



**Association of
Chairs of
Departments
Of Physiology**

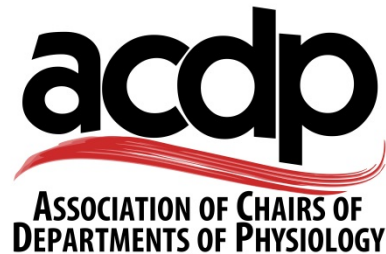
2014 Leadership Retreat

December 4 – 7, 2014

***Gamboa Rainforest Resort
Panama***



Association of Chairs of Departments of Physiology
9650 Rockville Pike, Suite E314
Bethesda, Maryland 20814-3991
Tel. 301-634-7785; Fax: 301-634-7098



November 22, 2014

Dear Attendees:

As President of ACDP for 2014, I want to welcome you to our annual ACDP Retreat at the Gamboa Rainforest Resort in the Panama. The resort, which is surrounded by Soberania National Forest, is a 30-minute ride from Panama City. It is situated in a remarkably tranquil location where the Chagres River meets the Panama Canal.

The program this year is an exciting mix of interactive workshops and short lectures. The Guyton Award Lecture will be presented by Dr. Gordon Mitchell from the University of Wisconsin-Madison and the University of Florida. Dr. Mitchell's work has increased the understanding of neuroplasticity, specifically in the respiratory motor control system. On Thursday evening we are delighted to have Dr. Michael Joyner from the Mayo Clinic presenting our Distinguished Service Award Lecture "Mendel vs the Future of Physiology." The New Chair Lecture on Friday will be presented by Don Gill who is the new head of the Department of Cellular and Molecular Physiology at Penn State. Friday afternoon includes a Smithsonian Lecture from Dr. Klaus Winter of the Smithsonian Tropical Research Institute which is based in Panama.

Feedback from previous ACDP retreats included requests for more time spent on interactive activities. In response, this year's program includes three workshops devoted to thorny issues such as physiology teaching, resource allocation to departments, and physiology's place in the academic medical center. Come prepared to roll up your sleeves and join in! The workshops will be terrific opportunities for lively discussion with fellow members.

I'm sure you will enjoy the lectures, workshops and the interesting location. I look forward to spending time with you in Panama.

Sincerely,

Nick Delamere, Ph.D.
President

2013-2014

Nicholas A. Delamere, President
Michael Sturek, President-elect
Muthu Periasamy, Past-President
Elsa I. Mangiarua, Secretary/Treasurer

Chris Cheeseman, Councilor (2015)
Pieter P. de Tombe, Councilor (2016)
Joseph M. Metzger, Councilor (2015)
Bishr Omary, Councilor (2014)

Janice H. Urban, Councilor (2016)
Charles E. Wood, Councilor (2014)
R. Clinton Webb, CFAS Rep. (2014)



Association of Chairs of Departments of Physiology
Leadership Retreat Agenda
Gamboa Rainforest Resort
Panama
December 4 – 7, 2014

Thursday, December 4	
8:30am – 2pm	Tour - Barro Colorado Island, Smithsonian Tropical Research Institute (restricted to those who have pre-registered)
3:30 – 5:00 pm	ACDP Council Meeting (NOTE: for ACDP officers only)
5:00 – 6:00 pm	New Chairs Orientation with ACDP Presidents
5:00 – 6:00 pm	Registration
6:00 – 7:00 pm	<i>Chasing Mendel vs. The Future of Physiology</i> <i>Michael J. Joyner</i> <i>Distinguished Service Award Lecture</i>
7:00 – 9:00 pm	Reception*
Friday, December 5	
8:00 – 8:30 am	Registration
8:30 – 8:45 am	<i>Welcome and Introductions</i>
8:45 – 9:30 am	<i>Transducing Calcium Signals</i> <i>Donald L. Gill</i>
9:30 – 10:00 am	<i>Business Meeting I</i> Financial report, CFAS report, nominations of officers
10:00 – 10:15 am	Coffee break
10:15 – noon	<i>Workshop 1:</i> <i>Quantifying Faculty Effort and Eking Out Departmental Resources</i> <i>Michael Sturek & Gordon Mitchell</i>
11:45 am – noon	ACDP Council meeting (NOTE: for ACDP officers only)
noon – 1:30 pm	Lunch
1:30 – 2:00 pm	<i>Winds of Change: 3-Year Medical School, Online Teaching and Other Interesting Developments</i> <i>Thomas Pressley</i>
2:00 – 4:00 pm	<i>Workshop 2:</i> <i>Physiology's Place in the Academic Medical Center</i> <i>Michael Joyner & Thomas Pressley</i>
4:00 – 4:15 pm	Coffee break
4:15 – 5:15 pm	<i>Smithsonian Lecture</i> <i>Klaus Winter</i>
5:15 – 6:00 pm	Sunset cocktails
Evening	Dinner on your own

*ACDP-registered attendees and ACDP-registered guests only.



Association of Chairs of Departments of Physiology
Leadership Retreat Agenda
Gamboa Rainforest Resort
Panama
December 4 – 7, 2014

Saturday, December 6	
8:30 – 10:30 am	Workshop 3: <i>Undergraduate Teaching and the Physiology Pipeline</i> <i>Patricia Molina & Christopher Minson</i>
10:30 – 10:45 am	Coffee Break
10:45 – 11:45 am	<i>Harnessing Intermittent Hypoxia-induced Spinal Motor Plasticity: Breathing and Walking After Spinal Injury</i> <i>Gordon Mitchell</i> <i>Arthur C. Guyton, Jr. Distinguished Lectureship Award Lecture</i>
11:45 – 12:15 pm	<i>Status and Initiatives of the APS</i> <i>Martin Frank</i> <i>Executive Director, American Physiological Society</i>
12:15 - 12:30 pm	<i>Business Meeting II</i> Election of officers, 2015 meeting information
Afternoon	Lunch and afternoon on your own
7:00 – 10:00 pm	Meeting Banquet* Announcement of new officers
Sunday, December 7	
All Day	Departures or on your own
8:30am – 2pm	Tour - Barro Colorado Island, Smithsonian Tropical Research Institute (restricted to those who have pre-registered)

***ACDP-registered attendees and ACDP-registered guests only.**



ACDP Attendee List

(As of 11/18/14)

Robert A. Augustyniak, Ph.D.
Dept. of Cellular and Molecular Physiology
Edward Via College of Osteopathic Medicine-
Carolinas Campus
350 Howard St.
Spartanburg, SC 29303
Phone: 864-327-9831
Email: raugustyniak@carolinas.vcom.edu

Walter F. Boron, M.D., Ph.D.
Dept. Physiology & Biophysics
Case Western Reserve Univ. Sch of Med
10900 Euclid Ave.
Cleveland, OH 44106-4970
Phone: 216-368-3400
Email: walter.boron@case.edu

Chris Cheeseman, Ph.D. (Gill Taylor)
Department of Physiology
Univ. of Alberta
7-22 Medical Sciences Bldg.
Edmonton, Alberta, Canada T6G 2H7
Phone: 780-492-4955
Email: chris.cheeseman@hrs.ualberta.ca

C. Lee Cox, Ph.D. (Heather)
Dept. of Physiology/Neurology
Michigan State University
567 Wilson Rd, Rm 2201E
East Lansing, MI 48824
Phone: 517- 884-5060
Email: coxlee@cns.msu.edu

Nicholas A. Delamere, Ph.D. (Martha)
Department of Physiology
Univ. of Arizona College of Medicine
1501 N. Campbell Ave., PO Box 245051
Tucson, AZ 85724
Phone: 520-626-6425
Email: delamere@arizona.edu

Pieter P. de Tombe, Ph.D. (Anna Tyberg)
Dept. of Cell & Molecular Physiology
Loyola Univ. Chicago Medical School
2160 South First Avenue
Maywood, IL 60153-5500
Phone: 708-216-1018
Email: pdetombe@lumc.edu

Ricardo Espinosa-Tanguma, M.D., Ph.D.
(Martha Aguilar-Cedi)
Dept. de Fisiologia
Universidad Autonoma de San Luis
Potosi Facultad de Medicina
Ave. V Carranza 2405
Apartado Postal 142
78210, San Luis Potosi, SL.P., Mexico
Phone: 444-826-2345
Email: espinosr@uaslp.mx

J. Kevin Foskett, Ph.D. (Hilary Martin-Foskett)
Department of Physiology
Univ. of Pennsylvania School of Medicine
3700 Hamilton Walk
B400 Richards Bldg.
Philadelphia, PA 19104-6085
Phone: 215-898-1354
Email: foskett@mail.med.upenn.edu

Martin Frank, Ph.D. (Cheryl)
Executive Director
The American Physiological Society
9650 Rockville Pike
Bethesda, MD 20814
Phone: 301-634-7118
Email: mfrank@the-aps.org

Donald L. Gill, Ph.D. (Julie)
Dept. of Cellular & Molecular Physiology
Pennsylvania State Univ. Coll. of Med.
500 Univ. Dr., H166
Hershey, PA 17033
Phone: 717-531-8567
Email: dlg49@psu.edu

Beth A. Habecker, Ph.D. (Sephen Delamarter)
Dept. Physiology & Pharmacol. (L-334)
Oregon Health Sciences Univ.
3181 S.W. Sam Jackson Park Road
Portland, OR 97239-3098
Phone: 503-494-0497
Email: habecker@ohsu.edu

Dale Buck Hales, Ph.D. (Karen)
Department of Physiology
Southern Illinois Univ. Sch. of Med.
Life Science II, Room 27 (M/C 6512)
1125 Lincoln Drive
Carbondale, IL 62901
Phone: 618-453-1544
Email: dhales@siumed.edu

Christopher Hardin, Ph.D. (Tina Roberts)
Dept of Nutrition and Exercise Physiology
204 Gwynn Hall
University of Missouri
Columbia, MO 65211
Phone: 573-882-0183
Email: HardinC@missouri.edu

Michael J. Joyner, M.D. (Teri)
Department of Anesthesiology
Mayo Clinic College of Medicine
200 First Street S.W.
Rochester, MN 55905
Phone: 507-255-4288
Email: joyner.michael@mayo.edu

Diomedes E. Logothetis, Ph.D. (Faye)
Department of Physiology & Biophysics
Medical College of Virginia Sch. of Med.
1101 E. Marshall Street
Richmond, VA 23298-0551
Phone: 804-828-9756
Email: delogothetis@vcu.edu

Melinda E. Lowy (Joel)
Executive Assistant, ACDP
9650 Rockville Pike, Suite 314
Bethesda, MD 20814-3991
Phone: 301-634-7785
Email: mlowy@the-aps.org

Kebreten F. Manaye, M.D.
Dept. of Physiology and Biophysics
Howard Univ. College of Medicine
520 W Street N.W.
Washington, DC 20059
Phone: 202-826-6336
Email: kmanaye@howard.edu

Elsa I. Mangiarua, Ph.D.
Dept. of Pharm., Physiology & Toxicology
Joan C. Edwards School of Medicine
Marshall University
1700 Third Avenue
Huntington, WV 25755
Phone: 304-696-6211
Email: mangiaru@marshall.edu

Christopher T. Minson, Ph.D. (Julie)
Department of Human Physiology
University of Oregon
122C Esslinger Hall
Eugene, OR 97403-1240
Phone: 541-346-4311
Email: minson@uoregon.edu

Gordon S. Mitchell, Ph.D. (Andrea)
Dept. of Physical Therapy and Neuroscience
Center for Respiratory Biology & Rehab.
University of Florida
College of Public Health & Health Professions
1225 Center Drive
Gainesville, FL 32611
Email: gsmitch@phhp.ufl.edu

Patricia E. Molina, M.D., Ph.D. (Miguel)
Department of Physiology
Louisiana State Univ. Hlth Sci Center
1901 Perdido Street
New Orleans, LA 70112-1393
Phone: 504-568-6171
Email: pmolin@lsuhsc.edu

Edward E. Morrison, Ph.D. (Nancy)
Dept. of Anatomy, Physiology & Pharmacol.
Auburn University
College of Veterinary Medicine
109 Greene Hall
Auburn, AL 36849-5518
Phone: 334-844-6740
Email: morrie@auburn.edu

L. Gabriel Navar, Ph.D.
Department of Physiology
Tulane Univ. Health Sciences Ctr.
Box SL39, 1430 Tulane Ave.
New Orleans, LA 70112
Phone: 504-988-2594
Email: navar@tulane.edu

T. Richard Nichols, Ph.D. (Patricia)
School of Applied Physiology
Georgia Institute of Technology
281 Ferst Drive
Atlanta, GA 30332-0356
Phone: 404-894-3986
Email: trn@gatech.edu

M. Bishr Omary, M.D., Ph.D. (Souha Hakim)
Dept. of Molec. & Integrative Physiology
Univ. of Michigan Medical School
1137 Catherine St., 7744 Med. Sci. II
Ann Arbor, MI 48109-5622
Phone: 734-764-4376
Email: mbishr@umich.edu

Christina Pabelick, M.D.
Depts. of Anesthesiology and Physiology
Mayo Clinic College of Medicine
200 First Street S.W.
Rochester, MN 55905
Phone: 507-284-2511
Email: pabelick.christina@mayo.edu

Y.S. Prakash, M.D., Ph.D.
Dept. of Physiology & Biomed. Engineer.
Mayo Clinic College of Medicine
200 First Street S.W.
Rochester, MN 55905
Phone: 507-255-7481
Email: prakash.ys@mayo.edu

Thomas A Pressley, Ph.D. (Beth)
Department of Medical Education
Texas Tech University Health Sciences Center
3601 4th Street STOP 6525
Lubbock, TX 79430-6525
Phone: (806) 743-2607
Email: Thomas.Pressley@ttuhsc.edu

Christopher M. Reilly, Ph.D.
Dept. of Physiology & Biochemistry
Virginia Polytechnic Inst. & State Univ.
Via College of Osteopathic Med.
2265 Kraft Drive
Blacksburg, VA 24060
Phone: 540-231-5345
Email: creilly@vcom.vt.edu

Gary Sieck, Ph.D. (Joanne)
Dept. of Physiology & Biomed. Engineer.
Mayo Clinic College of Medicine
200 First Street S.W.
Rochester, MN 55905
Phone: 507-255-8488
Email: sieck.gary@mayo.edu

Peter G. Smith, Ph.D. (Ellen Averett)
Dept. of Molec. & Integrative Physiology
Kansas Univ. Medical Center
3901 Rainbow Blvd.-Mail Stop 3043
Kansas City, KS 66061
Phone: 913-588-7400
Email: PSMITH@kumc.edu

Michael Sturek, Ph.D. (Diane)
Dept. of Cell. & Integrative Physiology
Indiana Univ. School of Medicine
635 Barnhill Dr., MS 385
Indianapolis, IN 46202-5120
Phone: 317-274-7772
Email: msturek@iupui.edu

Andrew P. Thomas, Ph.D. (Lourdes Serrano)
Dept of Pharmacology & Physiology
UMD-New Jersey Medical School -Rutgers
185 South Orange Ave., MSB-H609
Newark, NJ 07101-1709
Phone: 973-972-4460
Email: thomasap@umdnj.edu

Glen F. Tibbits, Ph.D.
Dept. of Biomedical Physiology and Kinesiology
Faculty of Science
Simon Fraser University
8888 University Drive
Burnaby, BC V5A 1S6
CANADA
Phone: 778-782-3658
Email: tibbits@sfu.ca

Gabor Tigyi, M.D., Ph.D.
Dept. of Physiology
Univ. of Tennessee College of Medicine
894 Union Ave.
Memphis, TN 38163
Phone: 901-448-4793
Email: gtigyi@uthsc.edu

Janice H. Urban, Ph.D (Keith McCrea,
Anne McCrea, Elisabeth McCrea)
Dept. of Physiology & Biophysics
Rosalind Franklin Univ. of Med. & Sci.
Chicago Medical School
3333 Green Bay Rd.
North Chicago, IL 60064-3095
Phone: 847-578-3283
Email: janice.urban@rosalindfranklin.edu

R. Clinton Webb, Ph.D. (Nancy)
Dept. of Physiology
Georgia Regents University
1120 15th St.
Augusta, GA 30912-3000
Phone: 706-721-2781
Email: cwebb@gru.edu

Michael M. White (Claudia)
Dept. of Pharmacology & Physiology
Drexel Univ. College of Medicine
245 N. 15th Street, MS 488
Philadelphia, PA 19102-1192
Phone: 215-991-8769
Email: mwhite@drexelmed.edu

L. Britt Wilson, Ph.D.
Dept. of Pharmacol./Physiol./Neurosci.
Univ. of South Carolina Sch. of Med.
VA Campus
Basic Science Bldg., 3rd Fl Rm D-26
Columbia, SC 29208
Phone: 803-216-3520
Email: britt.wilson@uscmcd.sc.edu

Charles E. Wood, Ph.D. (Maureen Keller-Wood)
Dept. of Physiology & Funct. Genomics
Univ. of Florida College of Medicine
P. O. Box 100274
Gainesville, FL 32610-0274
Phone: 352-392-7730
Email: cwood@phys.med.ufl.edu

Irving H. Zucker, Ph.D. (Judy)
Dept. of Cell. & Integrative Physiology
Univ. of Nebraska Medical Center
985850 Nebraska Medical Center
Omaha, NE 68198-5850
Phone: 402-559-7161
Email: izucker@unmc.edu



ACDP 2014 Annual Meeting Speakers

Chasing Mendel vs. The Future of Physiology

Distinguished Service Award Lecture

Michael J. Joyner, M.D.

Caywood Professor of Anesthesiology
Distinguished Investigator
Department of Anesthesiology
Mayo Clinic

Transducing Calcium Signals

New chair - **Donald L. Gill, Ph.D.**

Professor and Chair
Department of Cellular and Molecular Physiology
The Pennsylvania State University College of Medicine
Milton S. Hershey Medical Center

Workshop 1:

Quantifying Faculty Effort and Eking Out Departmental Resources

Michael Sturek, Ph.D. & Gordon Mitchell, Ph.D.

Dept. of Cellular & Integrative Physiology
Indiana University School of Medicine

Dept. of Physical Therapy & Neuroscience
Ctr. for Respiratory Biology & Rehabilitation
University of Florida

Winds of Change: 3-Year Medical School, Online Teaching and Other Interesting Developments

Thomas Pressley, Ph.D.

Professor, Depts. of Medical Education and Cell Physiology & Molecular Biophysics
Texas Tech University Health Sciences Center

Workshop 2:
Physiology's Place in the Academic Medical Center

Michael Joyner, M.D. & Thomas Pressley, Ph.D.

Caywood Professor of Anesthesiology
Distinguished Investigator
Department of Anesthesiology
Mayo Clinic

Depts. of Medical Education & Cell Physiology &
Molecular Biophysics
Texas Tech University Health Sciences Center

Smithsonian Lecture

Klaus Winter, Ph.D.

Senior Staff Scientist
Plant Physiology Program
Smithsonian Tropical Research Institute

Workshop 3:
Undergraduate Teaching and the Physiology Pipeline

Patricia Molina, M.D., Ph.D. & Christopher Minson, Ph.D.

Department of Physiology
Louisiana State Univ. Hlth Sci Center

Department of Human Physiology
University of Oregon

***Harnessing Intermittent Hypoxia-induced Spinal Motor Plasticity:
Breathing and Walking After Spinal Injury***

Arthur C. Guyton, Jr. Distinguished Lectureship Award Lecture

Gordon Mitchell, Ph.D.

Professor, Department of Physical Therapy and Neuroscience
Director, Center for Respiratory Biology and Rehabilitation
University of Florida
College of Public Health & Health Professions

Status and initiatives of the APS

Martin Frank, Ph.D.

Executive Director
American Physiological Society



*2014 Distinguished Service
Awardee*

Michael J. Joyner, M.D.

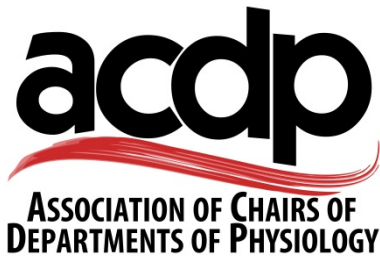
Caywood Professor of Anesthesiology
Distinguished Investigator
Department of Anesthesiology
Mayo Clinic

Michael Joyner is the Caywood Professor of Anesthesiology at Mayo Clinic where he was named Distinguished Investigator in 2010. His interests include: exercise physiology, blood pressure, metabolism, and transfusion practices. He attended the University of Arizona for his B.S. and M.D. degrees, with residency training at Mayo Graduate School of Medicine, Mayo Clinic College of Medicine.

His lab has been funded by NIH since 1993, and former fellows have established independent research programs at leading institutions throughout the world.

He has held leadership positions at Mayo, in the extramural research community, and with leading journals.

Professional highlights include Walter B. Cannon Lecture, American Physiological Society (2013); Edward F. Adolph Distinguished Lecture, American Physiological Society (2011); Fulbright Specialist Grant, Fulbright Scholar Program (2011); Distinguished Investigator, Mayo Clinic (2010); Citation Award, American College of Sports Medicine (2009); Frank R. and Shari Caywood Professor of Anesthesiology, Mayo Clinic (2009); Michael de Burgh Daly Prize Lecture, Physiological Society, UK (2007); Joseph B. Wolffe Memorial Lecture, American College of Sports Medicine (2004).



ACDP Speaker Biosketches

2014 Arthur C. Guyton, Jr. Distinguished Lecturer



Gordon Mitchell, PhD

Professor, Department of Physical
Therapy and Neuroscience
Director, Center for Respiratory
Biology and Rehabilitation
University of Florida

Gordon Mitchell, after 17 years as Chair of the Department of Comparative Biosciences at the University of Wisconsin, recently relocated to the University of Florida where he will start the new Center for Respiratory Biology and Rehabilitation and join the McKnight Brain Institute. He received his PhD in Developmental and Cell Biology from the University of California at Irvine in 1978. He pursued postdoctoral training (1978-80) at the Max-Planck-Institute for Experimental Medicine in Germany where he studied respiratory physiology and neurobiology with Professor Peter Scheid; he then completed one additional year as a postdoctoral fellow at the University of Wisconsin with Professor Jerome Dempsey before the University of Wisconsin opened a new School of Veterinary Medicine. Dr. Mitchell became one of the founding faculty members of that school and remained there until 2014.

Dr. Mitchell has received recognition for his research and teaching accomplishments, including a MERIT Award from the National Institutes of Health, selection as the Steenbock Professor of Behavioral and Neural Science, multiple institutional research and teaching awards, and recognition as a plenary lecturer by the Society for Neuroscience and American Physiological Society (Comroe Lecture). He served as an APS councilor from 2008-2011.

Dr. Mitchell was among the first to recognize the importance of neuroplasticity in respiratory motor control. Currently, four major research areas are under active investigation in the laboratory. The first area concerns cellular and molecular mechanisms of long-lasting phrenic and hypoglossal motor facilitation induced by intermittent hypoxia. A multidisciplinary approach is used, including neurophysiology, neuropharmacology, ventilation measurements, immunohistochemistry and cell/molecular biology techniques, including flow cytometry and RNA interference in vivo (one of the first laboratories to successfully apply this technology in vivo). To date, at least five distinct cell-signaling cascades giving rise to long-lasting phrenic motor facilitation have been identified. Major questions include: how these pathways interact, when they are used by the animal and for what purpose. A second direction concerns the ability to harness respiratory plasticity to treat respiratory and somatic motor impairment following spinal injury. The fundamental goal is to harness intermittent hypoxia-induced respiratory plasticity to enhance respiratory and somatic motor function in rodents and persons with chronic spinal injury. Striking findings to date include: 1) repetitive acute intermittent hypoxia elicits profound functional recovery of breathing capacity and forelimb function in rodent models of spinal injury, and 2) leg strength and walking ability in humans with incomplete, chronic spinal injuries. A third direction concerns mechanisms of compensatory respiratory plasticity in rodent models of neurodegenerative diseases, including ALS. Compensatory respiratory plasticity preserves ventilatory capacity during motor neuron disease, despite progressive death of respiratory motor neurons; however, phrenic motor output decreases, indicating imminent ventilatory failure (the major cause of death in ALS). Intermittent hypoxia and spinal stem cell implants have been used to promote motor neuron survival and restore breathing capacity. Another major effort concerns the impact of systemic/neuro inflammation on spinal respiratory plasticity; inflammation is prevalent in most clinical disorders that challenge ventilatory control, and undermines the capacity for spontaneous or induced functional recovery.

The Mitchell laboratory collaborates with outstanding scientific groups in Wisconsin with interests in immunology), epigenetics, gene therapy, stem cell biology, and respiratory neurobiology. New collaborations are underway at the Univ. of Florida and Univ. of South Florida. Other, inter-institutional collaborations include: Univ. of Saskatchewan, Emory Univ., Rehabilitation Inst. of Chicago, Cedars Sinai, and Univ. of Texas, Southwestern.

Dr. Mitchell was director of the Respiratory Neurobiology Training Program at the University of Wisconsin from 2002 to 2014. He has supervised 23 graduate students and 26 postdoctoral trainees, with service on 40 additional graduate thesis committees. Dr. Mitchell's trainees have been highly successful as a group: 1) trainees have won >50 awards from national/international organizations for research excellence; 2) many have been invited to give talks in symposia at national/international conferences; 3) many trainees (>20) successfully competed for fellowships from NIH or medical foundations; and 4) 16 former postdoctoral trainees and 5 former graduate students are now faculty at academic institutions, many with active, extramurally funded research programs. Dr. Mitchell has been active in training clinician scientists and underrepresented minority students.

ACDP Speaker Biosketches



Donald L. Gill, Ph.D.

Professor and Chair

Dept. of Cellular and Molecular Physiology

The Pennsylvania State University

Milton S. Hershey Medical Center

Donald Gill is the new Chair of the Department of Cellular and Molecular Physiology at Penn State in Hershey. He received his Ph.D. from the University of London and his postdoctoral training at the National Institutes of Health.

Dr. Gill studies the signals of Ca^{2+} which occur as a result of control of specific channels in the plasma and endoplasmic reticulum membranes which allow Ca^{2+} to flow into the cytosol. A slight elevation in the resting cytosolic Ca^{2+} level is enough to trigger rapid cellular responses such as contraction, secretion or changes in the function of key metabolic enzymes. More sustained Ca^{2+} signals mediate crucial longer term responses including cell growth, cell division, and cell death (apoptosis). Our lab studies signal transduction, i.e., how cells transduce external signals into Ca^{2+} signals. Cells sense many different external signals through specific receptors for chemical agents, such as growth factors, neurotransmitters, and hormones, as well as receptors for temperature, pressure, stretch, sound, and light. The cell converts the message received by receptors into Ca^{2+} signals by precisely controlling the opening of Ca^{2+} channels. We use a combination of molecular biology, biochemistry, cell biology, and single cell physiological approaches to understand how the Ca^{2+} channels are controlled. We use molecular biology to mutate the channel proteins, create expression vectors, and modify channel expression using gene silencing approaches. We follow real-time Ca^{2+} signals in cells using sophisticated single cell ratiometric fluorescence imaging technology. We measure the precise biophysical properties of channels using state-of-the-art electrophysiological methods. The work centers on the analysis of several distinct types of membrane channels, including members of the now widely recognized TRP family of channel proteins involved in transducing a remarkable array of external signals. More recently, we have focused on understanding the mechanisms by which STIM and Orai proteins are involved in the controlling Ca^{2+} signals. Our work draws together molecular and cellular approaches to understand the basic function and physiological role of these channels which are critical to mediating essential cellular responses.



Michael Sturek, Ph.D.

Professor and Chair
Department of Cellular &
Integrative Physiology
Indiana University School of Medicine

Mike Sturek has been Chair of the Department of Cellular & Integrative Physiology at Indiana University School of Medicine since 2004, when he moved from the University of Missouri School of Medicine. Sturek is also Professor of Biomedical Engineering at Purdue University.

He received his B.A. degree from Augustana College in exercise physiology and psychology where he also participated in football and earned Academic All-American honors. He received his M.S. degree from Purdue University in exercise physiology and then studied exercise physiology in the Ph.D. program at the University of Iowa before earning his Ph.D. degree in pharmacology. After his postdoctoral fellowship in membrane physiology at the University of Chicago Sturek was at the University of Missouri School of Medicine for 17 years, where he rose to Professor and Associate Director of Basic Research in the Center for Diabetes and Cardiovascular Health.

Sturek is active in the APS on the Cardiovascular Section Steering Committee and was founding President of the Indiana Chapter of the APS. He is currently a member of the NIH Vascular Cell and Molecular Biology Study Section. Sturek's research encompasses experimental approaches at all levels – clinical, whole animal, organ, tissue, cell, and molecular.

He primarily studies ion transport and calcium signaling adaptations in vascular cells after several *in vivo* manipulations, including dyslipidemia, metabolic syndrome (“pre-diabetes”), and diabetes. His emphasis is on the coronary vasculature and translational research using the pig as a model, especially the novel Ossabaw swine model of metabolic syndrome and type 2 diabetes. The model enables study of *in vivo* vascular imaging catheters, drug delivery devices, etc., in addition to the study of cellular and molecular mechanisms.



Thomas A. Pressley, Ph.D.

Professor

Depts. of Medical Education and Cell
Physiology & Molecular Biophysics
Texas Tech Univ. Health Sciences Ctr.



Tom Pressley is a Professor in the Departments of Medical Education and Cell Physiology & Molecular Biophysics at Texas Tech University Health Sciences Center.

After earning his undergraduate degree at the Johns Hopkins University, he entered the graduate program in biochemistry at the Medical University of South Carolina. His postdoctoral training was in the College of Physicians and Surgeons at Columbia University. He was recruited by the University of Texas Medical School in Houston in 1987, and he transferred to Texas Tech in 1995.

His research interests focus on active transport, and his teaching responsibilities include cardiovascular physiology to first- and second-year medical students.

Dr. Pressley has served as an interim dean, a visiting professor at multiple institutions, a member of grant review committees, and the chair of the Education Committee of the American Physiological Society. He has also developed numerous courses, and he has reviewed degree programs at several schools.



Klaus Winter, Ph.D.
Senior Staff Scientist
Plant Physiology Program
Smithsonian Tropical Research Institute

Klaus Winter studies the biochemical-physiological foundations of how tropical plants interact with the environment and respond to environmental stress.

Topics of current research include responses of tropical plant species to pre-industrial, current-ambient and elevated concentrations of atmospheric CO₂. These experiments compare responses of legumes and non-legumes, lianas and trees, angiosperms and gymnosperms, and investigate interactions between CO₂ concentration and soil nutrient status, soil water status and temperature. Dr. Winter also studies adaptation and acclimation of tropical plants to high temperature and the inhibition of photosynthesis by excess light (photoinhibition) and the protective mechanisms against excess light (photoprotection). His lab also studies the functional significance and evolutionary origins of CAM photosynthesis in tropical species of Orchidaceae, Bromeliaceae and Clusiaceae.



Patricia Molina, M.D., Ph.D.

Richard Ashman Professor and Chair,
Department of Physiology
Director, Alcohol and Drug Abuse Center
of Excellence
Louisiana State Univ. Health Sciences Ctr.

Patricia Molina completed her MD training at the Universidad Francisco Marroquin in Guatemala, Central America. Thereafter, she pursued a PhD in Physiology at LSUHSC under the mentorship of Dr. John J. Spitzer, presenting her dissertation on “Ethanol-endotoxin interaction with carbohydrate metabolism”. Her postdoctoral experience at Vanderbilt University was supported by a NIGMS Minority Supplement Grant under the mentorship of Dr. Najji N. Abumrad. She progressed through the academic ranks initially as an Assistant Professor of Surgery and Physiology at the State University of New York, Stony Brook and subsequently as Director of Surgical Research at North Shore University Hospital. During that period, she held a Guest Scientist appointment at Brookhaven National Laboratory prior to joining the Department of Physiology at LSUHSC as an Associate Professor. Since becoming a faculty member at LSUHSC, Dr. Molina has obtained tenure and promotion to the rank of Professor, and has been named the Richard Ashman, PhD Professor in Physiology. In September 2008, she was appointed Department Head for Physiology.

Dr. Molina’s research has been funded continuously since completing her PhD degree. She has mentored several undergraduate, graduate and post-doctoral trainees. Dr. Molina is a member of the faculty of the School of Graduate Studies, the Graduate Education Committee in Physiology, The Graduate Advisory Council, and is a mentor for the LSUHSC Interdisciplinary Graduate Program. Dr. Molina is an active member of several committees within LSUHSC and is also actively involved in the Scientific Community outside the institution. Currently, she is the Chair for the National Hispanic Science Network on Drug Abuse and President Elect of the American Physiological Society. Research in her laboratory focuses on the impact of alcohol and drug abuse on the cardiovascular, metabolic and immune consequences of acute traumatic injury and hemorrhagic shock. In addition, work in her laboratory also investigates the interaction of chronic alcohol and cannabinoid use on the behavioral, metabolic, and immune consequences of HIV/AIDS. Currently, work in her laboratory is funded by NIAAA, NIDA, and CDMRP.



Christopher T. Minson, Ph.D.

Ken and Kenda Singer Endowed
Professor
Department of Human Physiology
University of Oregon



Chris Minson's research focuses on topics related to women's health, integrative neural-vascular physiology, and the acute and adaptive responses to environmental extremes. Cardiovascular health, studied through various models of endothelial, vascular, and microvascular function, is the overarching theme in much of his research.

Dr. Minson served as Head of the Department of Human Physiology at the University of Oregon for 6 years from 2008-2014, and is currently an Endowed Professor with teaching emphases in cardiovascular and environmental physiology.

He received his doctorate from Pennsylvania State University, and post-doctoral training at Mayo Clinic.

ACDP Speaker Biosketches



Martin Frank, Ph.D.

Executive Director

The American Physiological Society

Martin Frank received his Ph.D. in Physiology and Biophysics from the University of Illinois, Urbana, in 1973 working under Dr. William W. Sleator. He served as a research associate in the Cellular Physiology Laboratory, Michigan Cancer Foundation, Detroit, and in the Department of Pharmacology and Toxicology, Michigan State University, East Lansing. In 1975, he joined the Department of Physiology, George Washington University School of Medicine, Washington, DC, as an assistant professor. From 1978-1985, he served as the Executive Secretary, Physiology Study Section, Division of Research Grants, National Institutes of Health, Bethesda, MD. While at NIH he set up his own personal professional development program, working with various directors in the NIH institutes. From 1983-1985, he was a member of the Senior Executive Service Candidate Development Program, Department of Health and Human Services, Washington, D.C. As part of the program, he served as a policy analyst in the Office of the Assistant Secretary of Health, DHHS. In 1985, Frank accepted a position as the Executive Director of the American Physiological Society, Bethesda, MD.

The American Physiological Society is a not-for-profit association devoted to fostering education, scientific research, and dissemination of information in the physiological sciences through its meetings and publications. The Society was founded in 1887 with 28 members and now has over 10,500 members. Frank manages a staff of 75 with an annual budget of \$19 million. In 2004, Frank accepted a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring on behalf of the Society for its extensive programs to increase the diversity of the discipline. Frank was also the recipient of the 2001 Distinguished Alumni Award from his academic department at the University of Illinois, Urbana. In 2004, he helped found the Washington DC Principles Coalition for Free Access to Science, a Coalition that represents approximately 70 not-for-profit society and university press publishers. The Coalition believes free access to the scientific literature should be determined by the publishers' business and publication model, not government mandates.



AGENDA
ACDP Business Meeting I

(General membership)

December 5, 2014

- I. Call to order**
- II. Approval of 2013 draft meeting minutes**
- III. Call for names for 2015 Guyton Award Lectureship**
Submit nominations to Pieter P. de Tombe, Janice Urban, or Mike Sturek
- IV. Call for names for 2015 Distinguished Service Awardee**
Submit nominations to Mike Sturek
- V. Call for nominations for officer positions (President, Councilors, CFAS Rep.)**
- VI. Treasurer's Report (Mangiarua)**
- VII. CFAS Update (Webb)**
- VIII. 2014 David S. Bruce Awards for Excellence in Undergraduate Research – supported in part by ACDP**
- IX. New Business**

ACDP Business Meeting I Minutes

I. Call to Order

The Business Meeting was convened by President Muthu Periasamy at 9:30 am on December 6, 2013.

II. Approval of 2012 Draft Meeting Minutes

The minutes from the 2012 Business Meetings were unanimously approved as submitted.

III. Financial Report

The financial report was presented by Secretary-Treasurer Susan DeMesquita. She distributed 2013 year-to-date budget numbers compared with 2012 at the same point in time. She noted that the Society is in good financial shape, with approximately \$10,000 more in assets than at this point last year. She did point out that meeting costs are not included yet because the travel agency was used again. However, it is expected that by holding the meeting at an all-inclusive resort again, ACDP should break even or make a small amount of money. Membership is at around 100, up slightly from last year in terms of dues revenue. Expenses show a drop in travel because there was no site visit for the 2013 location and neither CFAS representative attended the fall CFAS meeting. However, award costs increased with the approval in 2012 to support the David Bruce Undergraduate Awards at a level of \$2,000 for 3 years.

IV. CFAS Update

Montrose reminded the group that he and Webb are the ACDP representatives to the Council of Faculty and Academic Societies (CFAS), a newly created body formerly known as the Council of Academic Societies until it was opened to include two representatives from each of the 150 medical schools as appointed by the Deans. This was to ensure that faculty would be represented directly as initially envisioned. One of the faculty representatives is supposed to be a senior faculty member (professor, chair) and the second a newer faculty member within 10 years of appointment. The change took effect in July 2013. Most societies, ACDP included, have decided to continue to pay dues for the time being and are monitoring the new organization but remain concerned about the dilution of the societies' voices.

There was a CFAS orientation meeting in November as part of the AAMC meeting that neither Montrose nor Webb attended as the agenda for it seemed to be mainly a "meet and greet." A PowerPoint presentation given at the meeting was distributed that contained the top 10 priorities for CFAS. Of those 10, only 2 appear to be directly relevant basic science departments. A list of CFAS members was also distributed. Montrose will send out the PPT and list and encouraged everyone to see if their institution has representatives and if not, consider volunteering themselves or someone from their department to ensure basic science representation.

The next CFAS meeting is scheduled for March. Both Webb and Montrose plan to attend and will report on that via email and at the ACDP meeting scheduled for Experimental Biology.

Martin Frank, APS Executive Director, informed the group that APS also has two representatives who are Gary Sieck (a member of ACDP) and Michael Levitzky (LSU, New Orleans). Levitzky has been appointed to the CFAS Board and will be reporting about the new organization to APS.

V. Call for Nominations for Officer Positions

A call was made for nominations for President-elect, Secretary-Treasurer, and two open Councilor positions. The membership was reminded that the nominees for President need to have previously served on Council as either Councilors or Secretary-Treasurer. The deadline for nominations is Saturday by 11:00 am.

The meeting was adjourned until the following day at 11:30 am.

ACDP Business Meeting II Minutes

I. Call to re-convene

Periasamy reconvened the business meeting at 11:31 am on December 7, 2013.

II. Election of Officers

The slate of nominees for President-elect, Secretary-Treasurer, and Councilors was announced and the membership voted by secret ballot. Michael Sturek (Indiana University) was elected President-elect. Elsa I. Mangiarua (Marshall University) was elected Secretary-Treasurer. Pieter de Tombe (Loyola Univ. Chicago Medical School) and Janice Urban (Rosalind Franklin University of Medicine & Science, Chicago Medical School) were elected Councilors with terms ending in 2016.

III. 2014 ACDP Meeting

Nick Delamere, ACDP President-elect, announced that the 2014 ACDP meeting will be held December 4-7, 2014 at Gamboa Rainforest Resort in Panama. He gave a slide presentation on the meeting site, from which he recently returned from a site visit. There are minor details to work out and then the contract can be signed. There is a nearby Smithsonian Tropical Research Institute on Barro Colorado Island. Delamere is working to set up a tour prior to the meeting, as well as possibly having a speaker from there. DeMesquita informed the group that she had been there a year ago and highly recommended it.

Delamere plans to send out a meeting survey to participants for feedback on topics and types of presentations to help him better plan the program for 2014. He encouraged everyone to fill it out and give him suggestions.

IV. Meeting Name Change

Delamere, Montrose and Sturek brought up the issue of attendance at the meeting and possible declining membership with the disappearance of departments of physiology. One suggestion had been to investigate a new name for the ACDP but it was agreed that such a step would be labor intensive and costly. However, renaming the annual meeting would be very feasible and could be

a way to increase both membership and meeting attendance. Delamere and Sturek will work together to draft a letter to send to medical physiology course directors, directors of graduate programs in physiology, and directors of undergraduate programs in physiology to invite them to join ACDP and attend the 2014 meeting. APS has the first two lists and Webb noted that he has a list of undergraduate programs and will forward that information. Chris Minson suggested including exercise science departments and Fred Peterson urged targeting Osteopathic School chairs or program directors. Both agreed to work with staff to find lists of people.

Many of these people may be at Experimental Biology. It was suggested that they be invited to attend the ACDP meeting held there and ask them for input regarding the 2014 program.

After discussion, a new name for the meeting was agreed on: ACDP Leadership Retreat. This conveys that the ACDP organizes the meeting/retreat, but that faculty in several Leadership roles are involved, e.g. education, research, service. Further, the Retreat conveys the focus on these leadership issues away from other tasks. Delamere agreed to work on a draft agenda as soon as possible to allow the various people time to decide whether they want to attend and can justify such a meeting if necessary to their leadership.

V. Adjournment

The meeting was adjourned at 12:10 pm.

Respectfully submitted,

Susan DeMesquita
Secretary-Treasurer

Association of Chairs of Departments of Physiology
Arthur C. Guyton Distinguished Lectureship Award

The Arthur C. Guyton Distinguished Lectureship Award was instituted in 2006 to recognize outstanding and cutting edge research in physiology or related areas. Awardees are invited to attend the ACDP fall meeting and present a seminar on their research.

Awardees are selected by the President in conjunction with members of Council based on membership recommendations. They receive travel, hotel, food, complimentary registration and an honorarium of \$1,000.

The Award was named for the late Arthur C. Guyton, University of Mississippi, a well-known researcher, educator, author, and long-time department chair. He was the only person to be awarded both the ACDP Outstanding Teaching Award and the ACDP Distinguished Service Award.

Awardees:

- 2014** **Gordon Mitchell**
University of Florida (formerly University of Wisconsin, Madison)
- 2013** **José Jalife**
University of Michigan
- 2012** **Irena Levitan**
University of Illinois at Chicago
- 2011** **Paul Welling**
University of Maryland
- 2010** **Ferid Murad**
University of Texas, Houston
- 2009** **Helen Hobbs**
University of Texas Southwestern Medical Center
- 2008** **Eric Olson**
University of Texas Southwestern Medical Center
- 2007** **H. Lee Sweeney**
University of Pennsylvania

Association of Chairs of Departments of Physiology
Distinguished Service Award

The ACDP Distinguished Service Award is presented annually to someone who has given long and illustrious service to ACDP, physiology as a discipline, and/or the field of science in general.

The awardee is selected by the President in consultation with ACDP Council. Awardees receive all-expenses paid trip to the annual ACDP meeting.

The award was formally known as the Outstanding Teaching Award but in 1978 its focus and name were expanded to the current Distinguished Service Award.

Awardees:

2014 Michael J. Joyner
2013 Allen W. Cowley, Jr.
2012 Ernest M. Wright
2011 R. John Solaro
2010 John A. Williams
2009 Phyllis M. Wise
2008 Irving H. Zucker
2007 William H. Dantzler
2006 Antonio Scarpa
2005 No awardee – joint meeting with AAMC
2004 Daniel C. Tosteson
2003 L. Gabriel Navar
2002 Gabor Kaley
2001 Mordecai P. Blaustein
2000 Paul C. Johnson
1999 F. Norman Briggs
1998 Norman R. Alpert
1997 Carlton C. Hunt
1996 Arthur C. Guyton
1995 Aubrey E. Taylor
1994 Stanley G. Schultz
1993 Edward J. Masoro
1992 Gerhard H. Giebisch
1991 None
1990 John T. Shepherd
1989 Walter C. Randall
1988 William F. Ganong
1987 Howard E. Morgan

1986 Horace Davenport
1985 Clifford Barger
1984 Harry Patton
1983 Ernst Knobil
1982 Hermann Rahn
1981 Robert Berliner
1980 George Sayers
1979 Ewald Seikurt
1978 William F. Ganong

Outstanding Teaching Award

1977 C. Ladd Prosser
1976 Robert M. Berne
1975 Arthur C. Guyton
1974 Julius H. Comroe
1973 Maurice Visscher
1972 Robert Pitts

*Association of Chairs of Departments of Physiology
Revenue and Expenses and Changes in Net Assets
Year to Date as of September 30, 2014*

	2014 YTD			Totals at 9/30/13	Incr/(Decr)
	Annual Meeting	General	Totals at 9/30/14		
Revenue:					
Dues Income	\$ -	\$ 18,750	\$ 18,750	\$ 24,250	\$ (5,500)
Misc Income (Tour Receipts)	3,300	-	3,300	-	3,300
Interest Income	-	17	17	23	(6)
Total Revenue	3,300	18,767	22,067	24,273	(2,206)
Expenses:					
Professional Fees	-	-	-	25	(25)
Supplies	-	-	-	-	-
Telephone	-	280	280	315	(35)
Credit Card Processing Fees	-	499	499	547	(48)
Travel	-	4,096	4,096	1,990	2,106
Dues Expense - Associations	-	510	510	500	10
Awards (APS David Bruce Award)	-	2,000	2,000	2,000	-
Misc Expense (NDOG Mtg support)	-	2,000	2,000	-	2,000
Total Expenses	-	9,385	9,385	5,377	4,008
Net Revenue/(Expenses)	3,300	9,381	12,681	18,896	(6,215)
Net Assets, Beginning of Year			68,420	59,273	9,147
Net Assets, End of Period			\$ 81,101	\$ 78,169	\$ 2,932



In this issue: [Message from Chair](#) | [Task Force & Committee Updates](#) | [Connect with AAMC](#)

Welcome to the first edition of the *CFAS Representative Update*. This quarterly electronic newsletter will keep you looped into a range of ongoing activities and upcoming plans with the AAMC's Council of Faculty and Academic Societies. Conceived by the CFAS Communications Committee, this newsletter is for and about you.

As the Chair of CFAS, it is my hope that you feel engaged with the organization, that your ideas are heard, and that you have a stake in all of our activities. I welcome any ideas you have regarding newsletter topics as well as your feedback about overall CFAS activities. Let's keep the energy and momentum from the AAMC Annual Meeting going!



Rosemarie Fisher, M.D.
Chair, CFAS
Association of Program Directors in Internal Medicine
Professor of Medicine & Associate Dean GME
Yale University School of Medicine

CFAS Task Force and Committee Updates

CFAS task forces, committees, and working groups help advance council business, improve bidirectional communication, and are a forum for discussion and knowledge-sharing on critical issues. Below are short updates from a subset of groups.

Evaluation Committee

To understand how CFAS can provide its academic society members better value, the Evaluation Committee developed and disseminated a short electronic survey to society representatives during October. We had a 26 percent response rate, and insightful feedback on areas where societies and CFAS can collaborate, along with affirmation that key areas of AAMC/CFAS strategy – namely GME advocacy and NIH funding – are also front-and-center in the minds of a great many of our society representatives.

The survey results were discussed by the CFAS Ad Board during the AAMC Annual Meeting, and shared with representatives at the CFAS Business Meeting. A brief pre-annual meeting survey was also sent, primarily to find out how CFAS reps are disseminating information to faculty and the source of financial support for meeting attendance. As requested by several CFAS reps, we will send you the aggregate responses once they have been collected and organized.

CFAS Spring Meeting Program Committee

This group held a one-day retreat in September to develop objectives and session topics for the CFAS 2015 Spring Meeting, March 5-7, in San Diego. The meeting is shaping up nicely, with program details and speakers coming together. The preliminary plenary session topics were shared during the CFAS Business Meeting:

- Elevating the Learning Environment/Faculty and Resident Resilience
- Economics of Academic Medicine
- Tomorrow's Academic Medical Center
- Career Development and the Life Cycle of a Faculty Member

The full program will be announced and distributed in December.

In addition to pulling together program topics and session themes, the CFAS Program Committee also created what amounts to overall objectives or goals for the spring meeting, which will likely carry over into future meetings:

- Get equipped to be a liaison between CFAS and your institution or society

- Become fluent in the hot topics in academic medicine today
- Understand key issues and new perspectives by networking across diverse groups

The Faculty Resilience Task Force

This group was originally called the Work Life Balance Task Force, but since has been renamed the Faculty Resilience Task Force to be more broadly relevant. As many of you who were at the annual meeting know, resilience was a common theme in several sessions. It also was the subject of the two [Leadership Plenary addresses](#) delivered by AAMC President and CEO Darrell G. Kirch, M.D., and AAMC Chair Lorris Betz, M.D., Ph.D. With that in mind, this task force is developing partnerships with the other primary AAMC governing councils and organizations, including the Council of Teaching Hospitals, the Council of Deans, the Organization of Student Representatives, and the Organization of Resident Representatives, to bring this critical issue forward. We additionally are organizing the opening plenary session at the CFAS spring meeting in March of 2015 on improving the learning environment through addressing faculty and resident resilience. Our first planned work product is an online resource encompassing a range of valuable materials and training opportunities related to resilience that are now spread across various AAMC affinity groups.

Mission Alignment and Faculty Values Task Force

The Mission Alignment and Faculty Values task force has shifted focus to better align with the AAMC Board of Directors' focus on GME and the education continuum. Accordingly, our issues of focus going forward are: 1) the role of basic science in medical education, 2) the future of the 4th year of medical school, 3) residency education/GME, 4) transition to practice after residency, and 5) implications of increasing faculty engagement in education on the role, goals, and objectives of full and part time faculty members.

For the 2015 CFAS Spring Meeting, the task force has suggested, and will be coordinating, a detailed discussion of options for the future of the 4th year of medical school in the evolving education continuum; the implications of the new ACGME metrics relative to NAS, CLER, and EPAs for faculty time and effort; and the relationship of faculty performance and productivity to the effectiveness and engagement of institutional leadership.

Communications Committee

The Communications Committee continues to rely on the valued feedback CFAS representatives provided in our Spring 2014 communications survey. Based on the communications preferences you expressed, the committee has provided input to AAMC staff on faculty and society engagement, website content, and the CFAS LinkedIn community. The CFAS website at www.aamc.org/cfas is now easier to navigate and is a convenient way to access AAMC data, leadership development resources, and publications. The committee welcomes additional volunteers.

To increase knowledge sharing and further connect the diverse perspectives and audiences within CFAS, we have created an opt-out, all CFAS-email listserv. This CFAS listserv has been approved by the ad board, announced during the CFAS Business Meeting, and will launch later this month. Keep an eye out for the introductory message from CFAS-list@lists.aamc.org.

Results of Our Pre-Annual Meeting Survey

Prior to the AAMC Annual Meeting, CFAS Chair Rosemarie Fisher, M.D., sent an informal poll to CFAS reps to take your pulse on what strategies are working to relay and gather information from the medical school faculty and societies CFAS represents. Of the various methods CFAS reps rely upon, the most common techniques are email and in-person communication in faculty senate meetings or similar venues. A future edition of this newsletter will cover those survey results in more detail. Some of you might recall we held a webinar on this issue back in April, which was recorded and can be viewed [here](#).

Additionally, during the annual meeting, many of you asked for PowerPoint slides or a summary report that could be forwarded or presented at your home institutions to relate the content covered in Chicago. Please watch your inboxes in the coming days for a link to a presentation that summarizes CFAS issues from the annual meeting. These slides can be freely incorporated into any presentations that you may deliver.

Connect with AAMC

The CFAS community on LinkedIn is a closed group ideal for posing questions and sharing articles and best practices. If you need assistance finding the Council of Faculty and Academic Societies Group on LinkedIn, email cfas@aamc.org. Please join the community today.

CFAS tip: Be sure you have an AAMC login and password so you can access members-only content throughout www.aamc.org and www.aamc.org/cfas, including a member directory. If you don't know your AAMC login and password, follow the appropriate prompts once you click on "sign in" from any page on the AAMC website or email memberservice@aamc.org.

Tell us what you think: If you have comments about an article here, or have an idea or request for specific content to include in a future *CFAS Representative Update*, please send a message to Eric Weissman at eweissman@aamc.org or call 202-828-0044.

This message was intended for: mlowy@the-aps.org

You were added to the system March 31, 2011.

For more information [click here](#). [Update your preferences](#)

[Unsubscribe](#) | [Unsubscribe via email](#)

Highlights from the Council of Faculty and Academic Societies Spring Meeting

Nashville, Tenn. March 6-8, 2014



Through its new structure, CFAS provides an exciting venue for the AAMC to learn from and engage early and mid-career faculty and faculty leaders. With 241 attendees, the first ever CFAS spring meeting sent a huge signal about this constituency's hunger for engagement and input into the forces transforming academic medicine. Attendees alternated between hearing from inspiring thought leaders and working sessions to help shape CFAS priorities. AAMC had a record 17 staff on hand to hear from these new voices and lay the foundation for bi-directional communication.

—THEMES AND KEYNOTES—

Challenges and Opportunities Facing Higher Education and Its Future

Mark G. Yudof, J.D.

Professor of Law, Berkeley Law School // President Emeritus, University of California

Dr. Yudof made a strong case for higher education and medicine as public goods:

Takeaways: We're in a period where the support for public goods is eroding while the price sensitivity of consumers of higher education is growing. Sustainability can't be built on ever increasing tuition. State and federal funds, even as they decline in inflation-adjusted dollars, are attached to increasing expectations for accountability. Meanwhile, productivity improvements are evident in so many industries, while they are hard to achieve in higher education and medicine. This has been called the "cost disease." As a result, the limbs that support the research enterprise are sagging. Those who support research need to recognize its interdependency with undergraduate and graduate education, research trainees and the clinical enterprise. We need to explain how universities make a difference in people's lives, even as we continue to look for efficiencies and re-examine our sacred cows.

RESIDENT PERSPECTIVE

"Residents are not letting a good crisis go to waste: many are making strides not only to survive and thrive in this tumultuous environment, but helping to shape it by offering potential solutions. As both learners and teachers, residents are uniquely positioned to be agents of change."

Brenessa Lindeman, MD,
Past Chair, AAMC
Organization of Resident
Representatives

CLINICAL FACULTY PERSPECTIVE

"As people move towards having to foot more of their private bills for health care, will they also be willing to subsidize medical research and education? Likewise, is the public prepared to sustain a fulltime academic faculty in the way we've become used to?"

Vincent Pellegrini, Jr, MD
Chair Elect, CFAS

RESEARCH FACULTY PERSPECTIVE

"As part of telling the story of the value of the university, we need to tell the story of how fundamental science impacts human health. And collectively, we have to intervene earlier in the education pathway to develop enduring interest in science."

Tika Benveniste, PhD
Member, CFAS
Administrative Board

MEDICAL EDUCATORS PERSPECTIVE

"Most of us learned teaching from mimicking great teachers. We have to break that mold and develop the skills to convey knowledge, communication, empathy and problem solving in a learner-centered way...and we need to work closer with educational experts."

Steven Block, MBBCh
Chair, AAMC Group on
Faculty Affairs

The ACA and Health System Transformation: The Impact on Faculty and Learners

Janis Orlowski, M.D. // Sr. Director, Clinical Transformation, AAMC

Dr. Orlowski shared how some teaching hospitals are making significant changes in focus and behavior in the transition towards value-based payment and new approaches to care delivery.

She also announced a new AAMC report, [Advancing the Health System of the Future](#) which reveals eight common themes among institutions that are taking proactive steps to the future:

1. The AMC of the future will be system based
2. These AMC systems require strong and aligned governance, organization, and management systems
3. University relationships will be challenged to change as AMC systems grow and develop
4. Growth and complexity of an AMC requires enhanced profile for Department Chairs, new roles for physician leaders, and evolution of the practice structures
5. Transparency in quality, performance, and financial information at all levels of the organizations central to achieving high achievement
6. National imperative to bend the cost curve will require a more efficient AMC operating model
7. Time for AMC Leadership to develop skills in Population Health
8. Candid assessment of strengths and weaknesses essential to achieve change

Her full presentation is [available for participants to download](#).

Jeffrey R. Balsler, MD, PhD

Vice Chancellor for Health Affairs and Dean, School of Medicine // Vanderbilt University

Takeaways: Academic medical centers play an indispensable role in the nation's health care. We perform key services that no other sector of the healthcare service industry can effectively provide, as centers that continuously invest in training the unique professionals capable of performing these services and innovating healthcare delivery for the nation.

At the same time, it is our responsibility to reengineer our own systems to better align our investments and costs with our unique role in the healthcare ecosystem. This can require big changes in the organization, with major shifts that fundamentally impact faculty, staff, students and trainees. Institutional culture is at stake during periods of radical change, and transparency and honesty are key to preserving culture in such times.

It is essential that leadership articulate plans that assure fairness across the organization. The importance of clarity and frequency of communication cannot be understated - all members of the institution must understand what is happening and how it affects them.

Audience questions for Dr. Balsler

How do you weigh investments in personalized medicine vs. investments in population health management?

The backbone of population health management is a major commitment and investment in informatics, which also aligns with the needs of personalized medicine. Embedded in this investment is the infrastructure to measure and report quality in subpopulations, and because AMCs are investing in this we will be well positioned to be attractive partners to other providers in the healthcare ecosystem.

As part of personalized medicine, increasingly we are using genomics not just for research, but in clinical decision making. While the data are not yet conclusive on the cost effectiveness of genome-guided medicine, early evidence suggests a savings with genome-guided drug therapy in cases that reduce expenditure on ineffective drugs, or those with fewer side effects. More research is needed to demonstrate the economic case to gain universal acceptance of genomic testing by payers.

What are the impacts on faculty of administrative consolidation?

Creating administrative cores is an effective way to reduce duplication and save cost, but the cores should be designed with care, in a manner that takes advantage of scale and the ability to hire senior, experienced individuals, and therefore improve workflow and overall service to faculty. At the same time, some faculty are challenged to adjust to a more centralized resource, differing in many aspects from the tailored resources historically residing in local units. Overall, the goal of administrative redesign should be to provide better tools and support, reducing the ever-growing faculty burden of administrative activity.

Communicating Medicine and Research in a Rapidly Changing World

Robert Bazell

Adjunct Professor, Molecular Cellular & Developmental Biology // Yale University School of Medicine
Former Chief Science and Medicine Correspondent // NBC-TV

Bazell provided illuminating thoughts from his experience as a reporter and scientist on how to make the value statement for academic medicine.

“If you want to communicate to the public, it doesn’t have to be in 140 characters. There are people who want to know what’s behind the headlines, as there has always been. One of the good things about the information age is that you can provide a diagnosis and direct patients to vetted internet resources where they can learn more.”

~Bazell

“You have more sway and influence than you think. The profession has earned public respect and admiration...When you have the authority in a society that is so fragmented, don’t forget the importance of honoring that through service.”

~Bazell

—ADVOCACY UPDATE—

AAMC CEO and President Darrell G. Kirch, MD shared how AAMC will be aligning internally and externally to focus on two primary advocacy and policy priorities: NIH and GME.

The impending Match and Supplementary Offer & Acceptance Program (SOAP) hung in the air over the conference, because of the excitement it holds for graduating medical students, but also because of what it might reveal about the mismatch between the number of medical students and residency slots. See [AAMC's statement from March 21](#) on continuing concerns about the shortage of residency positions.

How can faculty support the AAMC's advocacy agenda?

- Faculty understand the impacts of policies to voters that members of congress and their staff will listen to. Explain what happens to your lab or your research; you're close to patients and trainees, explain the impacts to them.
- If you have a personal relationship with a member of congress, tell us so we can try to leverage that relationship!
- Inform your representatives about what you do. Learn about how you can host [AAMC's Project Medical Education](#), which helps to educate Congress and other policymakers about academic medical centers, the benefits they provide, their complex funding mechanisms and the essential role of government support.

—WHAT'S NEXT?—

Join us for a webinar on April 28, 3-4pmET to learn:

- How to communicate with AAMC and what we want to hear from faculty.
- How AAMC and CFAS are working to foster two-way communication between group representatives and faculty.
- How to identify and partner with your institution's AAMC Group on Faculty Affairs, Government Relations Representative, Group on Diversity & Inclusion and other key representatives to AAMC

More information and registration information to follow.

SAVE the DATE

Next year's CFAS Spring Meeting
Thursday, March 5 – Saturday, March 7, 2015
The Westin San Diego Gaslamp Quarter



**The American Physiological Society
2014 David S. Bruce Outstanding
Undergraduate Abstract Awardees**

Name	Institution	Research Host	Abstract Title
Aw, Mun Y.	Univ. of Arizona	Thomas L. Pannabecker, Ph.D.	Increased expression of sodium transport proteins and Na,K-ATPase activity in the outer medulla of kangaroo rat is related to its greater urine concentrating ability compared to Sprague-Dawley (SD) rat
Backes, Iara M.	Univ. of Florida	Deborah A. Scheuer, Ph.D.	Blockade of mineralocorticoid receptors in the dorsal hindbrain enhances baroreflex sensitivity
Catanzaro, Michael F.	Univ. of Pittsburgh	Bill J. Yates, Ph.D.	Effect of an emetic gastrointestinal input on the processing of labyrinthine inputs by cerebellar rostral fastigial nucleus neurons
Dong, Frederick	Cornell Univ.	Robin L. Davisson, Ph.D.	Early surge in oxidative stress in the brain subfornical organ during angiotensin-II-induced hypertension
Ferland, David	Michigan State Univ.	Stephanie W. Watts, Ph.D.	The persistence of active smooth muscle in the female rat cervix through pregnancy
Frazier, Rebecca	Susquehanna Univ.	Erin M. Keen-Rhinehart, Ph.D.	Effects of prenatal food restriction on reproductive function in adult female rats
Gonzalez, Eileen R.	California State Univ., Los Angeles	Katrina G. Yamazaki, D.Phil.	Mitochondrial dynamics in the type 2 diabetic heart
Horwath, Julie A.	Cornell Univ.	Robin L. Davisson, Ph.D.	Relief of endoplasmic reticulum stress in the brain subfornical organ rescues high fat diet-induced non-alcoholic fatty liver disease
Johnson, Sarah M.	Univ. of Oregon	Jeffrey S. Gilbert, Ph.D.	Prevention of ischemic vascular injury: targeting cellular stress in the endothelium with 5-aminoimidazole-4-carboxamide 1- β -D-ribofuranoside

Kleinertz, Aaron M.	Univ. of Wisconsin-Madison	Melissa L. Bates, Ph.D.	Pulmonary hypertension is present in a rodent model of bronchopulmonary dysplasia at 21 days but not 6 months of age
Korn, Michael	Kalamazoo College	Christopher L. Mendias, Ph.D.	Simvastatin reduces myosteatorsis after skeletal muscle injury
Kruse, Sarah M.	Mayo Clinic	Jill N. Barnes, Ph.D.	Age-related differences in carotid and cerebral blood flow regulation
Laws, Maxwell T.	Wayne State Univ.	Patrick J. Mueller, Ph.D.	Physical (in)activity-induced changes in tonic excitation and inhibition in the rostral ventrolateral medulla
Lee, Debby	Univ. of California, Merced	Rudy M. Ortiz, Ph.D.	Thyroid hormone changes associated with prolonged food deprivation in adult male northern elephant seals
Mack, Jacob	Univ. of California, Davis	Barbara A. Horwitz, Ph.D.	Recovery of neuronal pathways following OGD is greater in Syrian hamster hippocampi than rat hippocampi
Malins, Kevin J.	Univ. of California, Davis	John M. Horowitz, Ph.D.	Histamine enhances Syrian hamster hippocampal neuronal activity at low levels of synaptic excitation
Mikhailova, Alexandra	Univ. of California, Davis	Barbara A. Horwitz, Ph.D.	Recovery of synaptic transmission from oxygen glucose deprivation in Syrian hamster hippocampi is temperature dependent and enhanced in hibernation
Ondek, Katelynn	Susquehanna Univ.	Erin M. Keen-Rhinehart, Ph.D.	Intrauterine growth restriction increases tyrosine hydroxylase expression and propensity for addiction in low birth weight rats
Opacich, Jonathan W.	Univ. of Minnesota, Duluth	Jean F. Regal, Ph.D.	Antagonism of complement C5a receptor but not C3a receptor attenuates placental ischemia-induced endothelial dysfunction in rat
Peterson, Jenna M.	Univ. of Minnesota, Duluth	Jean F. Regal, Ph.D.	Complement C5a receptor antagonist attenuates placental ischemia-induced hypertension in rat

Poinsatte, Katherine M.	Univ. of Texas Southwestern	Ann M. Stowe, Ph.D.	Detraining minimizes the protective effects of exercise on stroke recovery in mice
Savarese, Mary	Elon Univ.	Jennifer K. Uno, Ph.D.	The effect of wheat products on the colonization of the microbiota in the intestines of zebrafish
Shuster, Taylor T.	Univ of Wisconsin-Madison	Marlowe W. Eldridge, Ph.D.	Vascular hyperreactivity in a rat model of bronchopulmonary dysplasia
Skolka, Michael P.	Messiah College	R. Alberto Travagli, Ph.D.	Intraductal lidocaine attenuates the severity of post ERCP acute pancreatitis
Small, Alissa L.	Univ of Wisconsin-Madison	Jyoti J. Watters, Ph.D.	Repetitive acute intermittent hypoxia differentially affects CD11b+ cell phenotypes after C2 spinal hemisection
Tank, Ericka M.	Univ of Iowa	Gary L. Pierce, Ph.D.	Lower soluble RAGE and higher aortic stiffness in African American adolescents: possible protective effect of higher sRAGE in white youth
Tosto, Jenna	William Paterson Univ. of New Jersey	Jorge M. Serrador, Ph.D.	Cerebral blood flow regulation is affected immediately following a concussion
Trisko, Breanna M.	Univ of California, San Diego	Ellen C. Breen, Ph.D.	Cigarette smoke impairs the in situ fatigue resistance of locomotor skeletal muscle in mice
Weidemann, Benjamin J.	Univ of Iowa	Justin L. Grobe, Ph.D.	The brain renin-angiotensin system suppresses digestive efficiency
York, Julia	Univ of British Columbia	William K. Milsom, Ph.D.	Cardiorespiratory and metabolic changes during hypoxic flight in bar-headed geese



**The American Physiological Society
2014 David S. Bruce Excellence in
Undergraduate Research Awardees**

Name	Institution	Research Host	Abstract Title
Dong, Frederick	Cornell Univ.	Robin L. Davisson, Ph.D.	Early surge in oxidative stress in the brain subfornical organ during angiotensin-II-induced hypertension
Ferland, David *	Michigan State Univ.	Stephanie W. Watts, Ph.D.	The persistence of active smooth muscle in the female rat cervix through pregnancy
Frazier, Rebecca	Susquehanna Univ.	Erin M. Keen-Rhinehart, Ph.D.	Effects of prenatal food restriction on reproductive function in adult female rats
Horwath, Julie A.	Cornell Univ.	Robin L. Davisson, Ph.D.	Relief of endoplasmic reticulum stress in the brain subfornical organ rescues high fat diet-induced non-alcoholic fatty liver disease
Kruse, Sarah M.	Mayo Clinic	Jill N. Barnes, Ph.D.	Age-related differences in carotid and cerebral blood flow regulation
Laws, Maxwell T.	Wayne State Univ.	Patrick J. Mueller, Ph.D.	Physical (in)activity-induced changes in tonic excitation and inhibition in the rostral ventrolateral medulla
Mack, Jacob	Univ. of California, Davis	Barbara A. Horwitz, Ph.D.	Recovery of neuronal pathways following OGD is greater in Syrian hamster hippocampi than rat hippocampi
Mikhailova, Alexandra	Univ. of California, Davis	Barbara A. Horwitz, Ph.D.	Recovery of synaptic transmission from oxygen glucose deprivation in Syrian hamster hippocampi is temperature dependent and enhanced in hibernation
Peterson, Jenna M.	Univ. of Minnesota, Duluth	Jean F. Regal, Ph.D.	Complement C5a receptor antagonist attenuates placental ischemia-induced hypertension in rat
Savarese, Mary	Elon Univ.	Jennifer K. Uno, Ph.D.	The effect of wheat products on the colonization of the microbiota in the intestines of zebrafish
Skolka, Michael P.	Messiah College	R. Alberto Travagli, Ph.D.	Intraductal lidocaine attenuates the severity of post ERCP acute pancreatitis

Tank, Ericka M.	Univ. of Iowa	Gary L. Pierce, Ph.D.	Lower soluble RAGE and higher aortic stiffness in African American adolescents: possible protective effect of higher sRAGE in white youth
Tosto, Jenna	William Paterson Univ. of New Jersey	Jorge M. Serrador, Ph.D.	Cerebral blood flow regulation is affected immediately following a concussion
York, Julia	Univ. of British Columbia	William K. Milsom, Ph.D.	Cardiorespiratory and metabolic changes during hypoxic flight in bar-headed geese

*Top Awardee



**AGENDA
ACDP Business Meeting II**

(General membership)

December 6, 2014

- I. Call to re-convene**
- II. Election of 2014-2015 Officers**
- III. 2015 ACDP Meeting (Mike Sturek)**
- IV. Adjournment**



(6/1/14)

ACDP 2013-2014 Officers

President (Term ends 2014)

Nicholas A. Delamere, Ph.D.
Department of Physiology
Univ. of Arizona
1501 N. Campbell Ave.
Tucson, AZ 85724
Phone: 520-626-6425
Fax: 520-626-2382
Email: delamere@arizona.edu

Past President (Term ends 2014)

Muthu Periasamy, Ph.D.
Dept. of Physiology and Cell Biology
Ohio State Univ. College of Medicine
1645 Neil Avenue, 304 Hamilton Hall
Columbus, OH 43210-1218
Phone: 614-292-2310
Fax: 614-292-4888
Email: periasamy.1@osu.edu

Councilor (Term ends 2015)

Chris Cheeseman, Ph.D.
Vice Provost & Assoc. Vice-President
Human Resources
Department of Physiology
Univ. of Alberta
7-22 Medical Sciences Bldg.
Edmonton, Alberta, Canada T6G 2H7
Phone: 780-492-4955
Fax: 780-492-8915
Email: chris.cheeseman@hrs.ualberta.ca

President-elect (Term ends 2014)

Michael Sturek, Ph.D.
Dept. of Cell. & Integrative Physiology
Indiana Univ. School of Medicine
635 Barnhill Dr., MS 385
Indianapolis, IN 46202-5120
Phone: 317-274-7772
Fax: 317-274-3318
Email: msturek@iupui.edu

Secretary-Treasurer (Term ends 2016)

Elsa I. Mangiarua, Ph.D.
Dept. of Pharm., Physiology & Toxicology
Joan C. Edwards School of Medicine
Marshall University
1700 Third Avenue
Huntington, WV 25755
Phone: 304-696-6211
Fax: 304-696-7391
Email: mangiaru@marshall.edu

Councilor (Term ends 2016)

Pieter P. de Tombe, Ph.D.
Dept. of Cell & Molecular Physiology
Loyola Univ. Chicago Medical School
2160 South First Avenue
Maywood, IL 60153-5500
Phone: 708-216-1018
Fax: 708-216-6308
Email: pdetombe@lumc.edu

ACDP Officers (Cont'd)

Councilor (Term ends 2015)

Joseph M. Metzger, Ph.D.
Dept. of Integrative Biology & Physiology
University of Minnesota
321 Church Street, SE, Rm. 6-125
Minneapolis, MN 55455
Phone: 612-625-8296
Fax: 612-625-5149
Email: metzgerj@umn.edu

Councilor (Term ends 2016)

Janice H. Urban, Ph.D.
Dept. of Physiology & Biophysics
Rosalind Franklin Univ. of Med. & Sci.
Chicago Medical School
3333 Green Bay Rd.
North Chicago, IL 60064-3095
Phone: 847-578-3283
Fax: 847-578-3265
Email: janice.urban@rosalindfranklin.edu

CAS Representative (Term ends 2014)

R. Clinton Webb, Ph.D.
Dept. of Physiology
Georgia Health Sciences University
1120 15th St.
Augusta, GA 30912-3000
Tel: 706-721-2781
Fax: 706-721-7299
Email: cwebb@georgiahealth.edu

Executive Assistant

Melinda E. Lowy
9650 Rockville Pike, Suite E314
Bethesda, MD 20814-3991
Tel: 301-634-7785
Fax: 301-634-7098
Email: mlowy@the-aps.org

Councilor (Term ends 2014)

Bishr Omary, M.D., Ph.D.
Dept. of Molec. & Integrative Physiology
Univ. of Michigan Medical School
1137 Catherine St., 7744 Med. Sci. II
Ann Arbor, MI 48109-5622
Phone: 734-764-4376
Fax: 734-936-8813
Email: mbishr@umich.edu

Councilor (Term ends 2014)

Charles E. Wood, Ph.D.
Dept. of Physiology & Funct. Genomics
Univ. of Florida College of Medicine
P. O. Box 100274
Gainesville, FL 32610-0274
Phone: 352-392-7730
Fax: 352-392-8340
Email: cwood@phys.med.ufl.edu

CAS Representative (Term ends 2015)

Past Officers of ACDP

Presidents (3-yr term: President-elect, President, Past President)

2014-15	Michael Sturek	Indiana University
2013-14	Nicholas Delamere	University of Arizona
2013-14	Michael Reid	University of Kentucky
	(resigned as President-elect, took position as Dean)	
2012-13	Muthu Periasamy	Ohio State University
2011-12	Marshall (Chip) Montrose	University of Cincinnati
2010-11	Gary Sieck	Mayo Medical School
2009-10	R. Clinton Webb	Medical College of Georgia
2008-09	Meredith Bond	University of Maryland, Baltimore
2007-08	Nicola C. Partridge	UMDNJ-RW Johnson Medical School
2006-07	William S. Spielman	Michigan State University
2005-06	Richard N. Bergman	University of Southern California
2003-05	Peter M. Cala	University of California, Davis
2002-03	Irving H. Zucker	University of Nebraska
2001-02	Irving G. Joshua	University of Louisville
2001	Phyllis M. Wise	University of Kentucky
	(resigned as President-elect, took position as Dean)	
2000-01	Donald M. Bers	Loyola University
1999-2000	William H. Dantzler	University of Arizona
1998-99	R. John Solaro	University of Illinois at Chicago
1997-98	Mordecai P. Blaustein	University of Maryland
1996-97	Paul De Weer	University of Pennsylvania
1995-96	L. Gabriel Navar	Tulane University
1994-95	Robert D. Foreman	University of Oklahoma
1994-95	Antonio Scarpa	Case Western Reserve University
1993-94	Wayne E. Crill	University of Washington
1992-93	Harel Weinstein	Mount Sinai School of Medicine
1991-92	Donald J. Marsh	Brown University
1990-91	Allen W. Cowley, Jr.	Medical College of Wisconsin
1989-90	Robert B. Gunn	Emory University
1988-89	Donald T. Frazier	University of Kentucky
1987-88	M. Ian Phillips	University of Florida
1986-87	Stephen H. White	
1985-86	Stanley G. Schultz	
1984-85	George A. Hedge (replaced Stephen White who was unable to serve as President)	
1983-84	Edward J. Masoro	
1982-83	F. Norman Briggs	
1981-82	Franklyn G. Knox	
1980-81	Paul C. Johnson	
1979-80	Jack L. Kostyo	
1978-79	Leonard Share	
1977-78	Charles R. Park	

1976-77	W. F. Ganong
1975-76	Howard E. Morgan
1974-75	Norman R. Alpert (replaced James O. Davis who resigned as President-elect)
1973-74	James B. Preston
1972-73	E. B. Brown, Jr.
1971-72	Ewald E. Selkurt
1970-71	Robert M. Berne
1969-70	Ernst Knobil

Councillors (6 Councillors total – 3-yr term; 2 rotate off each year)

Janice Urban	(2013-16)	
Pieter de Tomb	(2013-16)	
Chris Cheeseman	(2012-15)	
Joseph Metzger	(2012-15)	
Charles Wood	(2011-14)	
Michael Sturek	(2010-13)	
Bishr Omary	(2010-14)	finishing Chip Montrose’s term; re-elected to full term
Patricia E. Molina	(2009-12)	
Michael B. Reid	(2009-12)	
Nicholas A. Delamere	(2008-11)	
Marshall H. Montrose	(2008-10)	elected President-elect
T. Richard Nichols	(2008-13)	finishing Gary Sieck’s term; re-elected to full term
Steven R. Houser	(2007-10)	
Gary Sieck	(2007-09)	elected President-elect
Raymond A. Frizzell	(2006-09)	
Muthu Periasamy	(2006-09)	
Susan L. Hamilton	(2005-08)	
R. Clinton Webb	(2005-08)	
Kenneth D. Philipson	(2004-07)	
Michael L. Jennings	(2004-07)	
Meredith Bond	(2004-05)	new Councillor position
William S. Spielman	(2003-06)	
Joseph C. Dunbar	(2003-06)	
D. Neil Granger	(2002-05)	
Nicola C. Partridge	(2002-03)	finishing Peter Cala’s term
David C. Dawson	(2002-04)	
Peter M. Cala	(2001-02)	elected President-elect
Michael Jennings	(2001-03)	new Councillor position
Nicola Partridge	(2001-03)	finishing Irving Zucker’s term
Richard Bergman	(2001-02)	finishing Irving Joshua’s term
Irving Zucker	(2000-03)	elected President-elect
Irving G. Joshua	(1999-2002)	elected President in place of Phyllis Wise
Robert E. Fellows	(1999-2001)	finishing Donald Bers’ term
Donald Bers	(1998-99)	elected President-elect
Irving G. Joshua	(1998-99)	finishing William Dantzler’s term

Phyllis M. Wise	(1997-2000)	elected President-elect
Donald Bers	(1997-98)	finishing Aubrey Taylor's term
William H. Dantzler	(1996-98)	elected President-elect
Aubrey E. Taylor	(1995-97)	elected Secretary-Treasurer
Kent Sanders	(1994-97)	
Sandra Sabatini	(1994-95)	finishing Gabby Navar's term
James G. Townsel	(1993-96)	
Paul De Weer	(1993-94)	finishing Antonio Scarpa's term
L. Gabriel Navar	(1992-94)	elected President-elect
Antonio Scarpa	(1991-93)	elected President-elect
James G. Townsel	(1992-93)	finishing Robert Foreman/Wayne E. Crill's term
Wayne E. Crill	(1991-92)	finishing Robert Foreman's term; elected President-elect
Robert D. Foreman	(1990-91)	elected Secretary-Treasurer
Harel Weinstein	(1989-91)	elected President-elect
Robert Thurber	(1988-91)	
Benjamin Kaminer	(1988-89)	finishing Robert Gunn's term
Donald J. Marsh	(1987-90)	
Robert B. Gunn	(1986-88)	elected President-elect
John J. Spitzer	(1985-88)	
Allen W. Cowley, Jr.	(1985-87)	finishing Donald Frazier's term
Donald T. Frazier	(1984-85)	elected Secretary-Treasurer
M. Ian Phillips	(1983-86)	
Allen W. Cowley, Jr.	(1984-85)	finishing Stanley Schultz's term
Stanley G. Schultz	(1982-84)	elected President-elect
Jimmy Neill	(1981-84)	
Stephen White	(1982-83)	finishing Edward Masoro's term
Edward J. Masoro	(1980-82)	elected President-elect
Joseph P. Gilmore	(1979-82)	
Paul Horowicz	(1978-81)	
William Van der Kloot	(1977-80)	
Paul C. Johnson	(1976-79)	
Jack L. Kostyo	(1975-78)	
Francis Ganong	(1974-75)	finishing Harry Patton's term
Harold Hempling	(1974-77)	
Charles R. Park	(1973-76)	elected President-elect
Harry D. Patton	(1972-74)	
Norman R. Alpert	(1973-74)	finishing James Davis' term
James Davis	(1971-73)	elected President-elect
Gerhard Giebisch	(1970-73)	
James B. Preston	(1969-72)	
Howard Morgan	(1968-71)	

Secretary-Treasurers (3-year term; renewable)

Elsa I. Mangiarua	(2013-16)	
Susan DeMesquita	(2010-13)	
Chris Cheeseman	(2007-10)	
Richard L. Moss	(2004-07)	
Philip M. Best	(2002-04)	
Aubrey E. Taylor	(1997-2001)	
R. John Solaro	(1994-97)	elected President-elect
Robert D. Foreman	(1991-94)	
Douglas G. Stuart	(1989-91)	
Allen W. Cowley, Jr.	(1988-89)	elected President-elect
Donald T. Frazier	(1985-87)	replacing Lowell Stone who was deceased
H. Lowell Stone	(1984)	
George A. Hedge	(1981-84)	
F. Norman Briggs	(1980-81)	
Franklyn G. Knox	(1976-80)	
Leonard Share	(1974-76)	
Howard E. Morgan	(1971-74)	elected President-elect
E. B. Brown, Jr.	(1970-71)	

CAS (2 reps; 3-yr terms, renewable)

Marshall Montrose	(2012-15)	
R. Clinton Webb	(2011-14)	
Meredith Bond	(2010-11)	became Dean
William S. Spielman	(2007-10)	stepped down as a chair
Meredith Bond	(2006-07)	elected President-elect
L. Gabriel Navar	(1997-2012)	
Antonio Scarpa	(1995-2005)	finishing Allen Cowley's term
M. Ian Phillips	(1991-97)	
Allen W. Cowley, Jr.	(1992-95)	finishing Donald Frazier's term plus additional term
Donald Frazier	(1989-92)	
Stanley G. Schultz	(1988-89)	finishing Leonard Share's term
Mordecai P. Blaustein	(1987-91)	
Leonard Share	(1985-87)	
Howard Morgan	(1982-85)	
William F. Ganong	(1980-87)	
Stephen H. White	(1980-82)	
H. Maurice Goodman	(1980-81)	
Daniel Tosteson	(1970-71)	

Public Affairs

Mordecai P. Blaustein (1994-96)

Leonard S. Jefferson (1993-94)

Charles D. Barnes (1989-93)

Norman R. Alpert (1981-89)

Association of Chairmen of Departments of Physiology

Revised 11/9/88



**ASSOCIATION OF CHAIRMEN OF DEPARTMENTS OF
PHYSIOLOGY**

CONSTITUTION
(As amended April 15, 1968)

ARTICLE I

- Section 1. The name of this organization shall be the Association of Chairmen of Departments of Physiology

ARTICLE II

PURPOSES AND OBJECTIVES

- Section 1. The purpose and objective of this Association shall be to promote discussion of problems of interest and concern to chairmen of departments of physiology.

ARTICLE III

MEMBERSHIP

- Section 1. The membership of the Association shall include the chairmen of departments of physiology in accredited schools of medicine in the United States, Puerto Rico, Canada, and Mexico.
- Section 2. Upon approval by the Council, membership will also be open to individuals in other types of institutions who have similar responsibilities.
- Section 3. Upon approval of the Council, in colleges of medicine lacking a Department of Physiology, the administrative officer of an academic unit responsible for the discipline of physiology can be admitted to membership.

ARTICLE IV

OFFICERS AND COUNCIL

- Section 1. The officers of the Association shall consist of a President, a President-Elect and a Secretary-Treasurer. The President and President-Elect shall serve for terms of one year. The Secretary-Treasurer shall serve for three years.
- Section 2. The council shall consist of Officers, three Councilors and the past President. Each Councilor shall ordinarily serve a term of three years. One new Councilor shall be elected each year.

ARTICLE V

MEETINGS

- Section 1. The time and place of the annual meeting and all called meetings shall be determined by the Council.
- Section 2. Notice of time and place of all meetings shall be mailed to all members at least thirty days prior to such meeting.

ARTICLE VI

QUORUM

- Section 1. A quorum for any regular or called meeting shall consist of 20% of the members.

ARTICLE VII

CHARTER MEMBERS

- Section 1. All of those present at the first meeting, August 25, 1967, or who qualify under Article III, Section 1 are automatically charter members, unless they decline.

ARTICLE VIII

AMENDMENTS

- Section 1. Amendments to this Constitution may be effected by two-thirds of the voting members at a regular or called meeting provided that such an amendment has been submitted in writing to all members at least thirty days prior to such meeting.

ASSOCIATION OF CHAIRS OF DEPARTMENTS OF PHYSIOLOGY, INC.

BY-LAWS

ARTICLE I

Office

SECTION 1. Principal Office. The principal office of the Corporation shall be at the American Physiological Society, 9650 Rockville Pike, Bethesda, MD 20814.

SECTION 2. Other Offices. The Corporation may also have an office or offices in such other places as the business of the Corporation may require and the Board of Directors may from time to time appoint.

ARTICLE II

Members

SECTION 1. Applications for Membership. Membership shall include the chairs of Departments of Physiology in accredited schools of medicine in the United States, Puerto Rico, Canada and Mexico. Upon approval of the Board of Directors, membership will also be open to

- a. individuals in other types of institutions who have similar responsibilities, and
- b. the administrative officer of an academic unit responsible for the discipline of physiology in colleges of medicine lacking a department of physiology.

Emeritus Membership status is granted to former chairs that have held membership in ACDP for a total of 5 or more years. Emeritus members are invited to attend the annual meeting. Emeritus members can neither vote on Association business nor hold office.

SECTION 2. Procedure. Membership eligibility shall be automatic upon appointment to a chair of a Department of Physiology, notification of the Secretary/Treasurer by the new member and payment of dues by the member.

SECTION 3. Dues. The Board of Directors shall determine the annual dues for the members.

SECTION 4. Attendance. Attendance at meeting shall be limited to members or guests invited with the approval of the Board of Directors.

SECTION 5. Annual Meeting. The annual meeting of the members of the Corporation shall be held on a day duly designated by the Board of Directors either within or without the United States if not a legal holiday, and if a legal holiday then the next succeeding day not a legal holiday, for the transaction of such corporate business as may come before the meeting.

SECTION 6. Special Meetings. Special meetings of the members may be called at any time for any purpose or purposes by the Chair of the Board, by the President, by the President-elect, or by a majority of the Board of Directors, and shall be called forthwith by the Chair of the Board, the President, the President-elect, the Secretary-Treasurer or any director of the Corporation upon the request in writing of a majority of all the members entitled to vote on the business to be transacted at such meeting. Such request shall state the purpose or purposes of the meeting. Business transacted at all special meetings of members shall be confined to the purpose or purposes stated in the notice of the meeting.

SECTION 7. Place of Holding Meetings. All meetings of members shall be held within or without the United States at a place designated by the Board of Directors.

SECTION 8. Notice of Meetings. Written notice of each meeting of the members shall be mailed, postage prepaid by the Secretary/Treasurer, or sent by e-mail over the Internet or similar electronic communications equipment by the Secretary/Treasurer, to each member of record entitled to vote thereat at his/her post office address or e-mail address, as it appears upon the books of the Corporation, at least thirty (30) days before the meeting. Each such notice shall state the place, day, and hour at which the meeting is to be held and, in the case of any special meeting, shall state briefly the purpose or purposes thereof.

SECTION 9. Quorum. The presence in person or by proxy of twenty percent (20%) of the members of the Corporation shall constitute a quorum at all meetings of the members except as otherwise provided by law, by the Articles of Incorporation or by these By-Laws. If less than a quorum shall be in attendance at the time for which the meeting shall have been called, the meeting may be adjourned from time to time by a majority vote of the members present or represented, without any notice other than by announcement at the meeting, until a quorum shall attend. At any adjourned meeting at which a quorum shall attend, any business may be transacted which might have been transacted if the meeting had been held as originally called.

SECTION 10. Conduct of Meetings. Meetings of members shall be presided over by the President or the Corporation or, if the President is not present, by the President-elect, or, if none of said officers is present, by a chair to be elected at the meeting. The Secretary/Treasurer of the Corporation shall act as secretary of such meetings, in the absence of the Secretary-Treasurer the presiding officer may appoint a person to act as Secretary of the meeting.

SECTION 11. Voting. At all meetings of members, every member entitled to vote thereat shall have one (1) vote. Such vote may be either in person or by proxy appointed by an instrument in writing subscribed by such member or the member's duly authorized attorney, bearing a date not more than three (3) months prior to said meeting, unless said instrument provides for a longer period. Such proxy shall be dated, but need not be sealed, witnessed or acknowledged. All elections shall be held and all questions shall be decided by a majority of the votes cast at a duly constituted meeting, except as otherwise provided by law, in the Certificate of Incorporation or by these By-Laws. If the chair of the meeting shall so determine, a vote by ballot may be taken upon any election or matter, and the vote shall be so taken upon the request of ten percent (10%) or more of all the members entitled to vote on such election or matter. In either of such events, the proxies and ballots shall be received and be taken in charge and all questions touching the

qualification of voters and the validity of proxies and the acceptance or rejection of votes, shall be decided by members appointed by the chair of the said meeting.

ARTICLE III

Board of Directors

SECTION 1. General Powers. The property and business of the Corporation shall be managed under the direction of the Board of Directors of the Corporation. The Board shall be the policy making and administrative body of the corporation during the interval between the regular annual meetings and shall be empowered to enter into contracts and to authorize such expenditures as may be necessary to carry on the affairs of the Corporation.

SECTION 2. Number and Term of Office. The number of Directors shall be either (8) or such other number, but not less than three (3) nor more than nine (9), as may be designated from time to time by resolution of a majority of the entire board of Directors. Directors shall be members of the Corporation.

SECTION 3. Filling of Vacancies. In the case of any vacancy in the Board of Directors through death, resignation, disqualification, removal, or other cause, the office shall be left vacant unless filled by a vote of the members at a special meeting.

SECTION 4. Place of Meeting. The Board of Directors may hold their meetings and have one or more offices, and keep the books of the Corporation, either within or outside the State of Maryland, at such place or places as they may from time to time determine by resolution or by, written consent of all the directors. The Board of Directors may hold their meetings by conference telephone, e-mail over the Internet or other similar electronic communications equipment if everyone can hear everyone else in accordance with the provisions of the General Corporation Law of the State of Maryland.

SECTION 5. Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and place as shall from time to time be determined by resolution of the Board, provided that written notice of each meeting of the Board of Directors shall be mailed, postage prepaid by the Secretary or sent by e-mail over the Internet or similar electronic communications equipment by the Secretary, to each member of record entitled to vote thereat at his/her post office address or e-mail address, as it appears upon the books of the Corporation, at least ten (10) days before the meeting. The annual meeting of the Board of Directors shall be held immediately following the annual meeting of members. Any business may be transacted at any regular meeting of the Board.

SECTION 6. Special Meetings. Special meetings of the Board of Directors shall be held whenever called by any member of the Board of Directors. The Secretary shall give notice of each special meeting of the Board of Directors, by mailing the same at least three (3) days prior to the meeting or by e-mailing over the Internet the same at least two (2) days before the meeting, to each Director, but such notice may be waived by any Director. Unless otherwise

indicated in the notice thereof, any and all business may be transacted at any special meetings. At any meeting at which every Director shall be present, even though without notice, any business may be transacted and any Director may in writing waive notice of the time, place and objectives of any special meeting.

SECTION 7. Quorum. A majority of the whole number of Directors shall constitute a quorum for the transaction of business at all meetings of the Board of Directors, but, if at any meeting less than a quorum shall be present, a majority of those present may adjourn the meeting from time to time, and the act of a majority of the Directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be specifically provided, by law, or by the Articles of Incorporation or by these By-Laws.

SECTION 8. Required Vote. An affirmative vote of a majority of those present shall be necessary for the passage of any resolution. All proceedings at the meeting of the Board of Directors or of any committee appointed by the Board shall be governed by Roberts Rules of Order, Revised, except where otherwise provided in these By-Laws.

SECTION 9. Compensation of Directors. Directors shall not receive any stated salary for their services as such, but each director shall be entitled to receive from the Corporation reimbursement of the expenses incurred by the Director attending any regular or special meeting of the Board, and, by resolution of the Board of Directors a fixed sum may also be allowed for attendance at each regular or special meeting of the Board and such reimbursement and compensation shall be payable whether or not a meeting is adjourned because of the absence of a quorum. Nothing herein contained shall be construed to preclude any Director from serving the Corporation in any other capacity, and receiving compensation there for.

SECTION 10. Standing Committees. The Board of Directors shall:

- a. Elect two members of the Corporation to represent the corporation at the Council of Academic Societies ("CAS") of the Association of American Medical colleges ("AAMC"). The CAS representatives shall attend Board meetings and make periodic reports to the Board and to the members of the Corporation. The term of appointment shall be for four (4) years, renewable once.
- b. Elect a member of the Board to serve a three year term as Director of Public Affairs.

SECTION 11. Other Committees. The Board of Directors may, by resolution passed by a majority of the whole Board, designate one or more other committees, each committee to consist of two or more of the directors of the Corporation, which, to the extent provided in the resolution, shall have and may exercise the powers of the Board of Directors, and may authorize the seal of the Corporation to be affixed to all papers which may require it. Such committee or committees shall have such names as may be determined from time to time by resolution adopted by the Board of Directors.

SECTION 12. The Board of Directors shall allow Chairs in good standing to designate a member of the faculty of his or her Department to attend annual meetings in their absence as a

non-voting representative of the Department. Non-voting representatives shall not count toward the number of members needed to constitute a quorum.

ARTICLE IV

Officers

SECTION 1. Election, Tenure and Compensation. The officers of the Corporation shall be a President, a President-elect, and a Secretary/Treasurer, and also such other officers including a Chair of the Board as the Board of Directors from time to time may consider necessary for the proper conduct of the business of the Corporation. The President and President-elect shall be elected annually by the members at the annual meeting of the members. The Secretary/Treasurer shall be elected every three years by the members at the annual meeting of members. All officers of the Corporation shall be directors. The Secretary and Treasurer offices may be held by the same person, but no officer shall execute, acknowledge or verify any instrument in more than one capacity if such instrument is required by law or by these By-Laws to be executed, acknowledged or verified by any two or more officers.

The procedures for nominating and balloting will be determined at the time of the meeting of members. A majority of the members voting at a duly authorized meeting shall be necessary to elect the nominees.

In the event that any office other than an office required by law, shall not be filled by the members, or, once filled, subsequently becomes vacant, then such office and all references thereto in these By-Laws shall be deemed inoperative unless and until such office is filled in accordance with the provisions of these By-Laws.

All officers and agents of the Corporation shall be subject to removal at any time by the affirmative vote of a majority of the members voting at a duly authorized meeting of members, and any officers, agents, and employees, shall hold office at the discretion of the members.

SECTION 2. Powers and Duties of the Chair of the Board. The Chair of the Board shall preside at all meetings of the Board of Directors unless the Board of Directors shall by a majority vote of a quorum thereof elect a chair other than the Chair of the Board to preside at meetings of the Board of Directors. The Chair of the Board may sign and execute all authorized bonds, contracts, or other obligations in the name of the Corporation, and he/she shall be ex-officio a member of all standing committees.

SECTION 3. Powers and Duties of the President. The President shall be the chief executive officer of the Corporation and shall have general charge and control of all its business affairs and properties. The President shall preside at all meetings of the members.

The President may sign and execute all authorized bonds, contracts or other obligations in the name of the Corporation. The President shall have signature power to sign checks under his/her signature in amounts below \$1,000. The President shall have the general powers and

duties of supervision and management usually vested in the office of president of a corporation. The President shall be ex-officio a member of all the standing committees. The President shall do and perform such other duties as may, from time to time, be assigned to him/her by the Board of Directors.

In the event that the Board of Directors does not take affirmative action to fill the office of Chair of the Board, the President shall assume and perform all powers and duties given to the Chair of the Board by these By-Laws.

SECTION 4. Powers and Duties of the President-elect. The Board of Directors shall appoint a President-elect and the Board of Directors may appoint a Vice President. The President-elect (unless otherwise provided by resolution of the Board of Directors) may sign and execute all authorized bonds, contracts, or other obligations in the name of the Corporation. The President-elect shall have such other powers and shall perform such other duties as may be assigned to him/her by the Board of Directors or by the President. In case of the absence or disability of the President, the duties of that office shall be performed by the President-elect, and the taking of any action by the President-elect in place of the President shall be conclusive evidence of the absence or disability of the President.

SECTION 5. Secretary/Treasurer.

- a. The Secretary shall handle all voting matters, whether at actual meetings, telephonic meetings or meetings held on the Internet or other electronic media; he/she shall give, or cause to be given, notice of all meetings of members and directors and all other notices required by law or by these By-Laws, and in case of his/her absence or refusal or neglect to do so, any such notice may be given by any person thereunto directed by the President, or by the directors or members upon whose written request the meeting is called as provided in these By-Laws. The Secretary shall record all proceedings of the meetings of the members and of the directors in books provided for that purpose, and shall perform such other duties as may be assigned to him/her by the directors or the President. The Secretary shall have custody of the seal of the Corporation and shall affix the same to all instruments requiring it, when authorized by the Board of Directors or the President, and attest the same. In general, the Secretary shall perform all the duties generally incident to the office of Secretary, subject to the control of the Board of Directors and the President.
- b. Treasurer. The Treasurer shall have custody of all the funds and securities of the Corporation, and he/she shall keep full and accurate account of receipts and disbursements in books belonging to the Corporation. The Treasurer shall deposit all moneys and other valuables in the name and to the credit of the Corporation in such depository or depositories as may be designated by the Board of Directors. The Treasurer shall have the power to sign checks under his/her signature in amounts up to \$1,000. All checks for amounts over \$1,000 shall require the signatures of two officers.

The Treasurer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements. He/she shall render to the President and the Board of Directors, whenever either of them so requests, an account of all his/her transactions as Treasurer and of the financial condition of the Corporation.

The Treasurer shall give the Corporation a bond, if required by the Board of Directors, in a sum, and with one or more sureties, satisfactory to the Board of Directors, for the faithful performance of the duties of his/her office and for the restoration to the Corporation in case of his/her death, resignation, retirement, or removal from office of all books, papers, vouchers, moneys, and other properties of whatever kind in his possession or under his control belonging to the Corporation.

The Treasurer shall perform all the duties generally incident to the office of the Treasurer, subject to the control of the Board of Directors and the President.

SECTION 6. Assistant Secretary. The Board of Directors may appoint an Assistant Secretary or more than one Assistant Secretary. Each Assistant Secretary shall (except as otherwise provided by resolution of the Board of Directors) have power to perform all duties of the Secretary in the absence or disability of the Secretary and shall have such other powers and shall perform such other duties as may be assigned to him/her by the Board of Directors or the President. In case of the absence or disability of the Secretary, the duties of the office shall be performed by any such Assistant Secretary, and the taking of any action by any such Assistant Secretary in place of the Secretary shall be conclusive evidence of the absence or disability of the Secretary.

SECTION 7. Assistant Treasurer. The Board of Directors may appoint an Assistant Treasurer or more than one Assistant Treasurer. Each Assistant Treasurer shall (except as otherwise provided by resolution of the Board of Directors) have power to perform all duties of the Treasurer in the absence or disability of the Treasurer and shall have such other powers and shall perform such other duties as may be assigned to him/her by the Board of Directors or the President. In case of the absence or disability of the Treasurer, the duties of the office shall be performed by any Assistant Treasurer, and the taking of any action by any such Assistant Treasurer in place of the Treasurer shall be conclusive evidence of the absence or disability of the Treasurer.

ARTICLE V

Corporate Seal

SECTION 1. Seal. In the event that the President shall direct the Secretary to obtain a corporate seal, the corporate seal shall be circular in form and shall have inscribed thereon the name of the Corporation, the year of its organization and the word "Maryland". Duplicate copies of the corporate seal may be provided for use in the different offices of the Corporation but each copy thereof shall be in the custody of the Secretary of the Corporation or of an Assistant Secretary of the Corporation nominated by the Secretary.

ARTICLE VI

Bank Accounts and Loans

SECTION 1. Bank Accounts. Such officers or agents of the Corporation as from time to time shall be designated by the Board of Directors shall have authority to deposit any funds of the Corporation in such banks or trust companies as shall from time to time be designated by the Board of Directors, and such officers or agents as from time to time shall be authorized by the Board of Directors may withdraw any or all of the funds of the Corporation so deposited in any such bank or trust company, upon checks, drafts, or other instruments or orders for the payment of money, drawn against the account or in the name or behalf of this Corporation, and made or signed by such officers or agents; and each bank or trust company with which funds of the Corporation are so deposited is authorized to accept, honor, cash and pay, without limit as to amount, all checks, drafts or other instruments or orders for the payment of money, when drawn, made or signed by officers or agents so designated by the Board of Directors until written notice of the revocation of the authority of such officers or agents by the Board of Directors shall have been received by such bank or trust company. There shall from time to time be certified to the banks or trust companies in which funds of the Corporation are deposited, the signature of the officers or agents of the Corporation so authorized to draw against the same. In the event that the Board of Directors shall fail to designate the persons by whom checks, drafts and other instruments or orders for the payment of money shall be signed, as hereinabove provided in this Section, all of such checks, drafts and other instruments or orders for the payment of money shall be signed by the President or President-elect and countersigned by the Secretary/Treasurer or an Assistant Secretary or an Assistant Treasurer of the Corporation.

SECTION 2. Loans. Such officers or agents of this Corporation as from time to time shall be designated by the Board of Directors shall have authority to effect loans, advances or other forms of credit at any time or times for the Corporation from such banks, trust companies, institutions, corporations, firms or persons as the Board of Directors, shall from time to time designate, and as security for the repayment of such loans, advances, or other forms of credit to assign, transfer, endorse and deliver, either originally or in addition or substitution, any or all stocks, bonds, rights and interests of any kind in or to stocks or bonds, certificates of such rights or interests, deposits, accounts, documents covering merchandise, deposits and accounts receivable and other commercial paper and evidences of debt at any time held by the Corporation, and for such loans, advances or other forms of credit to make, execute and deliver one or more notes, acceptances or written obligations of the Corporation on such terms, and with such provisions as to the security or sale or disposition thereof as such officers or agents shall deem proper; and also to sell to, or discount or rediscount with, such banks, trust companies, institutions, corporations, firms or persons any and all commercial paper, bills receivable, acceptances and other instruments and evidences of debt at any time held by the Corporation, and to that end to endorse, transfer and deliver the same. There shall from time to time be certified to each bank, trust company, institution, corporation, firm or person so designated the signatures of the officers or agents so authorized; and each such bank, trust company, institution, corporation, firm or person is authorized to reply upon such certification until written notice of the revocation by the Board of Directors of the authority of such officers or agents shall be delivered to such bank, trust company, institution, corporation, firm or person.

ARTICLE VII

Reimbursements

SECTION 1. Reimbursements. Any payments made to an officer or other employee of the Corporation, such as salary, commission, interest or rent, or entertainment expense incurred by him/her, which shall be disallowed in whole or in part as a deductible expense by the Internal Revenue Service, shall be reimbursed by such officer or other employee of the Corporation to the full extent of such disallowance. It shall be the duty of the Directors, as a Board, to enforce payment of each such amount disallowed. In lieu of payment by the officer or other employee, subject to the determination of the Board of Directors, proportionate amounts may be withheld from his/her future compensation payments until the amount owed to the Corporation has been recovered.

ARTICLE VIII

Miscellaneous Provisions

SECTION 1. Fiscal Year. The fiscal year of the Corporation shall end on the last day of December.

SECTION 2. Notices. Whenever, under the provisions of these By-Laws, notice is required to be given to any Director, officer or member it shall not be construed to mean personal notice, but such notice shall be given in writing, by email over the Internet, by mail, by depositing the same in a post office or letter box, in a postpaid sealed wrapper, addressed to each member officer or director at such address as appears on the books of the Corporation, or in default of any other address, to such director, officer or member at the general post office in the City of Rockville, Maryland, and such notice shall be deemed to be given at the time the same shall be thus mailed. Any member, Director or officer may waive any notice required to be given under these By-Laws.

SECTION 3. Waiver, Consent. Any notice required to be given under these By-Laws or otherwise may be waived by the Director, officer or member to whom such notice is required to be given and the presence of any person at a meeting shall constitute waiver of notice thereof as to such person. Any action which may be taken at a meeting of the Directors, officers or members may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the Directors, officers or members entitled to vote with respect to the subject matter thereof. Such consent shall have the same force and effect as an unanimous vote of the Directors, officers or members, as the case may be.

ARTICLE IX

Amendments

SECTION 1. Amendment of By-Laws. Any member can propose an amendment of the By-Laws by submitting the change to the President. If a majority of the Members adopt the amendment it shall be adopted provided that such amendment has been submitted in writing to all Members by mail at least thirty days prior to such meeting. Without prior notification, amendment of the By-Laws may be accomplished by the unanimous consent of the members voting at an annual or special meeting of the members.

ARTICLE X

Indemnification

SECTION 1. Definitions. As used in this Article X, any word or words that are defined in Section 2-418 of the Corporations and Associations Article of the Annotated Code of Maryland, as amended from time to time, (the "Indemnification Section") shall have the same meaning as provided in the Indemnification Section.

SECTION 2. Indemnification of Directors and Officers. The Corporation shall indemnify and advance expenses to a Director or officer of the Corporation in connection with a proceeding to the fullest extent permitted by and in accordance with the Indemnification Section.

SECTION 3. Indemnification of Employees and Agents. With respect to an employee or agent, other than a Director or officer, of the Corporation, the Corporation may, as determined by the Board of Directors of the Corporation, indemnify and advance expenses to such employee or agent in connection with a proceeding to the extent permitted by and in accordance with the Indemnification Section.

Amended 12/2006