



The American Physiological Society

WATER AND ELECTROLYTE HOMEOSTASIS SECTION NEWSLETTER

Spring 2019

Message from WEH Chair Michael J. Ryan

Greetings to the Water & Electrolyte Homeostasis Section!



Experimental Biology 2019 in Orlando, FL is rapidly approaching. The WEH Section has a lot to celebrate this year and you can read about all of it in this newsletter. For example, the scientific programming for our section, led by Dr. Kathryn Sandberg (Georgetown University) is diverse and broad including work related to epigenetics, hormonal control of pathophysiology, therapeutic agents in physiology, and dietary influences on metabolic, renal and cardiovascular physiology. The trainee award symposium and the, always popular, Data Diuresis symposium will continue now into its ninth year.

We are delighted that the 2019 Ernest H. Starling Distinguished Lectureship will be given by Dr. Jennifer Pollock (University of Alabama Birmingham) who is not only an exceptional scientist, but also a staunch advocate for the WEH Section as a past WEH Chair and outgoing APS Councilor.

Speaking of APS Councilors, our immediate past WEH Chair, Dr. Carmen Hinojosa-Laborde (U.S. Army Institute of Surgical Research) was recently elected by the APS membership to serve on council, a testament to her dedication to the WEH section and the APS. Dr. Michael Hultstrom (Uppsala University) will receive the WEH New Investigator Award, and the winner of the 2019 Leonard Share Award will be announced at the annual WEH business meeting and luncheon organized by Dr. Cathy Uyehara (Tripler Army Medical Center). The luncheon represents a great opportunity to celebrate the achievements of WEH Section members, and to connect with friends and colleagues.

Finally, the WEH Steering Committee is pleased to welcome many new members at the close of EB2019. The section is always seeking members who are interested in service to get involved.

I am looking forward to seeing you in Orlando, Florida.



Congratulations!



Newly elected APS Councilor
Dr. Carmen Hinojosa-Laborde

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PRESS



WEH Business Luncheon at EB 2019

Catherine Uyehara, WEH Secretary / Treasurer

We hope to see you at the WEH Section business luncheon meeting at Experimental Biology in Orlando. The restaurant is within walking distance from the convention center, located in Pointe Orlando. Reservations can be made online at the APS website <https://store.the-aps.org?format=banquet>. Your email confirmation will serve as your entry ticket. *Note: reservation spots are limited and this year there will be no tickets available for purchase at EB onsite.*

Date: Sunday April 7, 2019

Time: 12:00 – 2:00 p.m.:

Location: CUBA LIBRE RESTAURANT & RUM BAR
9101 International Drive
Orlando, FL



We will continue onsite fundraising at the Data Diuresis Session. Please consider making a tax-deductible contribution to support the activities of the WEH section. There are three APS Funds that directly support WEH members and information for each can be found at <http://www.the-aps.org/mm/hp/Audiences/Giving>. Representatives of DSI and the Portland Press will be attending our functions at EB. We are grateful for their continued support of our WEH section sessions and awards.

It is with great pleasure that the WEH Section announces the 2019 Ernest H. Starling distinguished Lecturer, Dr Jennifer Pollock. Dr. Pollock is recognized for exceptional contributions and lifelong dedication to the best of water and electrolyte homeostasis research

2019 Ernest H. Starling Distinguished Lectureship

There's NO Place Like Home(ostasis)

Jennifer Pollock, PhD

Professor of Physiology, University of Alabama Birmingham



Congratulations!



2019
A. Clifford Barger
Underrepresented
Minority Mentorship
Awardee

Michael J. Ryan, Ph.D.

University of Mississippi Medical Center

Save the Date...

2019 APS/ASN
Renal Conference in Charlottesville
"Control of Renal Function
In Health and Disease"

June 23-27, 2019

(Conference Organizers
Edward Inscho, PhD and Pablo Ortiz, PhD
abstract deadline: March 29, 2019)

WEH Parliamentarian Report *Dao Ho, WEH Parliamentarian*



At the close of EB 2019 (or Dec 31 for Trainee Advisory Committee), the following members will be ending their terms on the WEH Steering Committee. Thank you to the outgoing members for their excellent service and hard work on the Steering Committee!

- Frank Spradley (Councilor At-Large, Membership)
- Jeffery Osborn (Councilor At-Large, Translational)
- Paul O'Connor (Councilor At-Large, Data Diuresis Coordinator)
- Aaron Polichnowski (Councilor At-Large, Data Diuresis Coordinator)
- Dao Ho (Councilor At-Large, Parliamentarian)
- Ijeoma Obi (Trainee Advisory Committee Representative)
- Jeremy Sandgren (Trainee Advisory Subcommittee Member)

Incoming WEH Steering Committee Members

Congratulations and welcome to the incoming WEH Steering Committee Members!



Joint Programming Committee Chair

Zhongjie Sun (University of Tennessee-Health Science Center)

Data Diuresis Chair

Michael Hultström (Uppsala University)



Membership Chair

Carmen de Miguel (University of Alabama Birmingham)



Parliamentarian

Jean Regal (University of Minnesota-Duluth)



Translational-Physiology Representative

Colin Young (George Washington University)



Trainee Advisory Committee

Ellen Gillis, Chair (Augusta University)

Abigail Colburn (University of Connecticut)

Daniel Fehrenbach (Medical College of Wisconsin)

Kenji Maeda (University of Mississippi Medical Center)

WEH Section Joint Programming Committee

Kathryn Sandberg, WEH Joint Programming Committee Representative

We are currently accepting programming suggestions for EB2020. So send me ALL of your ideas (sandberg@georgetown.edu) and please write EB2020 in the subject heading.

We are looking forward to a terrific program at EB19 thanks to the creativity of the WEH membership!!!!



SATURDAY, April 6, 2019

Hyatt, Plaza Intl Ballroom G

2:00 – 3:30 pm

WEH Trainee Award Finalists

Chairs: Tom Cunningham and Analia Loria Moderator: Michael Hulstrom

3:45 – 5:00 pm

Data Diuresis

Chairs: Paul O'Connor and Aaron Polichnowski

SUNDAY, April 7, 2019

8:30 – 10:00 am W311D

WEH Symposium: Translational models of renal and cardiovascular disease: Informing human health or not?

Chairs: Lisa Harrison-Bernard & Jeffrey Osborn

3:30 – 4:30 pm W315

Ernest Starling Distinguished Lectureship: Dr. Jennifer Pollock

Chair: Michael J. Ryan

4:30 – 5:30 pm W315

New Investigator Award: Dr. Michael Hulstrom

Chair: Michael J. Ryan

9:00 am - 4:00 pm

WEH Posters Manned Time 10:15 am - 12:15 pm

574: Therapeutic and adverse effects of pharmacological agents on integrative physiology and pathophysiology

592: Caloric restriction, high fat diets and dietary supplements

593: Environment, exercise and epigenetics in pathophysiology

MONDAY, April 8, 2019

8:30 – 10:00 am W311B:

Hot Topics in WEH and ETG Chairs: Timo Rieg & Megan Beggs

1:30 – 3:00 pm W311H:

Therapeutic and adverse effects of pharmacological agents on integrative physiology and pathophysiology

Chairs: Analia Loria & Victoria Wolf

3:30 – 5:00 pm W311B:

Environmental and epigenetic contributions to disease origin

Chairs: Kelly Hyndman & Jacqueline Leachman

9:00 am - 4:00 pm

WEH Posters Manned Time 10:15 am - 12:15 pm

758: Sex differences in fluid homeostasis and blood pressure control

TUESDAY, April 9, 2019

1:30 – 3:00 pm W311B:

WEH Featured Topic Hormones and receptors in homeostatic control of physiology and during allostasis in pathophysiology

Chairs: Justin Grobe & Kirthikaa Balapattabi

3:30 – 5:00 pm W311H:

WEH Featured Topic Effect of diet on metabolism, cardiovascular and renal physiology and pathophysiology

Chairs: Heather Drummond & Paramita Pati

9:00 am - 4:00 pm

WEH Posters Manned Time 10:15 am - 12:15 pm

865: Preeclampsia and hypertensive disorders of pregnancy

866: Dietary sodium and pathophysiology

867: Hormones and Receptors in Homeostatic Control of Physiology and during Allostasis in Pathophysiology

See you in Orlando!



WEH Awards Committee

Carrie Northcott, WEH Awards Chair
Ruisheng Liu, WEH Awards Co-Chair



Thank you! Thank you! Thank you! To all the applicants and judges for the WEH 2019 awards. It is so exciting to read about all the great science that our members are doing.



Awards Committee: We had an amazing, as well as diverse awards committee this year with members representing Academia, Industry and the Military sector. We want to thank each judge for their willingness to lend their time and expertise to judge the numerous great abstracts and applications submitted. This year the awards committee consisted of: Richard Wainford, David Brooks, Ahmed Elmarakby, Ruisheng Liu, Carmen Hinojosa-Laborde, Thomas Herzig, Michael Ryan, Justin Grobe, Peter Bie, Magdalena Alonso-Galicia, Sydney Murphy, Amy Banes-Berceli, Eric George and myself.

The 2019 WEH New Investigator Award winner is **Dr. Michael Hultström**, from Uppsala University. Dr. Hultström is an Associate professor of Physiology; a medical doctor that works in renal physiology, anesthesia and intensive care. He is an externally funded researcher and his current research focuses on acute kidney injury, renal vascular function and hypertensive kidney damage. Dr. Hultström has been an active part of the Water and Electrolyte Section of APS, has received numerous accolades throughout his career, and is dedicator mentor. Please join us for his talk and to congratulate him in person:



❖ **“The Physiology of Decompensation: From Bench to Bedside”**
Sunday, April 7th, from 4:30-5 pm at the Convention Center, Room

➤ The top three **Postdoctoral and Predoctoral Award finalists** will present their research at the

❖ **Trainee Finalists and Data Diuresis Session**

Saturday April 6 from 2:00 – 5 pm , Headquarter Hotel, Room Plaza Ballroom G

Please come support these great trainees as they present their cutting edge research and compete for top accolades.



Juan Carlos Romero WEH Section Postdoctoral Research Recognition Awards Finalists:

Bhavisha Bakrania: “Soluble Guanylate Cyclase Activators Increase cGMP Expression and Improve Vascular Function and Placental Ischemia-Induced Hypertension”

Jessica Bradshaw: “Elevated Saturated Fatty Acids Attenuate Trophoblast Migration via TLR Signaling Mechanisms”

Bruna Visniauskas: “High Plasma Soluble Prorenin Receptor (sPRR) Levels Correlate with Systolic Blood Pressure in Aged Male but Not in Female Mice”

Portland Press WEH Section Predoctoral Research Recognition Awards Finalists:

Erika Guise: “Bioengineered VEGF Therapy Following Angioplasty in Renovascular Disease: More and Better Microvessels”

Hannah Turbeville: “Intrapartum Sildenafil Therapy Reprograms Susceptibility to Hypertension in Offspring of Dahl S Rats”

Chelsea Weaver: “African Green Monkeys Born to Mothers with Hypertensive Pregnancy Disorders have Higher Blood Pressures and Altered Water Balance in Early Adolescence”

➤ The **WEH/AJP RIC Trainee Award** and **Research Distinction Awards (which have not yet been announced)** as well as the winners of the **Juan Carlos Romero WEH Postdoctoral** and **Portland Press WEH Predoctoral Research Awards** will be announced at the **WEH luncheon and Business meeting** on **Sunday, April 7th from 12-2 pm** at **Cuba Libre Restaurant & Rum Bar**. Please purchase your ticket, learn who are, as well as, congratulate the award winners, eat and celebrate WEH!

WEH Committee on Committees

Barbara T Alexander, WEH Committee on Committees Representative



I am looking forward to seeing you in Orlando! I would like to thank all of you who submitted nominations for APS Committee service in 2020 and to those who provided their endorsement. Although the site to apply closed in early February, it is never too early to consider applying next year for service beginning in 2021. Positions become available every year for each of the different committees. Service on one of the many APS committees is a great way to give back to your scientific home and it also provides an opportunity to meet other APS members and network!

If you are interested in the nomination process for next year and have questions, you can contact me via email at baalexander@umc.edu. Also, if you are attending EB in Orlando, you can catch me at any of the WEH related events or email me to establish a set time to meet.

We had a number of outstanding applicants this year at the regular member and trainee levels. The WEH Section has a strong history of active involvement in the APS, including representation on the many APS committees. This is not possible without your enthusiasm and interest to serve.

WEH Membership Report

Frank Spradley, WEH Membership At-Large Councilor



HAPPY SPRING! It's time to report on the membership status of our WEH Section. There are exciting numbers! Presently, there are 991 total members, which has grown from 662 total members since the beginning of 2018! When breaking these numbers down, we currently have 236 primary, 348 secondary, and 407 tertiary members affiliated with our Section. These are up from 147 primary, 207 secondary, and 268 tertiary members since this past January. Therefore, we have had 89 primary, 141 secondary, and 139 tertiary members join our team at Regular, Graduate, Undergraduate, and Affiliate ranks this year! Keep up the good work with renewing your APS memberships and spread the word about joining our Section. This includes mentioning our many on-goings including our excellently programmed sessions at

Experimental Biology 2019 in Orlando, which have been developed by WEH members of all career stages. We will provide free entry to attend the WEH luncheon for all of those folks that have joined as primary members between the abstract submission deadlines for EB 2018 and 2019. Please welcome these new faces at EB 2019 in Orlando. I look forward to working with our members and Steering Committee to grow the support and membership of OUR section. Do not hesitate to contact me with ideas regarding this purpose. Encourage your colleagues to join the WEH section of the APS.

WEH Data Diuresis

Data Diuresis Coordinators

Aaron Polichnowski & Paul OConnor



A great big "Thank you!" to Aaron Polichnowski & Paul O'Connor who have wonderfully created an entertaining and very well attended platform to kick off the WEH programming at EB each year. This year, they hand off their coordinating and MC duties to Michael Hultstrom.

The 11th Annual Data Diuresis Session will be held on Saturday April 6, 2019 (3:45 - 5:00 pm). Come mix and mingle with WEH scientists and hear the following authors share a quick taste of their work while enjoying refreshments provided by Data Sciences International. The presenters this year are: Aline de Souza (Georgetown University), Celine Grenier (Edinburgh University), Daniel Fehrenbach (Medical College of Wisconsin), Hanna Kosnik (East Carolina University), Yue Pan (Augusta University), and Shao Yang Zhang (University of Iowa).

WEH Trainee Advisory Committee



TAC Representative

Ijeoma Obi

Univ of Alabama Birmingham



TAC Subcommittee Members

Ellen Gillis

Augusta University



Jeremy Sandgren

University of Iowa

Hello Trainees! Below are WEH and APS sponsored events. We encourage you to attend and give us feedback on how we can meet your trainee needs. We are also organizing the 7th annual "Mentoring on the Go" program this year. Each trainee (undergraduate, graduate, medical, or post-doctoral fellow) that submitted a first-authored abstract will be assigned a "meeting mentor" that will provide valuable outside mentorship, professional development, and networking opportunities! You and your meeting mentor will receive more information regarding the assignments before EB. Please be on the lookout for that email and contact your meeting mentor before EB commences. See you in Orlando!

EB Trainee Events

Saturday 4/6/19

- 8:00-12:00pm: Education Committee- Refresher course on Beyond the Weight Room: The Importance of Skeletal Muscle in Health and Disease. Convention Center, Room W314. Chairs: Merritt and Durocher
- 1:00-3:00pm: Science Policy Committee, Cosponsored by APS Women in Physiology Committee- A Role for Professional Societies in Addressing and Preventing Sexual Harassment in the Sciences, Convention center, Room W309AB. Chairs: Goulopoulou and Wilson
- 2:00-5:00pm: WEH Trainee Award Finalist Session and Data Diuresis Mixer; Hyatt, Plaza Intl Ballroom G, Chairs: Cunningham and Loria

Sunday 4/7/19

- 7:00-8:00am: APS Trainee Advisory Committee Symposium- Marketing Yourself for a Successful Career I; Convention Center, Room W311B. Chairs: Obi and Zarate
- 7:00-8:00pm: Careers in Physiology Committee Symposium- The Hidden Job: Skills for a Career in Physiology; Convention Center, Room W311D. Chairs: Becker and Trimby
- 7:00-8:00am: Women in Physiology Committee Symposium- Career Planning: No Scientist Left Behind; Convention Center, Room W311C; Chairs: Nicols and Randive
- 8:30-10:00am: Publications Committee Workshop- Publications 101; Convention Center, Room W309AB; Chairs: Sigmund and Scheman
- 12:00-2:00pm: WEH Section Business Luncheon and Banquet; Cuba Libre Restaurant and Rum Bar
- 3:30-4:30pm: Ernest H. Starling Lecture and WEH Section New Investigator Award; Convention Center Room W315.
- 3:00-5:30pm: David Bruce Undergraduate Poster Session and the Horwitz/Horowitz Award Ceremony; Convention Center, Valencia Ballroom

Monday 4/8/19

- 7:00-8:00pm: APS Trainee Advisory Committee Symposium- Marketing Yourself for a Successful Career II; Convention Center, Room W311B. Chairs: Obi and Zarate
- 7:00-8:00pm: Careers in Physiology Committee Symposium- The Hidden Job: Skills for a Career in Physiology; Convention Center, Room W311D. Chairs: Becker and Trimby
- 7:00-8:00am: Women in Physiology Committee Symposium - Career Planning: No Scientist Left Behind II; Convention Center, Room W311C; Chairs: Nicols and Randive

Tuesday 4/9/19

- 7:00-8:00pm: APS Trainee Advisory Committee Symposium– Marketing Yourself for a Successful Career III; Convention Center, Room W311B. Chairs: Obi and Zarate
- 7:00-8:00pm: Careers in Physiology Committee Symposium– The Hidden Job: Skills for a Career in Physiology; Convention Center, Room W311D. Chairs: Becker and Trimby
- 7:00-8:00am Women in Physiology Committee Symposium – Career Planning: No Scientist Left Behind III; Convention Center, Room W311C; Chairs: Nicols and Randive
- 5:40-6:30pm: Nobel Laureate Dr. Peter Agre. Lecture: Convention Center, Room W314.

Trainee reception to follow lecture!

Updates from the Career Opportunities in Physiology Committee

The Career Opportunities in Physiology Committee supports a number of APS programs to foster the career development of physiologists of all ages:

EB Symposium: “The Hidden Job: Skills for a Career in Physiology”

Join us Sunday, Monday, and Tuesday, 7:00am-8:00am in the Orlando Convention Center, Room W311D for a light breakfast and a series of discussions on hidden job skills. Careers in science require several skills and proficiencies that extend beyond the normal training practices. These include such things as negotiation skills, scientific society involvement, moving between academia and industry, and many others. The focus will be on those skills that are not a common aspect of training. Speakers will address these issues from a perspective of “what I wish I knew before I started this job” and “things no one told me I needed to know before I started.” This symposium will have an interactive format facilitated by leaders in academic, industry, teaching, governmental, and society roles. The targeted audience of trainees and established investigators alike will be exposed to the perspectives of the facilitators and will be able to incorporate the non-traditional training advice of the facilitators into their individual career plans. Visit www.the-aps.org/the-hidden-job for more information.

Experimental Biology Undergraduate Orientation and Poster Sessions

Open to all undergraduate students attending EB, the Undergraduate Orientation session serves as a primer to help the students get the most out of their EB experience, and includes award presentations for various APS-sponsored undergraduate research programs. This will be held at the Hyatt Regency Orlando, Plaza International Ballroom J/K from 3:00-5:00pm, April 6. There is also a special poster session for undergraduate students at EB, held from 3:30-5:00pm (undergrad presenters must arrive by 2:00pm to check-in and hang posters) on April 7 in the Orange County Convention Center, Valencia Ballroom D – please stop by and meet the next generation of physiologists!

Experimental Biology PhUn Week Poster Session

Physiology Understanding (PhUn) week is a nationwide outreach program that builds connections between scientists and their local schools. During PhUn week, APS members engage students in interactive, hands-on physiology activities. Please stop by the PhUn Week poster session, open to all APS members, held from 7:00-9:00am on April 7 in the Orange County Convention Center, Valencia Ballroom C, to see how your colleagues helped promote physiology outreach and to see how you can get involved with PhUn week.

The APS Local Undergraduate Research Award in Physiology (LURAP)

LURAP allows APS Members to recognize excellence in physiology research by undergraduates at their home institutions. The award fosters interest in physiological research for undergraduates, encourages them to continue with physiological studies, and provides networking with APS members at their home institutions. The LURAP is presented by an APS member to an undergraduate at the member’s home institution’s research showcase event. The award package includes a certificate, an APS t-shirt, and a free one-year undergraduate membership. Visit www.the-aps.org/lurap for more information.

Please note, room locations are subject to change. Check the final program on the EB app for room assignments.

For more information and resources, please visit our Facebook page: <https://www.facebook.com/APSWEH> and LinkedIn page: http://www.linkedin.com/groups/APS-Water-Electrolyte-Homeostasis-Section-5191181?trk=my_groups-b-grp-v. Don't forget to "like" our page to receive updates on your newsfeed! For suggestions on how we may better serve you, please contact us at WEHTAC@gmail.com



Physiologists in Industry Committee

Carrie Northcott, PIC Representative

Physiologists in Industry Committee (PIC) Mixer
Sunday, April 7th, 6:45 p.m.
Peacock Springs room in the Hyatt Regency Orlando

You're invited! Come meet, eat, drink (cash bar) and socialize with your fellow physiologists who are working in the corporate, industrial, academic, or government sector. The Physiologists in Industry Mixer is an informal gathering of EB registrants who either work in industry, considering a career in industry, or just want to meet people from industry. Bring your students, colleagues and friends. The turnout last year was outstanding, and we expect another terrific mixer again this year.

PIC Symposium: SGLT2 Inhibitors: From Basic Physiology to Clinical Success
Sunday, April 7th, 1:30 - 3:00 PM
Convention Center, Room W311B

The Physiologists in Industry Committee is sponsoring an exciting symposium co-sponsored by AJP Renal Physiology entitled "**SGLT2 Inhibitors: From Basic Physiology to Clinical Success**". This symposium will describe basic physiological mechanism of sodium-glucose cotransporter 2 (SGLT2) in the kidneys and the important role it plays in glucose homeostasis. This symposium will also highlight observations from several large clinical trials which show that SGLT2i also confer cardiovascular and possibly renal protection. The session will be chaired by Romer Gonzalez Villalobos (Janssen) and co-Chaired by Paramita Pati (University of Alabama Birmingham).

Physiologists in Industry Committee "2019 Translational Research Award" Winners!

The Physiologists in Industry Committee "Translational Research Award" is given to one postdoctoral fellow and one doctoral student each year. This award recognizes a trainee who performed research that is translatable to industry applications and has been designated by the Physiologists in Industry Committee as an outstanding example of experimental research. The winner of the 2019 postdoctoral award is Dr. Malgorzata Kasztan, University of Alabama at Birmingham, for the project entitled "Glomerular Hyperfiltration Predicts the Onset of Chronic Kidney Disease in Humanized Sickle Cell Mice". The winner of the predoctoral award is Nicholas VanDongen, University of Colorado at Boulder, for the project entitled "Transfer of Young Gut Microbiota Ameliorates Age- and Western-Style Diet-Related Vascular Endothelial Dysfunction in Mice". Both awards will be presented at the APS Business Meeting at the Orange County Convention Center (room W314) on Tuesday, April 9th at 5:15 p.m.

EB TV *check it out!*

Webs Edge will be featuring session highlights and posting Conference News onsite at EB. EB TV will also feature research programs and activities from around the world. In one of the features, WEH members Dr Dao Ho and Dr Catherine Uyehara describe military-civilian research partnerships in the Pacific and the translational research at Tripler Army Medical Center.



Visit us at our web page!!

For general information related to the activities and organization of the WEH Section of the APS, please visit us at our web page

<http://www.the-aps.org/mm/hp/Audiences/Sections/Water-Electrolyte>





Dr. Ida Henrietta Hyde

Denise Cornelius, WEH Historian

Ida Henrietta Hyde (1857-1945), was born in Davenport, Iowa. As the daughter of German immigrants, she grew up in a family that valued education for sons, but not for daughters. Against her mother's wishes, Ida saved her salary as a milliner (a person who designs or sells women's hats), and at the age of 24, began

taking college courses at the University of Illinois at Champaign. After 1 year, Hyde withdrew from school to help care for her sick brother. In 1888, at the age of 31, Ida returned to school and attended Cornell University, graduating with her B.A. in 1891.

She worked in research at the Marine Biological Laboratory at Woods Hole in Massachusetts before receiving an Association of Collegiate Alumnae fellowship to study in Europe. After many obstacles because of her gender, Hyde received her Ph.D. at Heidelberg University in Germany, and was the first American woman to receive a doctorate from that institution.



Following completion of her doctorate, she was invited to Naples, Italy as the Investigator of Residence at the Naples Zoological Station, a prestigious post. She continued work on marine invertebrate physiology, until moving to the University of Bern (Switzerland) to work with Dr. Kronecker on muscle physiology. She became the first woman admitted to do research at Harvard Medical School under W.T. Porter. In 1899, Dr. Hyde was hired as an Associate Professor tasked with creating a physiology department at the University of Kansas (KU) in Lawrence. Dr. Hyde successfully created the KU Department of Physiology and served as its first chairperson. She remained at the institution for 22 years.

Hyde's research covered the nervous, circulatory, and respiratory systems of vertebrates and invertebrates, and explored the effects of narcotics, caffeine, and alcohol on the body. Through the course of her work she noted the differences in the effects of music on the cardiovascular system in athletes, musicians, and farmers and the effects of caffeine on efficiency in physical work. In addition to being a researcher and professor, Dr. Hyde was also an inventor and innovator. Her most well-known invention was an intracellular micropipette electrode for stimulating single cells. This invention was a breakthrough in the annals of neurophysiology.



In 1902, the American Society of Physiologists elected Dr. Hyde its first woman member. She was the only female member of APS until 1913. Hyde repeatedly encountered barriers to her education and career due to her gender, and pressed for more equal access and treatment of women in academia throughout her life. Dr. Hyde's proudest accomplishment wasn't her pioneering research, but her work on behalf of other women scientists. In 1897, Dr. Hyde persuaded America's foremost women educators and philanthropists to support research opportunities for American women scientists. The Naples Table Association became a source of both financial aid and professional support for women in scientific research, with 36 women benefiting from the program. In 1927, she established a scholarship at the [University of Kansas](https://www.ku.edu/) (KU) for women pursuing careers in the sciences. She also gave Cornell, her undergraduate alma mater, a similar scholarship and endowed the Association of American University Women with the Ida H. Hyde International Fellowship. More than 100 women

have directly benefited from her generosity and commitment.

Dr. Hyde retired from KU in 1920 and led an active life until her death in 1945. Dr. Hyde was inducted into the KY Emily Taylor Center for Women and Gender Equity in 2002. Through her important scientific research, contribution to KU, dedication to women, generous scholarship funds, and her life example, the Dr. Ida Hyde was and continues to be a standard of excellence and equality in science and in life.

More information on the life of Dr. Ida Henrietta Hyde can be found at: <https://emilytaylorcenter.ku.edu/pioneer-woman/hyde>, <https://jwa.org/encyclopedia/article/hydeida-henrietta>, <https://ispyphysiology.com/2017/03/01/ida-henrietta-hyde-a-trailblazer-in-physiology/>

WEH Steering Committee 2018-2019

<p>Chair Michael J Ryan, PhD (2021) University of Mississippi Medical Ctr 2500 N State Street Jackson, MS 39216-4505 phone: 601-984-1842 mjryan@umc.edu</p>	<p>Councilor-At-Large Parliamentarian Dao Ho, PhD (2019) Tripler Army Medical Center Dept Clinical Investigation 1 Jarrett White Road Tripler AMC, Hawaii 96859-5000 phone: 808-433-7152 dao.h.ho.civ@mail.mil</p>	<p>Fellows of the APS Representative Hershel Raff, PhD, FAAAS, FAPS Medical College of Wisconsin Aurora Research Institute Aurora St Luke's Medical Center 2801 W KK River Pky Suite 260 Milwaukee, WI 53215 phone: 414-649-6411 hraff@mcw.edu</p>
<p>Past Chair Carmen-Hinojosa-Laborde, PhD US Army Institute of Surgical Research 3698 Chambers Pass Bldg 3611 Fort Sam Houston, TX 78234-6315 phone: 210-539-7209 carmen.hinojosa-laborde.civ@mail.mil</p>	<p>Councilor-At-Large Membership Frank T Spradley, PhD (2019) University of Mississippi Medical Center Jackson, MS 39216-4505 phone: 601-801-3114 fspradley@umc.edu</p>	<p>Historian Denise C Cornelius, PhD (2020) University of Mississippi dcornelius@umc.edu</p>
<p>Secretary/Treasurer Catherine Uyehara, PhD (2020) Tripler Army Medical Center Dept Clinical Investigation MCHK-CI 1 Jarrett White Road Tripler AMC, Hawaii 96859-5000 phone: 808-433-7163 catherine.f.yamauchi.civ@mail.mil</p>	<p>Councilor-At-Large International Analia Loria, PhD (2020) University of Kentucky Dept Pharmacology and Nutritional Sciences 900 S Limestone St Lexington, KY 40536-0200 phone: 859-218-1414 analia.loria@uky.edu</p>	<p>Trainee Advisory Committee Rep Ijeoma Obi (2019) University of Alabama Birmingham Birmingham, AL 35203 iobi@uab.edu</p>
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