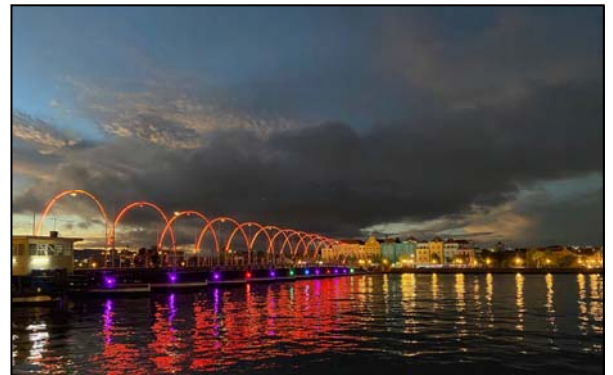
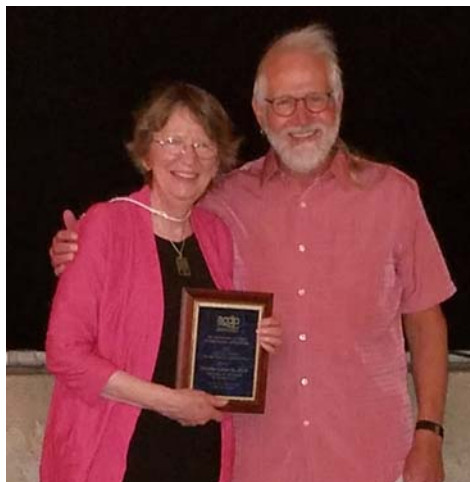


## Association of Chairs of Departments of Physiology 2021 Leadership Retreat Highlights

The Association of Chairs of Departments of Physiology (ACDP) held its annual Leadership Retreat at Renaissance Curaçao Resort in Willemstad, Curaçao, on December 2-5, 2021. It was good to be together again after the meeting had to be cancelled in 2020 because of COVID-19.



President Dale Buck Hales, Ph.D. (Southern Illinois Univ. Sch. of Med.) developed a program focused on professional development for students and faculty at all levels.



The 14th annual Arthur C. Guyton Lectureship was given by Christin Carter-Su, Ph.D. (University of Michigan Med. Sch. and was entitled “In Praise of Signal Transduction: Discovery of Pathways Affecting Growth, Obesity and Cancer.”

Photo by Karen Hales

The 2021 ACDP Distinguished Service Award was presented to Walter F. Boron, M.D., Ph.D. (Case Western Reserve Univ.) who gave a talk highlighting his career as a physiologist and those mentors who were so influential along the way (see accompanying article).

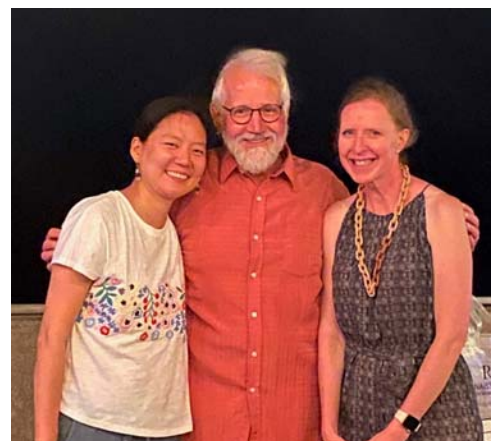
Research talks this year were given by several new chairs in the TED talk format, instead of a single chair as in previous years, allowing attendees the opportunity to learn more about the new members.

In addition, Donald J. Vander Griend, Ph.D., gave a well-received and talk on Physiology in the Age of Informatics, elucidating the new field in an understandable manner.



Paul M. Carvey, Ph.D. (Rush Univ.) talked on “Commonalities and Tricks of the Trade for Successful Grant Applications,” which contained a working outline for students and new faculty writing their first grants.

Interactive workshops were held on the topic of Five Practices for Exemplary Leadership by Sookyung Suh, Ph.D. and Stacy Sattovia, M.D., MBA (Center for Human and Organizational Potential, Southern Illinois University Sch. Med.). Topics included “Introduction to Exemplary Leadership,” “Organizational Change Management Overview,” “Communications for Engagement and Encouragement,” “Introduction to Coaching and Crucial Conversations,” and “Engaging Undergraduate Students.”





Officer elections were not held at the Leadership Retreat because of the small number of members present but will be held via email after the meeting.

**2019-2021 ACDP Officers. (l to r): C. Lee Cox, Merry L. Lindsey, V. Gustavo Blanco, Dale Buck Hales, Chris Hardin, Toni Pak, Walter Boron. Not pictured: Patricia E. Molina, Gaylen L. Edwards, Y. S. Prakash, Nicholas A. Delamere. (Photo by Karen Hales)**

Patricia E. Molina, M.D., Ph.D. (Louisiana State Univ. Hlth. Sci. Ctr.) was thanked for her service as Past President. Gaylen L. Edwards, D.V.M., Ph.D. (University of Georgia Coll. Vet. Med.) and Walter F. Boron, M.D., Ph.D. (Case Western Reserve Univ.) were thanked for their service as Councilors.

The meeting was turned over to the new President Chris Hardin, Ph.D. (Univ. of Missouri).



Hardin announced the 2022 ACDP Leadership Retreat will be held Dec. 1-4 at the Isla Bella Beach Resort in Marathon, FL. As details are available, they will be added to the 2022 meeting web page at [acdponline.org/Home/Meetings](http://acdponline.org/Home/Meetings).



**Isla Bella Beach Resort**

The Leadership Retreat is open to chairs of departments of physiology or related areas, graduate directors in physiology or related areas, medical/osteopathic/veterinary physiology course directors and undergraduate program directors. The meeting will build upon this year's topics and will continue to focus on leadership issues and other areas of broad interest to those audiences.

## **Boron Honored at 2021 ACDP Leadership Retreat**

The highest award given by the Association of Chairs of Departments of Physiology (ACDP), the Distinguished Service Award, was awarded to Walter F. Boron, M.D., Ph.D., Distinguished University Professor and Myers/Scarpa Professor and Chair of the Department of Physiology & Biophysics at Case Western Reserve University. Dale Buck Hales, Ph.D. (Southern Illinois Univ. Sch. Med.), President of ACDP, presented the award during the organization's 2021 Leadership Retreat at Renaissance Curaçao Resort in Willemstad, Curaçao, on December 2-5, 2021. Boron gave a talk entitled "Diffusion of Gases Through Membrane Proteins" and discussed his many influential mentors and their advice over the length of his career.



**President Dale Buck Hales (r) presents  
Walter F. Boron (l) with the 2021 ACDP  
Distinguished Service Award.**

Boron is Distinguished University Professor and Myers/Scarpa Professor and Chair of the Department of Physiology & Biophysics at Case Western Reserve University. He earned his AB summa cum laude in chemistry at Saint Louis University, and his MD and PhD (Physiology & Biophysics) at Washington University in St. Louis. Boron joined Yale University as a postdoctoral fellow with Emile Boulpaep in 1978, and remained there for the next 29 years, serving three terms as Chairman of the Department of Cellular & Molecular Physiology. In 2007, he returned to his hometown of Cleveland to assume his present position.

Boron developed his life-long interest in acid-base transport and intracellular-pH ( $\text{pH}_i$ ) regulation during his PhD studies with Albert Roos (his official mentor), Paul De Weer, and John Russell; and his interest in renal transport with postdoctoral mentor Boulpaep. Boron and collaborators described the first example of  $\text{HCO}_3^-$  dynamic  $\text{pH}_i$  regulation, discovered the electrogenic  $\text{Na}/\text{HCO}_3^-$  cotransporter (NBCe1), and introduced many of the paradigms used to study  $\text{pH}_i$  regulation. Their cloning of the cDNA encoding NBCe1 led to the identification of numerous, related  $\text{HCO}_3^-$  transporters. Their invention of out-of-

equilibrium  $\text{CO}_2/\text{HCO}_3^-$  solutions led to the discovery of receptor protein tyrosine phosphatase  $\gamma$  (RPTP $\gamma$ ) as a molecular sensor of extracellular  $\text{CO}_2$  and  $\text{HCO}_3^-$ , and modulator of acid-base transport. Their encounter with the first  $\text{CO}_2$ -impermeable membrane led to the discovery of the first example of a membrane protein with permeability to a dissolved gas. Boron's group currently focuses on three related areas: the molecular physiology of the  $\text{Na}^+$ -coupled  $\text{HCO}_3^-$  transporters, RPTP $\gamma$ , as well as  $\text{CO}_2$  and  $\text{O}_2$  channels.

Boron is former President of the American Physiological Society (APS) and former Secretary-General of the International Union of Physiological Sciences (IUPS), as well as former editor-in-chief of two journals, *Physiological Reviews* and *Physiology*. He and Emile Boulpaep co-edit the textbooks *Medical Physiology* and *Concise Medical Physiology*.

Among Boron's accolades are the Pitts Lecture/Award (IUPS, 1993), Gottschalk Lecture/Award (APS, 1998), NIH MERIT Award (2002), an honorary doctorate (Aarhus University, 2014), National Academy of Medicine (2014), Fellow of the APS (2015), and Fenn Lecture (IUPS, 2022).

Boron was selected to receive the ACDP Distinguished Service Award for his leadership in the discipline of physiology, educating the next generation of physiologists, outstanding research, and service to national and international organizations. His scientific endeavors and mentorship, his dedicated service to the field of physiology, and his distinguished service to ACDP, APS and other societies, the ACDP was proud to present its 2021 Distinguished Service Award to Walter F. Boron.