Message from the Section Chair, **Michael Hedrick**

This has been a busy year for CEPS. We had a very successful meeting at EB 2016 in San Diego with good attendance at all CEPS symposia, special topics and posters.

We have started planning for the 2017 Experimental Biology meeting in Chicago (April 22-26, 2017) at the McCormick Place Convention Center. I want to remind everyone that **abstracts are due November 17, 2016**. Please submit your abstracts to the CEPS topic categories (see page 2 of this newsletter) to help ensure that we maintain at least the same number of allocated Symposia and Featured Topics for CEPS at future Experimental Biology meetings. In case you are not aware, allocations for Symposia and Special Topics are reviewed by the APS council and linked to the number of abstracts submitted to each section. It is imperative that our CEPS members submit abstracts to our section to ensure future support from the APS.

CEPS has strong representation for the EB 2017 meeting in San Diego highlighted by the **2017 Krogh Lecture by Dr. Warren Burggren (University of North Texas) who will speak on the “Developmental Plasticity, Epigenetics and Evolution: A Comparative Physiologist’s Od(yssey)”** on Tuesday April 25 at 3:15 pm. Our program for CEPS looks exciting (see page 3 of this newsletter) with an abstract-driven trainee Featured Topic session on Sunday April 23, a CEPS Symposium on Monday April 24 (**Consequences of Physiological Stressors on the Development and Function of the Cardiovascular System**), a CEPS Symposium on Tuesday, April 25 (**Developmental Programming of Vertebrate Health and Disease by Hypoxia**) and a CEPS Featured Topic on Wednesday, April 26 (**Comparative Perspectives on Hypoxia Signaling and Tolerance**).

In addition to the excellent scientific program, the CEPS Trainee Advisory Committee will host the annual ‘Trainee Mixer’ on Monday April 24 at the **The Dawson Restaurant** in Chicago’s West Town followed by the CEPS Banquet/Business Meeting. This is an exciting event that will give us a chance to socialize and to honor several members and trainees of our section on their scientific accomplishments. I encourage our trainees and young faculty scientists to apply for the many CEPS awards available through our section (see page 5 of this newsletter). **The deadline for award applications is December 9, 2016.**

I look forward to seeing everyone in Chicago!

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**Important EB2017 Deadlines:**

- **November 17, 2016**: Abstract Submission
- **December 9, 2016**: CEPS Awards Deadline
- **February 23, 2017**: Early Registration Discount
- **March 31, 2017**: Housing/Hotel Reservations
Report from CEPS Program Officer, Dane Crossley

The CEPS program at EB 2017 promises to be exciting and informative. It will include the annual August Krogh lecture, two symposia, two featured topic sessions, and multiple poster sessions (including posters competing for the Scholander Award).

We will again have a featured topic session devoted exclusively to trainee presentations. To be considered for this featured topic session, trainees may submit their abstract to any CEPS poster session; however, they must indicate that they wish to make an “ORAL” presentation on their abstract submission. If selected, trainees will present both an “ORAL” presentation in the trainee featured topic session and a “POSTER” presentation in their selected poster session. The Trainee Featured Topic Session will be chaired by 2016 Scholander Awardee Cornelia Fanter. Trainees are also encouraged to apply for CEPS awards, including the Scholander Award (see below).

The other featured topic session will focus on *Comparative perspectives on hypoxia signaling and tolerance* (chaired by Graham Scott). Speakers will be chosen from abstracts submitted to poster session 1110-APS. The speakers will present both an oral and poster presentation.

**ABSTRACTS! ABSTRACTS! ABSTRACTS!**

*The deadline to submit abstracts is Thursday, November 17. Please submit your abstracts NOW!* Be sure to select one of the CEPS Topic Areas for your abstract (1110 to 1122 APS). Submitting abstracts to CEPS Topic Areas is an important benchmark for maintaining the number of CEPS symposia and featured topics at EB.

**Featured Topic**

- **1110-APS** Comparative Perspectives on Hypoxia Signaling and Tolerance (Scott)

**Posters**

- **1115-APS** Comparative cardiovascular and respiratory physiology
- **1116-APS** Comparative metabolic physiology, biochemistry and endocrinology
- **1117-APS** Comparative muscle physiology, locomotion and behavior
- **1118-APS** Comparative osmotic, ionic, and acid-base regulation
- **1119-APS** Comparative neurobiology
- **1120-APS** Comparative nutritional physiology
- **1121-APS** Other comparative and evolutionary physiology
- **1122-APS** Scholander Award Competition (separate competitions for undergrads and grad students/post-docs/young investigators)

In addition to the CEPS programming, there will be many lectures, workshops, symposia, and featured topics offered by other APS sections that will be of interested to the CEPS membership (see websites below).

**Important EB2017 Websites:**

- **Main EB page:** [http://experimentalbiology.org/2017/Home.aspx](http://experimentalbiology.org/2017/Home.aspx)
- **APS Program:** [http://www.apsebmeeting.org/eb2017/schedule-day.cfm](http://www.apsebmeeting.org/eb2017/schedule-day.cfm)
- **APS EB info:** [http://www.apsebmeeting.org](http://www.apsebmeeting.org)
- **EB registration:** [http://experimentalbiology.org/2017/Registration-and-Housing/Registration-Information.aspx](http://experimentalbiology.org/2017/Registration-and-Housing/Registration-Information.aspx)

**Follow the APS and EB2017 on social media:**

- **Twitter:** [https://twitter.com/APSPhysiology](https://twitter.com/APSPhysiology)
- **Facebook:** [https://www.facebook.com/AmericanPhysiologicalSociety](https://www.facebook.com/AmericanPhysiologicalSociety)
- **Youtube:** [https://www.youtube.com/user/APSPhysiology](https://www.youtube.com/user/APSPhysiology)

- **Twitter:** [https://twitter.com/expbio](https://twitter.com/expbio)
- **Facebook:** [https://www.facebook.com/expbio](https://www.facebook.com/expbio)
- **Youtube:** [https://www.youtube.com/experimentalbiology](https://www.youtube.com/experimentalbiology)
Preview of CEPS Programming at EB2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session Type</th>
<th>Topic</th>
<th>Chair/Speakers</th>
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</thead>
<tbody>
<tr>
<td>Sunday, April 23</td>
<td>7:30 AM – 5:30 PM</td>
<td>CEPS Poster Session</td>
<td>Abstract-Driven Trainee Session: Speakers drawn from submitted abstracts</td>
<td>Chair: Cornelia Fanter</td>
</tr>
<tr>
<td>Sunday, April 23</td>
<td>3:15 PM – 5:15 PM</td>
<td>CEPS Featured Topic</td>
<td>Consequences of physiological stressors on the development and function of the cardiovascular system</td>
<td>Chair: Todd Gillis</td>
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<tr>
<td>Monday, April 24</td>
<td>10:30 AM – 12:30 PM</td>
<td>CEPS Symposium</td>
<td>Developmental programming of vertebrate health and disease by hypoxia</td>
<td>Chair: Gina Galli</td>
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<tr>
<td>Tuesday, April 25</td>
<td>8:00 AM – 10:00 AM</td>
<td>August Krogh Distinguished Lecture</td>
<td>Developmental Plasticity, Epigenetics and Evolution: A Comparative Physiologist’s Od(d)yssey</td>
<td>Chair: Sinya Benyajati</td>
</tr>
<tr>
<td>Tuesday, April 25</td>
<td>3:15 PM – 4:15 PM</td>
<td>CEPS Poster Session</td>
<td>Comparative perspectives on hypoxia signaling and tolerance</td>
<td>Chair: Graham Scott</td>
</tr>
<tr>
<td>Wednesday, April 26</td>
<td>10:30 AM – 12:30 PM</td>
<td>CEPS Featured Topic</td>
<td>Additional speakers drawn from submitted abstracts</td>
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2017 August Krogh Distinguished Lectureship

The Section’s Distinguished Lectureship for 2017, the August Krogh Award, will be presented to Dr. Warren W. Burggren, Professor of Biology at the University of North Texas.

Dr. Burggren received his Ph.D. in Cardiovascular and Respiratory Physiology in 1976 from the University of East Anglia, UK. He spent his earlier professional career at the University of Massachusetts and the University of Nevada, Las Vegas. Dr. Burggren’s research has been at the forefront of comparative respiratory and cardiovascular physiology of a wide range of species, from fish to reptiles to crabs. His research has demonstrated the importance of early-life perturbations due to stressors such as hypoxia in defining developmental trajectories and future performance and fitness. One of Dr. Burggren’s most recent advancements is the recognition of the need to incorporate epigenetics in the study of comparative and evolutionary developmental physiology.

Dr. Burggren has disseminated his work and ideas in over 10 authored or co-authored books, 7 edited or co-edited books, 34 book chapters, and 182 peer reviewed publications. He is a co-author of the widely used comparative physiology textbook Animal Physiology. Dr. Burggren has trained many high school students and undergraduates in STEM research; he mentored 18 M.S. students, 23 PhD students and 15 postdoctoral fellows. He has given 16 plenary lectures and named lectureships.

Dr. Burggren’s accomplishments have been widely recognized (for example, Rector Honoris Causa (Honorary University President), The Autonomous University of the State of Mexico, Toluca, Mexico; Medal of the University of Helsinki, Finland; elected Fellow, Japan Society for the Promotion of Science). Many of Dr. Burggren’s research accomplishments took place while he was either serving as Dean of the College of Arts and Sciences (1998-2010) or Provost and Vice President for Academic Affairs, (2010-2015) at the University of North Texas. He currently serves as the President’s Special Advisor for STEM and International Activities.
Physiologist in Industry  Ken Olson, CEPS Representative

The Physiologists in Industry Committee is sponsoring an exciting Symposium with Environmental & Exercise Physiology Section at EB2017, Chicago, entitled “Nitric Oxide Pathway Modulation for Therapeutic Intervention and Exercise Enhancement” on Sunday, April 23, 10:30–12:30pm at Chicago Convention Center. This symposium will explore recently discovered therapeutic compounds and nutritional supplementation as a way to enhance NO pathway signaling in health and disease. It will provide a great opportunity for interaction and knowledge exchange between our academic and industry colleagues. This session will be chaired by John Mattson, Ph.D. and co-chaired by Dr. Kavaljit Chhabra, Ph.D. who is our 2016 PIC Novel Disease Model Award Postdoctoral recipient.

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 granted a $500 and $800 award to a graduate student and a postdoctoral fellow, respectively, who submitted the best abstracts at EB 2016 that described a novel disease model. The pre-doctoral awardee was Renato Gaspar, Federal University of Maranhão, Sao Luis, Brazil for his abstract “Polycystic Ovary Syndrome Phenotype in Hyperinsulinemic but Normoandrogenic Monosodium L-Glutamate Obese Rats”. The postdoctoral awardee was Kavaljit Chhabra, Ph.D., University of Michigan, Ann Arbor, MI for his abstract “Hypothalamic POMC-deficiency Impairs the Function of Leptin to Decrease Food Intake and Bodyweight”. Both awards were presented at the APS Business Meeting in San Diego.

The PIC Novel Disease Model Award invites all students and postdoctoral fellows to apply. Please see this link for additional information: http://www.the-aps.org/mm/awards/Other-APS-Awards/Postdoc-or-Resident. Submission deadline coincides with the EB abstract deadline (November 17, 2016).

Committee on Committees  Stan Hillyard, CEPS representative

Ever consider applying for APS committee service? The CoC makes recommendations to APS Council for all society committees relevant to our section. It is critical that our section have a representative on each APS committee. Please review the functions of society committees on the APS website (http://www.the-aps.org/mm/hp/Audiences/APS-Committees) and consider whether you have qualifications well suited for one or more. We are a small section with a unique spectrum of experimental approaches. It is important that our perspective is represented in these committees. We were fortunate to get Ed Dzialowski on Animal Care and Experimentation to replace Dan Warren. The application process is simple. You can self-nominate and then submit one reference in support of your nomination.

Nomination Procedures for Committee Appointments:
APS members seeking a committee position should submit an application via the APS awards module www.the-aps.org/awardapps. Submit separate applications for each committee to which you apply. These forms are not for Section Committee positions. Please note that members of the Committee on Committees (CoC), Joint Program Committee (JPC), Physiologists in Industry (formerly the Liaison with Industry Committee), Section Advisory and Trainee Advisory Committees are appointed by individual APS sections and have separate nomination procedures. If you are interested in one of these committees, please contact our section chair Mike Hedrick about the nomination process.

For all other committees, forms should be submitted only via awards module www.the-aps.org/awardapps. The deadline is January 16, 2017 for 2018 committee appointments. Questions concerning the nomination process can be directed to Scarletta Whitsett, Executive Assistant, at swhitsett@the-aps.org.

Looking Ahead to EB2018  April 21-25, 2018, San Diego, CA
The EB2018 meeting will be held in San Diego, CA April 21-25, 2018. It is not too early to be thinking about ideas for symposia or featured topic proposals for the 2018 meeting. For more information about submitting proposals see http://www.the-aps.org/mm/Conferences/EB and contact Dane Crossley at dane.crossley@unt.edu. Proposals for symposia and featured topics should be submitted by April 1, 2017. Proposals will be discussed and decided upon at the CEPS Steering Committee meeting at the EB2017 meeting.
Call for 2018 Krogh Award Nominations

We are now accepting nominations for the 2018 Krogh Lecturer. The nomination packet should be submitted by the nominator, whose letter should state the basis for nomination with a synopsis of the nominee’s scientific contributions and can include supporting excerpts/statements (no more than 5) from other colleagues and trainees. The nominee’s curriculum vitae (required) should be current, listing honors or awards, positions, grants, or papers, current and past grant support, a list of trainees, and professional activities.

All nomination materials for the 2018 award must be submitted to the Award Chair, Siribhinya Benyajati, Ph.D., sinya-benyajati@ouhsc.edu, by February 1, 2017. The steering committee will generate a slate from those nominees, and that slate will be put to the membership for voting.

Awards for Students and Trainees – Apply Now!

When submitting your abstract, be sure to apply for travel awards, both within our section and for APS-wide awards. Some of these awards are listed below, but be sure to check the APS website for up to date information, additional details and new award announcements.

CEPS Awards for EB 2017
http://www.the-aps.org/mm/awards/sections/comp-evol
(deadlines: December 9, 2016)
- New Investigator Award
- Research Recognition Award
- Scholander Award
- Travel Award sponsored by Novo Nordisk Foundation
- Travel Award sponsored by Dr. Dolittle

Society Awards for EB 2017 and Beyond
http://www.the-aps.org/mm/awards/Other-APS-Awards
(deadlines vary: check website)
- International Early Career Physiologist Travel Awards
- APS Minority Travel Award
- Caroline tum Suden Awards
- Dale J. Benos Early Career Professional Service Award
- Excellence in Professional Student Research
- Porter Fellowship for Minorties
- Novel Disease Model Award

Undergraduate Awards at EB.
http://www.the-aps.org/mm/awards/Other-APS-Awards/Undergraduate
David S. Bruce Excellence in Undergraduate Research Awards (deadline: January 12, 2017)
APS Presents...Phantastic Physiology Voyage: “Function Follows Form” (deadline: December 15, 2016)

CEPS Dinner - Business Meeting @ EB2017

Save the date! The annual Comparative and Evolutionary Physiology Section Dinner-Business Meeting is set for Monday, April 24 at The Dawson Restaurant in Chicago’s West Town. Through the generous support of several donors, including Novo Nordisk, dinner tickets for faculty will only be $60 and students and postdocs will receive a highly discounted rate of only $30. Tickets will be available for purchase online from the APS-CEPS WEBSITE. Be sure to watch your email for an announcement of when the purchasing site is open.

Trainee Advisory Committee News

Joseph Santin, Section Representative

The APS Trainee Advisory Committee is launching a new program. The Graduate Student Ambassador (GSA) program provides a two-year fellowship for APS member graduate students to serve as liaisons between APS and undergraduate/graduate students in their communities. The goals of the GSA program are to: 1) build leadership, teaching and public speaking skills; 2) network and build professional relationships with scientists and students at other universities; 3) increase awareness of the many benefits of APS membership; and 4) encourage student membership in APS, particularly among underrepresented minority students. The APS Trainee Advisory Committee will provide web-based training to all GSAs to enhance their knowledge of APS programs and membership benefits, leadership and presentation skills, and prepare them for other GSA responsibilities. GSA’s will receive up to $1200 per year in registration and travel reimbursements to EB. We are currently recruiting a passionate and dedicated group of graduate students to become the inaugural class of Graduate Student Ambassadors. Applications are due November 24th 2016 with selection announced in February 2017. For more information and to apply visit www.the-aps.org/gsa.
EB2016 Recap

CEPS Chair Michael Hedrick (right) and nominator Scott Kirkton (left) present Jon Harrison (center) with the 2016 August Krogh Award.

Dr. Harrison gathered with current and former students and trainees after delivering the August Krogh Lecture at EB 2016.

Trainees recognized at the annual CEPS Dinner.
Awards presented by CEPS Chair Michael Hedrick and 2016 Krogh Lecturer Jon Harrison.

New Investigator Award

Novo Nordisk Travel Awardees

Casey Mueller
California State Univ.- San Marcos

Ashley Heim
Colorado State University

Joseph Santin
Wright State University

Outstanding Graduate Student Scholander Awards

Outstanding Undergraduate Student Scholander Awards

First – Cornelia Fanter
Saint Louis University

Second – Joseph Santin
Wright State University

First – Lillian Horin
Univ. California - Merced

Second – Zoha Ahmed
Arizona State University
UPDATE: Intersociety Meeting in 2018

Dane Crossley, Program Chair

The theme for our next intersociety meeting (October 2018) is Comparative Physiology: Complexity and Integration. Based on feedback from past attendees and CEPS members we have targeted Austin TX as our next meeting site. We are reaching out to CEPS members for potential symposium topics and gathering suggestions over the next several months. In addition, we plan to program abstract-driven sessions to expand the breadth of the topics during the meeting. Please contact any of the committee members if you have suggestions or questions. Looking forward to hearing from you.

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AJP - Regulatory, Integrative and Comparative Physiology

Willis Samson, Editor-in-Chief

Two of our Calls for Papers expire December 1. We encourage submission of manuscript for these calls: Sex and Gender Differences in Cardiovascular, Renal and Metabolic Diseases (Edited by Dr. Jane Reckelhoff) and Hypertensive Disorders of Pregnancy: Effects on Mother and Baby (Edited by Dr. Babbette LaMarca). We recently announced two new Calls:

Exploiting Environmental Factors to Improve Health and Performance (Edited by Dr. Steven Romero, deadline March 31, 2017) Environmental stress is historically considered a challenge to human health and homeostasis, and has been used to acclimate humans to various environmental conditions. Recently there has been a renewed interest in the mechanisms by which environmental stressors can improve human health and the efficacy of those approaches. The goal of this Call is to highlight novel research that has exploited environmental stressors to improve human physiological function/health. Primary emphasis will be placed on environmental factors utilized to improve mechanisms of oxygen delivery and utilization in conditions associated with physical and functional limitations such as primary aging, spinal cord injury, diabetes, heart failure, peripheral vascular disease, etc.

Model Systems for the Study of Integrative Physiology: The Rebirth of Translational Biology (Edited by Dr. Janna Morrison, deadline May 1, 2017) The use of animal models to understand basic physiology and gain insight into the mechanisms of human disease has led to many critical discoveries that have impacted both animal and human medicine. Modern methodologies have further expanded the role of animal models in integrative physiology. The goal of this Call is to highlight past research successes using animal models as well as current innovations that extend the understanding of physiology and pathophysiology through use of animal models.

For more detailed information see: http://www.the-aps.org/mm/Publications/Journals/AJP-Regu/Special-Calls

Section Appreciation Awards @ EB2016 for Distinguished Service on the CEP Section Steering Committee

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Karen Sweezaea
Treasurer
Scott Kirkton
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