEEDS, U.K.

get admitted for COVID-19, their endocrine problems begin to impact their treatment and have the potential for worsening their disease. That is what we were trying to highlight in our editorial."

Stewart notes that endocrinologists hold visible positions in referral care and major teaching centers, where they can be advocates for their patients and ensure that their needs are included in their intensive care protocols. He says that the editorial is a rallying cry

"to mobilize in whichever hospital they are to make sure the key people in their centers are aware of this guidance."

Kaiser adds that sorting out the treatment needs of patients who have received glucocorticoid therapy can be a complex and nuanced process, and endocrinologists need to be ready to consult with critical care doctors about the kinds and doses of steroids that might be needed.



Drive-thru COVID-19 testing in the parking lot of the Mahalia Jackson Auditorium in New Orleans, La. Louisiana health officials have said that the state's high death rate is due to the presence of underlying conditions in COVID-19 patients, the most common being obesity and diabetes. Photo: William A. Morgan/Shutterstock

- SEABORG IS A FREELANCE WRITER BASED IN CHARLOTTESVILLE, VA. IN THE APRIL ISSUE, HE WROTE ABOUT HOW OLDER PEOPLE WITH DIABETES BENEFITED FROM MEDICARE RULES ALLOWING REIMBURSEMENT FOR THE USE OF CONTINUOUS GLUCOSE MONITORS.



A Health eCareers Partner

A PLACE TO CARE FOR YOUR CAREER

YOU CARE FOR OTHERS—WE'RE HERE TO CARE FOR YOUR CAREER. FIND JOBS, CAREER ADVICE, AND MORE AT ENDOCAREERS.

SEARCH hundreds of endocrine jobs nationwide and in your city.

SET JOB ALERTS to save time and ensure you don't miss out on your dream job.

UPLOAD YOUR RESUME to make applying to jobs easier—and activate it to make sure employers can find you.

STAY INFORMED with news and career advice.

BROWSE JOBS NOW AT ENDOCRINE.ORG/ENDOCAREERS



From a Distance: Encouraging Physical Distancing to Slow COVID-19



Endocrine News spoke with J. Larry Jameson, MD, PhD, editor-in-chief, Journal of the Endocrine Society, about his March editorial in the New York Times that urged physical distancing in order to save lives. He discusses the editorial's impact, the importance of videoconferencing, and COVID-19's lasting impact on healthcare.



n March 24, J. Larry Jameson, MD, PhD, dean of the Perelman School of Medicine at the University of Pennsylvania in Philadelphia and editorin-chief of the *Journal of the Endocrine Society* wrote an opinion piece for the *New York Times* on behalf of himself and six other leaders in the medical community entitled "7 Medical Leaders to Politicians: Save Lives, Not Wall Street," which urged national leadership to continue with social distancing policies in order to save thousands of lives.

But March 24 was more than a month ago, and much has happened since. Protests have peppered the country, with people demanding their respective governors "reopen the country" to "save the economy." And while these protests have been small, the danger is these sentiments could spread like a contagion itself, leading to more coronavirus infections and deaths and extending these lockdown orders indefinitely.

Endocrine News caught up with Jameson to discuss his commentary in the *Times*, what it's going to take to safely and responsibly return to some kind of normality, and what to do until then.

BY DEREK BAGLEY

⁶⁶We wanted to emphasize the importance of physical distancing as a means to slow the rate of viral spread and reduce the size of a surge on our nation's health system. We have now seen this play out. The surge is occurring and has been devastating, but the physical distancing seems to be mitigating the peak."

Endocrine News: First off, how did this commentary form, from concept to appearing in the *New York Times*?

J. Larry Jameson: At a time when our country's leadership was considering strategies for dealing with the coronavirus pandemic, I thought it was important for leaders of academic medicine to weigh in. I selected co-authors who lead both the academic and clinical components of medical centers, including colleagues at Johns Hopkins, NYU, Baylor, UCSF, MGH, and Mayo Clinic. Mainly, we wanted to emphasize the importance of physical distancing as a means to slow the rate of viral spread and reduce the size of a surge on our nation's health system. We have now seen this play out. The surge is occurring and has been devastating, but the physical distancing seems to be mitigating the peak. **EN:** This opinion piece appeared at the end of March. Can you share some of the feedback you've received since then?

Jameson: First, March 24 seems long ago. The feedback has been strongly supportive. For the most part, the public wants to hear information from trusted sources — scientists and physicians. Many people have responded to this editorial and similar messages by acting responsibly.

EN: Since this piece appeared, protestors have been demanding to return to work, to "save the economy," even if it costs lives. Can you speak to that?

Jameson: We all know that we need to develop strategies to "coexist with COVID." There are active debates about timing



⁶⁶ There will certainly be transformation of clinical delivery during and following the pandemic. Endocrinologists have an opportunity to redesign workflow that includes more telehealth, remote consults, and greater use of home sensing and testing devices to monitor our patients."

and appropriate strategies for opening the economy. This is a new experience for all of us. I foresee different strategies for reopening depending on the nature of the business, the availability of testing, ability to implement containment, and the level of disease activity.

EN: You write that "physical isolation does not have to mean total isolation." That seems like an important point, especially as social distancing orders are extended. What tips can you share to retain your health while at home?

Jameson: I strongly prefer the term "physical distancing" as that is the important feature to reduce viral spread. I encourage everyone to think creatively about their new circumstances. It's a chance to reconnect with family and friends. Embrace the new forms of videoconferencing. Develop a new hobby or catch up on online CME or other activities that we never have time for. Maybe this is a chance to prepare a review article for one of our endocrine journals! Certainly, in my role as EIC at JES, we would welcome these submissions.

EN: What role do you see for endocrinologists in combatting this pandemic?

Jameson: First, there are definitely research opportunities. We are learning that risk factors include hypertension, diabetes, obesity, and cardiovascular disease, but we do not yet understand the pathophysiology. How much of the risk is caused by these disorders themselves versus perhaps medications taken for them or overlapping social determinants of health? Second, there will certainly be transformation of clinical delivery during and following the pandemic. Endocrinologists have an opportunity to redesign workflow that includes more telehealth, remote consults, and greater use of home sensing and testing devices to monitor our patients. There may be

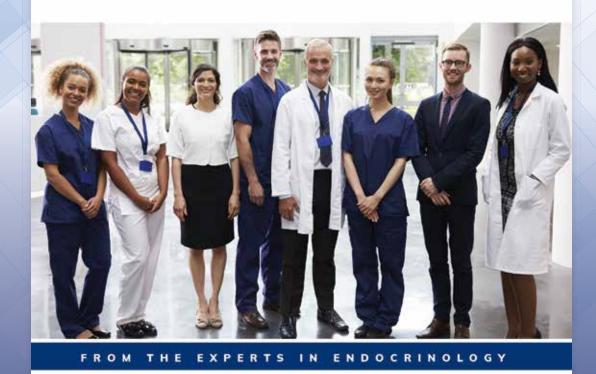
new ways to provide remote but interactive diabetic teaching or support groups. Third, we should embrace new models of teaching and learning to provide greater access and reduce costs. There will always be value in attending a large meeting like **ENDO** to renew relationships, network, meet new people, and learn about the latest advances in endocrinology. However, we can also use videoconferencing to a greater degree to interact more conveniently to share information.

EN: In your opinion, what needs to happen now so that the pandemic is at least contained, and people can safely begin to socialize again?

Jameson: Organizations and leaders are preparing thoughtful and lengthy responses to this important question. In brief, I would underscore four things: 1) Continue physical distancing strategies until the rate of infection is below $R_0 = 1$ for a sustained period of time; 2) have the ability to test, with reliable assays, both serologic immune responses, and active viral infection, along with monitoring of temperature and symptoms; 3) have the capacity to contain by quarantine and contact tracing; and 4) develop plans specific to a business, educational venue, or activity that address the logistical aspects of reopening, i.e., density of people, staffing, rotation schedules, sanitation, and detection of disease. These measures will be difficult. Different businesses and individuals will be affected disproportionately. It will be important for us to continue to emphasize a social contract in which we support one another to get through this as effectively as possible.

For the complete text of Jameson's *New York Times* editorial, "7 Medical Leaders to Politicians: Save Lives, Not Wall Street," go to: https://nyti.ms/2UxEhBL.

- BAGLEY IS THE SENIOR EDITOR OF *ENDOCRINE NEWS*. HE WROTE THE PROFILE OF INCOMING ENDOCRINE SOCIETY PRESIDENT GARY D. HAMMER, MD, PHD, IN THE APRIL ISSUE.



2020 ENDOCRINE CASE MANAGEMENT: MEET THE PROFESSOR

HEAR FROM LEADERS IN ENDOCRINOLOGY

Discover insights from the experts on how to provide care to patients with a variety of common and rare conditions. Earn 30 *AMA PRA Category 1 Credits*[™] with this compilation of case-based clinical discussions from the Meet the Professor sessions at ENDO 2020.

Available in print or eBook.

ENDOCRINE.ORG/STORE



Endocrine Society Scores Advocacy Wins in Legislation, Regulation, and White House Policy



o respond to the COVID-19 crisis, the Endocrine Society advocated to lawmakers, federal agencies, and the White House on a myriad of issues to support our member researchers, clinicians, and patients with endocrine diseases.

Our issues have ranged from the need to increase funding for research at the National Institutes of Health and the Centers for Disease Control and Prevention to the need to support labs reopening to relief for physician practices to additional health coverage and coding guidance. All of these issues can be found on the Society's COVID-19 Resources page at *endocrine.org* in the advocacy section. We are pleased that several of our advocacy efforts were successful, including:

- Our request to expand Medicare coverage for telehealth was included in the Centers for Medicare and Medicaid Services (CMS) emergency Interim Final Rule March 30;
- Our requests related to several Medicare waivers, including the three-month, inperson visit for patients with pumps and restrictions on telehealth across state lines was included in CMS emergency waivers released April 7;
- Our request to extend funding for the Special Diabetes Program was included in the CARES Act;
- Our request to support the Public Health and Social Services Emergency Fund to reimburse providers for expenses and lost revenue attributed to COVID-19 was included in the CARES Act; and
- Our request to extend social distancing measures beyond Easter was agreed to by the White House.

Endocrine Society Advocates Virtually to Urge Congress to Support Researchers, Clinicians, and Patients

s the pandemic took hold in the U.S. and communities implemented strict social distancing measures, including stay-at-home orders, the Endocrine Society pivoted its advocacy approach to Congress and launched a strategic "virtual" Hill Day to advocate our recommendations for relief legislation.

Originally, the Society had planned a Hill Day for April 20 to bring members to Washington, D.C., to meet with lawmakers and their staffs and advocate in advance of scheduled May legislation that was to include funding for the Special Diabetes Program (SDP) and potential drug pricing provisions. But then COVID-19 happened, and Congress focused its attention solely on legislation to provide relief for the pandemic. There would be no May legislation. Furthermore, there could be no visits to the Capitol.

The Society quickly re-evaluated its plan and changed its approach. While it is hard to influence policy when you cannot — to borrow a line from *Hamilton* — be in the room where it happens, Endocrine Society Government and Public Affairs staff developed a plan to have members get to key congressional offices April 14 just as they were beginning negotiations on a fourth COVID-19 relief package and share recommendations for how to support researchers, clinicians, and patients.

After hearing from our members — some on the front lines caring for patients in hospitals, some who had to close their labs, some who reported they were seeing

Our plan yielded success: We were able to connect directly with congressional offices, including the Speaker of the House, both the Senate Majority and Minority Leaders, and House and Senate leaders of key committees.



Endocrine Society staff brief Society members of the Advocacy & Public Outreach Core Committee during a Zoom call about how to participate in our virtual Hill Day as we comply with social distancing but also find ways to effectively advocate to Congress



most patients via telehealth, and some who were alarmed for their patients facing tough economic times and/or who were particularly vulnerable to the virus — we developed the following recommendations for the Hill Day:

Congress needed to:

- Alleviate the critical shortage of PPE;
- Increase reimbursement for telehealth visits that were telephone-only and could not be completed with a video connection;
- Support additional funding for the NIDDK (National Institute of Diabetes and Digestive and Kidney Diseases);
- Provide a 90-day supply of diabetes test strips; and
- Eliminate patient cost sharing for insulin.

We organized our virtual Hill Day by first identifying who in Congress would be making decisions on the legislation and then finding Endocrine Society members who lived in those congressional districts or states and could provide personal examples justifying our recommendations. Then, we created three tiers of Society participants:

Tier 1 – Society members who were constituents of a key member of Congress and who we could schedule a phone call with a senior congressional staff person in that office;

Take Action

All members of Congress need to hear from their constituents about what is needed to support researchers, clinicians, and patients. Please join the Endocrine Society's online advocacy campaign by visiting **endocrine.org/takeaction**. Our campaign will immediately direct an email to your representative and senators after you provide your zip code and contact information. This will only take a minute of your time, but it will have significant influence! **Tier 2** – Society members who were constituents of a key member of Congress and who we could not schedule a phone call for, but who could write a personalized, detailed letter and send directly to a senior congressional staff person in that office; and

Tier 3 – All other U.S. Society members who we would ask to participate in an online advocacy campaign.

Our plan yielded success: We were able to connect directly with congressional offices, including the Speaker of the House, both the Senate Majority and Minority Leaders, and House and Senate leaders of key committees. Our online campaign generated almost 1,000 letters to Congress within 24 hours. Additionally, we received positive feedback from congressional offices, including one Senate staffer who told a coalition of health groups to "work it like the Endocrine Society," and we even got press coverage in *Bloomberg News* about our virtual lobbying approach.

As this issue of *Endocrine News* goes to print in late April, congressional negotiations on the fourth relief package are difficult and ongoing. It remains unclear what will be the scope of the legislation and if Congress can pass it from a distance or address when it returns to Washington in May or June. However, because Congress was deliberating on these issues, we know our timing was critical, and we are hopeful that our concerns and asks will be addressed.

We consider the April 14 virtual Hill Day to be a success, and, based on this experience, we hope to conduct more Hill Day teleconferences even when social distancing is relaxed in order to engage more of our members and further amplify our messages. If you are interested in participating in a future Hill Day, either in person or virtually, please contact us at: **advocacy@endocrine.org**.

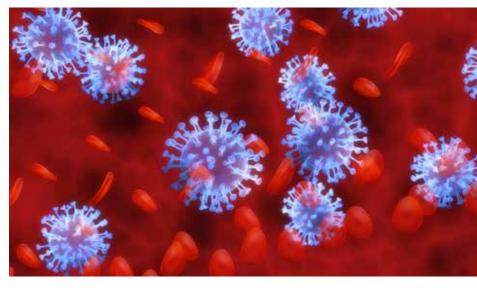
NIH Adapts to COVID-19 Pandemic

while working remotely.

Recognizing that extramural research labs are operating at a significantly reduced level or closed entirely for the near future, the NIH is trying to be as flexible as possible with administrative requirements for applicants and recipients of NIH grants. The NIH is also able to grant accommodations for loss of research time, especially for early-career

researchers. To provide the research community with a centralized information resource and updates on policies and procedures, the NIH has implemented a new COVID-19 information webpage (*https://grants.nih.gov/policy/naturaldisasters/corona-virus.htm*) for applicants and grantees that is updated regularly and includes a comprehensive history of updates.

At the same time, the NIH has mobilized resources to respond to the immediate public health threat. In addition to making use of regularly appropriated funds, the NIH has received additional funds in the recent emergency supplemental bills related to COVID-19. Through these supplements, as of April 15, 2020, several NIH ICs have received a combined total of nearly \$1.8 billion, with ~\$1.5 billion of the total to



NIAID. To get resources out to the community as expeditiously as possible, the NIH is using special competitive revision funding opportunity announcements (FOAs) and notices of special interest (NOSIs), often with rolling due dates. A complete list of FOAs and NOSIs are also compiled on the information webpage above.

This is obviously a rapidly evolving situation, and we encourage members to keep in touch with their program officers and closely monitor the NIH information webpage for updates. The Endocrine Society meanwhile will continue to work with Congress and the NIH to ensure that endocrine research questions related to COVID-19 such as chronic disease comorbidities are appropriately prioritized and supported during this critical time.

Safety First

A look at a few items that could become mandatory in the "new normal" of healthcare and research.

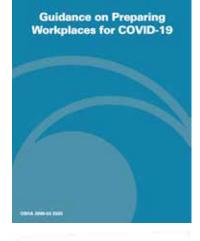
WRITTEN AND COMPILED BY COURTNEY CARSON

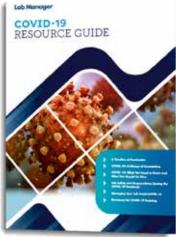
Social distancing (or physical distancing per the World Health Organization) — it's a term no one had even heard of just months ago, but now it's commonplace.

With it becoming a requirement, physical distancing isn't something we expect to completely go away in the near future. Even as guidelines are lifted, physical distancing (likely in modified forms) will remain a suggestion until a cure for COVID-19 is found. Since the most likely route of transmission is through aerosolized respiratory droplets from infected individuals and the fact that infected and contagious individuals may be asymptomatic, especially during the early stages of incubation, we must limit close contact. But what does that mean for those who cannot limit close contact to perform their essential work?

Endocrinologists cannot just stop seeing patients in person forever. Lab researchers will need to be in close proximity to test samples in the often-limited space of a lab. Clinicians must draw and sample bodily fluids for test results.

Thankfully, there are steps that can be taken, resources and products that can help in limiting the exposure to infectious diseases like COVID-19. Here, we focus on some of those items that will be helpful for those working in the endocrine field during this unprecedented time.





◄ One beneficial resource regardless of the type of workplace, whether a physician's office, lab, or any workplace for that matter, is the OSHA Guidance on Preparing Workplaces for COVID-19. It provides advisory recommendations to help employers reduce the impact of the COVID-19 outbreak on businesses, workers, patients, and anyone who enters a workplace's doors.
www.osha.gov/Publications/OSHA3990.pdf

The Environmental Protection Agency (EPA) has created the *Registered Antimicrobial Products for Use Against Novel Coronavirus SARS-CoV-2 List N: Disinfectants for Use Against SARS-CoV-2*. Products included in this list meet the EPA's criteria for use against SARS-CoV-2 on surfaces, not patients. Additional disinfectants may meet the criteria for use against SARS-CoV-2 and the EPA updates this list with additional products as needed. www.epa.gov

▲ Lab Manager suggests developing (or updating if already existing) an Infectious Disease Preparedness and Response Plan. Consider where, how, and what sources of COVID-19 exposures might impact workers. Take into consideration individual risk factors (age, medical conditions, pregnancy, etc.) and non-occupational risk factors at home and in the community and the controls needed to address those risks. Lab Manager also created the COVID-19 Resource Guide, an e-book specifically for managing labs during the pandemic.

www.labmanager.com



Tele-Endocrinology &

Modern Diabetes Care

6. m

.....

One example included in products approved for use in the healthcare setting is Avert Sporicidal Disinfectant Cleaner Wipes by Diversey Inc. These wipes should be used to clean healthcare equipment within one minute of the time the equipment touched a patient. Another option listed is FSC 35K by Ecolab Inc. This is a dilutable formula of quaternary ammonium that should be used on equipment within five minutes of patient exposure. www.diversey.com



Telemedicine has been a growing trend in healthcare in recent years, but now, more than ever, it is an essential part of healthcare. Evidence suggests that more appointments may be handled via telehealth for the foreseeable future, even as the lockdown lifts, as both doctors and patients see the ease that can come with this form of appointment

in certain instances. A wide variety of telehealth platforms exist, and there are myriad options ideal for practices of any size and specialty. **Chiron**, a Medici company, offers a platform that "manages patients with chronic conditions like diabetes and thyroid disease, and adjust various hormone and hypertension treatments" applications for teleendocrinology and modern diabetes care. **https://chironhealth.com**

Multiple aspects of diabetes can be managed through telemedicine. Another company, Visuwell, offers "applications for tele-endocrinology and modern diabetes care." Telemedicine can also make it possible to extend access to underserved markets, thus drastically reducing the burden on patients, increasing visits, and ultimately improving compliance. https://visuwell.io

▼ To learn more about telemedicine and implementing this practice, read "In Living Color: Extending Your Practice's Reach Via Telehealth," written by Cheryl Alkon in our October 2019 issue. www.endocrine.org/livingcolor



w

uwell

One thing is certain, the entire healthcare industry will be forever changed as a result of COVID-19, but thankfully the response has been unprecedented and amidst all the tragedy, there are some silver linings as the healthcare community, and the world as a whole, discover new ways of conducting business.

Endocrine News wishes all of you health and success as you navigate this next chapter along with us, and we commit to be here as a resource for our members through this pandemic and beyond.

DISCLAIMER INCLUSION IN THIS COLUMN DOES NOT SUGGEST AN ENDORSEMENT BY ENDOCRINE NEWS OR THE ENDOCRINE SOCIETY.

CLASSIFIEDS

Endocrinologist MINNEAPOLIS/ST. PAUL, MINNESOTA

HealthPartners Medical Group is one of the largest multi-specialty physician practices in the Upper Midwest. Our talented Endocrinology group has an exciting, fulltime practice opportunity for a BC/BE Endocrinologist interested in serving a diverse patient population, treating a variety of endocrine disorders, participating in resident/ fellow education and monthly educational forums, rounding at our Level 1 trauma center - Regions Hospital in St. Paul, and enjoying access to opportunities via our Research Institute and International Diabetes Center.

Join us. HealthPartners offers a patient-centered practice within a respected healthcare organization, competitive compensation and benefits, and great colleagues - all within a desirable, family-friendly metropolitan community consistently voted one of the best places to live and work. Apply online at **healthpartners.com/careers** or email your CV and cover letter to lori.m.fake@healthpartners.com. For more information, call Lori at (800) 472-4695 x1. EOE



CLINICAL PRACTICE

GUIDELINES ROM THE ENDOCRINE SOCIETY

An Exciting Opportunity for an Endocrinology Physician in the Southwest

San Juan Regional Medical Center in Farmington, NM is recruiting a second Endocrinology Physician to join a hospital-employed outpatient practice as a valuable member of our growing team of specialists.

You can look forward to:

- Compensation range of \$245,000 \$250,000 base salary; productivity bonus; quality bonus
- Lucrative benefit package
- Student loan repayment
- Sign-on bonus and relocation package Quality work/life balance



Interested candidates should address their C.V. to: Terri Smith | tsmith@sjrmc.net 888.282.6591 or 505.609.6011 sanjuanregional.com | sjrmcdocs.com

San Juan Regional Medical Center is a non-profit community-governed facility. Farmington offers a temperate climate near the Rocky Mountains with world-class snow skiing, fly fishing, golf, hiking and water sports. Easy access to cultural sites, National Parks and monuments. Farmington's strong sense of community and vibrant Southwest culture make it a great place to pursue a work-life balance.

Pharmacological Management of Osteoporosis in Postmenopausal Women

A STANDARD FOR CARE UPDATE

Improve patient care with our new guideline update which recommends romosozumab under selective criteria as another pharmacological therapy to prevent osteoporosis and reduce fracture risk in postmenopausal women.

READ THE GUIDELINE UPDATE AT **ENDOCRINE.ORG/2020OSTEOPOROSIS**



© 2020 ENDOCRINE SOCIETY



DIABETES. HEART DISEASE. LUNG DISEASE. CANCER. KIDNEY DISEASE. RARE GENETIC DISORDERS.

If you are living with one of these underlying endocrine disorders, then you are considered high-risk for complications with COVID-19. Protect your health with these recommendations.

Ensure you have enough medications to manage your condition. Take necessary precautions to prevent the spread of infection that can possibly make your condition worse.

COVID-19 SYMPTOMS



(DRY) COUGH THAT GETS MORE SEVERE OVER TIME



LOW-GRADE FEVER THAT GRADUALLY INCREASES OVER TIME



Contact your

provider if you

exhibit any of

the following

symptoms.

FATIGUE



SHORTNESS

OF BREATH

Healthcare providers have increased access to **telehealth options**, which can be helpful if you are exhibiting symptoms and want to stay safe at home, or if you are feeling anxiety and want to talk to a professional.







P HormoneHealthN





SAFETY PRECAUTIONS FROM OUR EXPERTS



Stay home and limit contact with others (social distancing)



Arrange a way to get healthy food delivered



Find creative ways to exercise at home



Practice **good hygiene** by washing your hands and sanitizing surfaces regularly



Keep your **hands away** from your face, particularly your eyes and mouth



Find a **"go-to" person** whom you're in touch with routinely



If possible, maintain a **3-month supply of medications** and supplies



Quit smoking or vaping as this can increase the risk of complications if the virus is contracted



Stay positive and find ways to **de-stress**

VISIT HORMONE.ORG

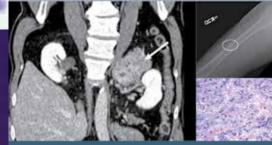
You have questions. We have answers.

Editors: Deena Adimoolam, MD; Grazia Aleppo, MD, FACE, FACP; Margaret Eckert-Norton, PhD; Caroline Davidge-Pitts, MBBCH



ESAP

ENDOCRINE SELF-ASSESSMENT PROGRAM QUESTIONS, ANSWERS, DISCUSSIONS





"This was a great review in endocrinology; it was comprehensive and will help me in my practice" - Beth Cohen, MD

"Overall, nice diversity of endocrinology topics with isolation of some problem issues in managing patients and their diseases" – Lori Roust, MD

EXAMINE YOUR CLINICAL KNOWLEDGE

ENHANCE YOUR PATIENT CARE WITH THE LEADING SELF-ASSESSMENT TOOL IN THE FIELD.

- Features 120 common and rare cases across the spectrum of endocrinology, diabetes, and metabolism
- Includes access to the online module as well as a printed reference book, with measurements in conventional and SI Units
- Certified for up to 40 AMA PRA Category 1 Credits™ and ABIM MOC Points

GET YOUR COPY OF ESAP 2020 TODAY AT ENDOCRINE.ORG/STORE.





MARCH 20-23, 2021 SAN DIEGO, CA, USA SAN DIEGO CONVENTION CENTER

ENDOCRINE.ORG/ENDO2021

