2014 is a busy and exciting year for the Comparative and Evolutionary Physiology Section. The upcoming Experimental Biology meeting (April 26-30) in San Diego provides an excellent forum for our section. We will again sponsor another all CEPS Trainee Featured Topics session and host a Krogh Distinguished Lectureship, presented by Dr. Hannah V. Carey, University of Wisconsin, on the topic of “Hibernation, Guts and Microbes: Bringing Symbiosis into Animal Physiology” on Tuesday April 29 at 3:15 pm.

In addition to a strong scientific program, the CEPS Trainee Advisory Committee is hosting the “Trainee Mixer” again this year on Monday April 28 at 5:00 pm at the Horton Grand Hotel, before the CEPS Dinner/Business Meeting. As always, the section Dinner and Business Meeting will provide an opportunity for all of us to gather for a combination of business and pleasure, and to congratulate many of our membership and trainee-awardees on their accomplishments. This is a sold-out event with 95 people planning to attend; I look forward to seeing you all!

We will get to meet again in five months for the APS Intersociety Meeting in Comparative Physiology. This one will also be in San Diego, CA, on October 5-8, 2014, at the Town and Country Resort and Conference Center. The scientific program highlighting research approaches utilizing the power of nature’s grand experiment (evolutionary change and organismal diversity) looks exciting. This meeting is the sixth in a series of intersociety meetings held every four years. Please plan to attend. The website is now open: http://www.the-aps.org/mm/Conferences/APS-Conferences/2014-Conferences/Comparative

Congratulations are extended to Ken Olson (Liaison with Industry Committee representative), who is now also representing us as the Associate Editor of AJP: Regulatory, Integrative, and Comparative Physiology, and to Rudy Ortiz, who will become a new member of the APS Council after the EB meeting. With more CEPS members representing our section on various APS committees, our ‘Comparative Physiology Voice’ is becoming stronger within the society!
See you all very soon!

Important EB2014 Websites

Main Experimental Biology site: http://experimentalbiology.org/2014/Home.aspx
APS Program: http://experimentalbiology.org/2014/Program-Information/Society-Programs/APS.aspx
APS EB info: http://www.apsebmeeting.org
EB attendee info: http://experimentalbiology.org/2014/Attendees.aspx

Bringing children to San Diego for EB?
Check out Camp EB: https://www.accentregister.com/Event/CEvents/6432
2014 August Krogh Distinguished Lectureship

The Section’s Distinguished Lectureship, the August Krogh Award, will be presented to Dr. Hannah V. Carey, Professor of Comparative Biosciences in the School of Veterinary Medicine at University of Wisconsin, on Tuesday April 29, 2014 at 3:15 pm.

Dr. Carey received her Ph.D. in Zoology from the University of California, Davis in 1983. She has held faculty positions at the University of Wisconsin (UW) since 1989. She also holds Affiliate Faculty appointments in the Department of Nutritional Sciences in the UW-College of Agriculture and Life Sciences, and in the Department of Pediatrics in the UW School of Medicine and Public Health. Dr. Carey is an exceptional researcher with a creative eye and an ability to translate fundamental research into both evolutionary physiology and biomedical physiology. She developed an independent research program that uses hibernating mammals as models for intestinal adaptation to extreme changes in nutrition and metabolism. Her research provides exciting insights into areas ranging from basic aspects of hibernation induction, gut microbe-symbiosis, to the translation of hibernation biology to biomedicine, including organ preservation, intestinal ischemia-reperfusion injury and severe blood loss. She has mentored approximately thirty students (high school, undergraduate, graduate, medical, veterinary) and postdoctoral trainees in her laboratory.

Dr. Carey has been unmatched in her service to academic physiology, serving in many capacities (committee members and Chair) for the American Gastroenterological Association, Federation of American Societies for Experimental Biology, International Union of Physiological Sciences, and the American Physiological Society, the latter for which she served as President from 2007 to 2008. Dr. Carey is also a tireless ambassador for comparative physiology in the scientific and lay communities. She served as a rotating Program Director for NSF Division of Integrative Organismal Systems (2010-2011), raising the visibility and stature of the discipline of Comparative and Evolutionary Physiology.
## Preview of CEPS Programming at EB2014

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
<th>Location</th>
<th>Details</th>
<th>Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday, April 27</td>
<td>7:30 AM – 5:30 PM</td>
<td>CEPS Poster Session</td>
<td>Exhibit Halls A-D</td>
<td>Presentations: 12:30 – 3:15 PM</td>
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<tr>
<td>Monday, April 28</td>
<td>10:30 AM – 12:30 PM</td>
<td>CEPS Featured Topic</td>
<td>Abstract-Driven Trainee Session: speakers drawn from submitted abstracts</td>
<td>Room 25C</td>
<td>Chairs: Heidy Contreras Barney Rees</td>
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</tr>
<tr>
<td>Tuesday, April 29</td>
<td>8:00 AM – 10:00 AM</td>
<td>CEPS Symposium</td>
<td>RNAseq Approaches to Understanding Extreme Physiological Adaptations</td>
<td>Room 26</td>
<td>Chairs: Daniel Warren Les Buck</td>
</tr>
<tr>
<td>Tuesday, April 29</td>
<td>10:30 AM – 12:30 PM</td>
<td>CEPS Symposium</td>
<td>Organismal Adaptation/Response to Hypoxic Environments: speakers: Tobias Wang, Paul Ponganis, Tatum Simonson, Allyson Hindle</td>
<td>Room 25C</td>
<td>Chairs: Birgitte McDonald Cassondra Williams</td>
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<td>August Krogh Distinguished Lecture</td>
<td>Hibernation, Guts and Microbes: Bringing Symbiosis into Animal Physiology: speaker: Hannah Carey</td>
<td>Room 23</td>
<td>Chair: Sinya Benyajati</td>
</tr>
</tbody>
</table>

### The Comparative and Evolutionary Physiology Section Congratulates

**Dr. Karen Sweazea**
Arizona State University

as the 2014 APS Dale J. Benos Early Career Professional Service Awardee. This award recognizes Karen for her professional service, outreach and mentoring/teaching activities with students at the graduate/professional, undergraduate and K-12 levels and her outstanding dedication to the physiology community and general public. Karen serves the Comparative and Evolutionary Section as treasurer.
CEPS Dinner - Business Meeting

Mark your calendars! The annual Comparative and Evolutionary Physiology Section Dinner-Business Meeting will be held on **Monday, April 28** at The Horton Grand Hotel located a few blocks from the San Diego Convention Center.

CEPS members, post-doctoral fellows, students and friends of CEPS are encouraged to attend and meet the Krogh Distinguished Lecturer and honored guest, Dr. Hannah Carey from the University of Wisconsin-Madison, School of Veterinary Medicine.

Recipients of the CEPS Research Recognition Award, New Investigator Award, Dr. Dolittle Travel Award, and Novo Nordisk Foundation Travel fellows will also be introduced.

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**CEPS Section Award Winners**

Congratulations to the 2014 Comparative section award recipients. Awardees will be recognized at the CEPS Section dinner on Monday, April 28.

**New Investigator Award:** Martin Tresguerres  
University of California, San Diego

**Research Recognition Awards:**  
Matthew Pamenteer  
University of British Columbia, Canada;  
Bernard Wone  
University of Nevada at Reno

**Novo Nordisk Travel Awards:**  
Laura Niiranen  
University of Oulu, Finland;  
Lucas Zena  
Wright State University

**APS Minority Travel Fellowship:**  
Bridget Martinez  
University of California, Merced

**Dr. Dolittle's Travel Award:**  
Nicolle Domni,  
Queen's University, Canada

This is a new award that encourages students to creatively connect physiology to the general public through blogging. The winning blog can be viewed at http://scienceblogs.com/lifelines/2014/02/25/congratula'ons-­‐to-­‐nicolle-­‐domnik-­‐queens-­‐university/

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**APS International Early Career Physiologist Travel Award**

Birgitte McDonald  
Aarhus University
EB2014 is just around the corner . . . and filled with many career development opportunities for trainees, as well as compelling symposia! To help you start planning your EB experience, trainee events and sessions of special interest to trainees are listed below:

**IMPORTANT EVENTS at EB**

**CEPS Trainee Mixer** – Back by popular demand is the Trainee Mixer. Last year, CEPS held its first mixer for trainees and we had a great turn out. So once again this year, all CEPS trainees are invited to join us before the CEPS business dinner on Monday, **Monday April 28, 2014**. The Mixer starts at 5:00pm at the Horton Grand Hotel in the Regency Ballroom. Come meet the Krogh lecturer, other section awardees, your fellow trainees and the CEPS trainee subcommittee members. The first drink is on us, but don’t be late – supplies are limited!

**TRAINEE SESSIONS at EB by DATE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Title</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, April 26</td>
<td>3:00-5:00 pm</td>
<td>Room 25C</td>
<td>Storytelling – Mandatory training for Today’s Scientists: featuring filmmaker Randy Olson</td>
<td>Sponsored by APS Communications Committee</td>
</tr>
<tr>
<td>Sunday, April 27</td>
<td>10:30 am – 12:30 pm</td>
<td>Room 25C</td>
<td>Publishing 101- How to get Your Work Published and Avoid Ethical Minefields</td>
<td>Sponsored by APS Publications Committee</td>
</tr>
<tr>
<td>Sunday, April 27</td>
<td>4:00-5:30 pm</td>
<td>Sails Pavilion</td>
<td>Support undergraduate researchers by attending the special APS Undergraduate Research Poster Session.</td>
<td>Sponsored by APS Education Committee</td>
</tr>
<tr>
<td>Monday, April 28</td>
<td>10:30 am – 12:30 pm</td>
<td>Room 25C</td>
<td>Abstract-Driven Trainee Session: (Speakers drawn from submitted abstracts)</td>
<td>Sponsored by CEPS: Led by Heidy Contreras &amp; Bernard Rees</td>
</tr>
<tr>
<td>Tuesday, April 29</td>
<td>8:00 – 10:00 am</td>
<td>Room 25C</td>
<td>Conscious Choice and Serendipity in Your Career Trajectory: A Panel Discussion Conflicts with a CEP section Symposium (Room 26)</td>
<td>Sponsored by APS Careers in Physiology Committee</td>
</tr>
<tr>
<td>Wednesday, April 30</td>
<td>8:00 – 10:00 am</td>
<td>Room 28A</td>
<td>Ahead of the Curve, Taking the Lead (A session on leadership skills )</td>
<td>Sponsored by APS Women in Physiology</td>
</tr>
<tr>
<td>Wednesday, April 30</td>
<td>10:30 am – 12:30 pm</td>
<td>Room 28A</td>
<td>The Other Side of the Submit Button: The Ins and Outs of the Manuscript Review Process</td>
<td>Sponsored by APS Trainee Advisory Committee</td>
</tr>
</tbody>
</table>

**INFORMATION and FUN**

1. **Tips on how to succeed at your first EB:** If you are an EB newbie, or if you just need a reminder of how to prepare for EB 2014, check out this article. It is chock-full of ideas for making the most of your EB: [http://www.the-aps.org/forum-eb](http://www.the-aps.org/forum-eb)

2. **Vote on Undergraduate or Graduate Student Videos with your View.** Have some time on your hands? Do you want to watch some fun physiology-based videos created by graduate or undergraduate students? Check out the videos for the APS contest, “APS Presents…Phantastic Physiology Voyage: Function Follows Form” and your view counts as a vote. The video with the most views wins and will be shown at EB! See them here: [http://www.the-aps.org/mischtml/videoentries.html](http://www.the-aps.org/mischtml/videoentries.html).

Finally, there are numerous career development seminars and sessions through the EB2014/FASEB career center. Bring your resume and a cover letter to get free one-on-one critiques. You can sign up at the career center at EB.

If you have trainees in your lab or department, please encourage them to join the APS and become members of the CEP section. Undergraduates can join for free! Membership fees are reduced for graduate students and postdocs. There are a number of ways for APS trainees to keep up to date on APS events and issues, including: (1) the APS trainee website: [http://www.the-aps.org/mm/hp/Audiences/APS-Committees/tac](http://www.the-aps.org/mm/hp/Audiences/APS-Committees/tac); (2) the APS trainees Facebook Fan page: [http://www.facebook.com/APSTrainees](http://www.facebook.com/APSTrainees); and (3) a Twitter account: APSTrainees.

If you have any questions, please contact me: cassondw@uci.edu. See you at EB!
Physiologist in Industry  

Ken Olson, CEPS Representative

The APS PIC is sponsoring a Symposium at EB 2014 entitled "NO, CO and H₂S: Toxic Gases, Gasotransmitters and Therapeutic Targets" (chaired by Kenneth R. Olson, Ph.D. and Catharine G. Clark, Ph.D.) on Sunday, April 27 at 8 – 10 am in the San Diego Convention Center, Room 24. Nitric oxide (NO), carbon monoxide (CO), and hydrogen sulfide (H₂S) are physiologically relevant signaling molecules that mediate different cellular regulation and communication. Recent studies have reported that these gasotransmitters may also be involved in a wide range of disease signaling processes from reperfusion injury, angiogenesis, inflammation, diabetes, oxygen sensing, cell cycling, ER stress and programmed cell death. The recent development of specific NO-, CO-, and H₂S-“donating” drugs has provided a novel pathway for regulation of gasotransmitter signaling. Chemically linking these compounds to other pharmaceuticals such as NSAIDs, angiotensin receptor inhibitors and others, has provided novel mechanisms with which to deliver multifaceted therapeutics. In this symposium, speakers will describe specific applications of the gasotransmitter-donating drugs and their therapeutic potential.

The PIC Novel Disease Model Award is sponsored by Novo Nordisk Research Centre China, a world leader in developing innovative treatments for Diabetes. The PIC Novel Disease Model Award will grant a $500 and $800 award to a graduate student and a postdoctoral fellow, respectively, who submit the best abstracts at EB 2014 that describe a novel disease model. The awardee for pre-doctoral student is Ellen Gillis, University of Mississippi Medical Center, Jackson, MS for her abstract entitled “The Dahl S rat on normal salt diet is a spontaneous model of preeclampsia” and the awardee for postdoctoral student is Suttira Intrapad, Ph.D., University of Mississippi Medical Center, Jackson, MS for her abstract “A new model of intra uterine growth restriction (IUGR) induced by reduced uterine perfusion in the mouse programs hypertension in the IUGR mouse offspring” Both awards will be presented at the APS Business Meeting.

You’re invited! Come meet, eat and socialize with your fellow Physiologists who are working in the corporate, industrial, academic, or government sector. The 13th Annual Physiologists in Industry Committee Mixer will feature free hors d’oeuvres along with information on the roles of Physiologists in Industry. It will be held at the San Diego Marriott Marquis & Marina (Sunday, April 27, 6:45 – 8:00 pm, Malibu Room). This is a great opportunity to network with industry and academic APS members alike – we hope to see you there!

The APS PIC meeting is scheduled on Sunday, 2:30 - 4:00 pm in the San Diego Marriott Marquis & Marina, Newport Beach Room— this is the committee’s annual opportunity to have a face-to-face meeting to discuss committee business and new initiatives. Please feel free to contact your PIC section representative if there are issues to be brought to the attention of the PIC.

Looking Ahead to EB 2015

March 28- April 1, 2015, Boston, MA

The Experimental Biology 2015 meeting will be held in Boston, MA, March 28-April 1, 2015. It is not too early to be thinking about ideas for symposia or featured topic proposals for the 2015 meeting. For more information about submitting proposals see http://www.the-aps.org/mm/Conferences/EB or contact Scott Kirkton at kirktons@union.edu. Proposals for symposia and featured topics should be submitted by April 1, 2014. Proposals will be discussed and decided upon at the CEPS Steering Committee meeting at the EB 2014 meeting.
This meeting will draw comparative and evolutionary physiologists from around the world to present and discuss recent advances in animal physiology. The three and a half day meeting will feature 15 symposia, 2 plenary lectures, 2 workshops, and multiple sessions for contributed abstracts as oral or poster presentations. This meeting will include the 2014 Scholander Award competition for young comparative physiologists, plus other trainee awards and activities.

**PLENARY LECTURES:**
Marcophysiological Forecasting for Policy in a Changing World
Opening the Black Box: How Physiology Links Genomes to Animal Function

**SYMPOSIA:**
Physiological Adaptations to Extremes: Providing Novel Animal Models for Investigating Health and Disease Evolutionary and Developmental Physiology
Transport, Digestion, and Locomotion

**WORKSHOPS:**
Trainee Workshop: Non-Traditional Career Paths for Comparative Physiologists
The Challenge of Teaching Physiology in a Changing Environment: Innovation and Resources

**DEADLINES**
Abstracts—July 9, 2014
APS Abstract and Minority-based Travel Award—July 16, 2014
CEPS Poster Competition—July 16, 2014
CEPS Scholander Award—July 16, 2014
MARC Program Travel Award—August 15, 2014
Advanced Registration—September 5, 2014
Hotel Reservations—September 12, 2014

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University of Oklahoma

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University of La Verne

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Jonathon Stillman, PhD
San Francisco State University

Tobias Wang, PhD
Aarhus University, Denmark

Matt McHenry, PhD
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For more information or to register visit:
[http://the-aps.org/comparative](http://the-aps.org/comparative) or scan this code
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