A section devoted to profiles of renown teachers and to the recognition and accomplishments of physiology teachers within the society

PROFILES

Robert A. Bjork: the 2010 Claude Bernard Distinguished Lecturer

The highest honor within the Teaching of Physiology Section of the American Physiology Society (APS) is to be selected to present the Claude Bernard Lecture during the Experimental Biology Meetings. The 2010 recipient was Prof. Robert A. Bjork (Fig. 1), who currently is a Distinguished Professor of Psychology at the University of California-Los Angeles (UCLA) while being Director and a Principle Investigator at the UCLA Bjork Learning and Forgetting Laboratory. His presentation, “Making things hard on yourself, but in a good way: creating desirable difficulties to enhance learning,” was well received by an attentive audience and is being published in this issue of Advance in Physiology Education.

In 1966, he received his PhD degree in Psychology from Stanford University with William K. Estes as his advisor. The title of his dissertation was “Learning and short-term retention of paired associates in relation to specific sequences of inter-presentation intervals.” During the same year, he was a coauthor of a text entitled Problems in Mathematical Learning Theory, which used his BS degree in Mathematics obtained 5 yr earlier. Subsequently, he accepted an appointment at the University of Michigan, where he became active in the Human Performance Center and published extensively in psychological journals on subjects related to mathematical models and learning, learning of complex sequences, recall and forgetting, short-term memory, positive and directed forgetting, and long-term free recall. In 1974, he left Ann Arbor, MI, to accept a position as a Professor of Psychology at UCLA.

It was at the Los Angeles campus that Prof. Bjork received national and international recognition for his research achievements. His publications addressed the issues of learning assessment, learning during sleep, and learning acceleration plus topics related to knowledge retention and to the measurement of memory and metamemory. Moreover, information pertaining to inhibitory processes, thought suppression, unintentional forgetting, and induced forgetting were published. In addition, he addressed issues as enhancing human performance, improving motor skills, and the process of metacognition in motor learning.

Prof. Bjork is acknowledged as an effective and influential classroom teacher, which was confirmed in 1992, when he received the Distinguished Teaching Award from UCLA. Not to be ignored were his publications that were directed toward teachers and their effectiveness in various classrooms. Specifically, articles were published on learning how to learn, when further learning fails, making claims in papers or talks, and analyzing information processing for college teachers.

Beginning in 1972 and continued throughout his career, Prof. Bjork talents as an editor were recognized, and he has served as an Editor or a Coeditor for Cognitive Psychology, Memory and Cognition, Psychological Reviews, and Psychological Science in the Public Interest. Simultaneously were appointments as the Chair of The Committee on Techniques for the Enhancement of Human Performance for the National Research Council, the Society of Experimental Psychologists, the panel for Cognition and Student Learning for the Institute of Educational Sciences, and Chair of the Council of Graduate Departments of Psychology. During his tenure as Chair of these various groups was his election as President of the American Psychological Association (2000–2001).

Honors have been intertwined with Prof. Bjork’s career, and they include The Distinguished Science Lecturer Award from the American Psychological Association, a Distinguished Service Award from the UCLA Department of Psychology, and, in 2008, the prestigious Distinguished Mentoring Award from the Academic Advancement Program of UCLA.

Stephen E. DiCarlo: the 2010 Arthur Guyton Physiology Educator of the Year

In 2010, the prestigious Arthur C. Guyton Physiology Educator of the Year Award was presented at the Experimental Biology Meeting to Prof. Stephen E. DiCarlo (Fig. 2), a Professor of Physiology at Wayne State University in Detroit, MI. His thoughtful presentation, “Teacher quality matters!!” was well received by those in attendance and was published in the August issue of The Physiologist (4).

Prof. DiCarlo received his PhD in 1985 from the Department of Physiology of the University of Oklahoma Health Science Center with the late Dr. Lowell Stone as his advisor. He then accepted a postdoctoral appointment in the Department of Pharmacology of the University of Texas Health...
Science Center (San Antonio, TX), with Prof. Vernon Bishop as his supervisor. As both Profs. Stone and Bishop received their postdoctoral training in the laboratory of Dr. Guyton, Dr. DiCarlo can rightful claim a Guyton lineage.

In 1989, he accepted an appointment as an Assistant Professor of Physiology with the Northeastern Ohio University College of Medicine (Roostown, OH), where he remained for 9 yr. During this interval, he also had academic appointments with Kent State University and the University of Akron and began a productive research career in cardiovascular physiology that brought him scientific recognition and acclaim. In fact, his innovative animal studies on β-adrenergic receptors, cardiac afferents, and baroreflex regulation have markedly advanced our understanding of the role of the autonomic nervous system with exercise training (7). Thus, it is no surprise that of his 41 educational publications, the initial ones pertained to the cardiovascular system (1–3, 5). Dr. DiCarlo’s approach to teaching physiology, which actively involves the learner in the learning process (6), was highly successful and effective with students at Northeastern Ohio University College of Medicine, as demonstrated by his selection as the M-1 Outstanding Teacher of the Year for 1993–1994 and for 1997–1998. In addition, he was selected as Class Marshall for the 1996 and 1997 academic years.

During 1998, he accepted an appointment as an Associate Professor of Physiology in the Department of Physiology at Wayne State University (Detroit, MI). In addition to research, he assumed teaching responsibilities that included undergraduate, graduate, and medical students. Over the years, the courses taught were cardiovascular, exercise, gastrointestinal, human, renal, and respiratory physiology plus special courses devoted to research studies and pedagogy. This latter course is distinctive in that it prepares physiology students to be effective teachers.

Like Northeastern Ohio University students, Wayne State University College of Medicine students appreciated the innovative and personalized teaching approach of Dr. DiCarlo and honored him with the Lamb Award, which is presented to the faculty member determined to be the best teacher, mentor, and inspiration to students.

Although his contributions to APS educational programs were detailed in his profile as a recipient of the Claude Bernard Distinguished Lecture Award (7), they failed to mention he has hosted, mentored, supervised, or directed 4 visiting scientists, 6 postdoctoral fellows, 5 PhD candidates, 21 MS students, 4 summer high school teachers, 14 summer research fellows, and 20 summer high school students. Moreover, he was actively involved in a Science Education Program with minority students from six different high schools and with a university-sponsored outreach program to students between the ages of 6–13 yr.

Thus, in 2010, APS again has selected a most deserving recipient of the Arthur Guyton Physiology Educator of Year Award.

REFERENCES


RECOGNITION

Thomas H. Adair: an Outstanding Teacher at the University of Mississippi Medical Center

As in 2009, Prof. Adair was selected by medical students of the Evers Society to receive the Carl G. Evers Teaching Award for 2010. Dr. Adair teaches gastrointestinal physiology and nerve-muscle physiology to 120 freshmen medical students at the health science campus in Jackson, MI.

William T. Ameredes: an Outstanding Teacher and a Distinguished Teaching Professor at the University of Texas Medical Branch

An Associate Professor of Medicine, Dr. Ameredes was recently designated as a Distinguished Teaching Professor by the University of Texas Medical Branch Academy of Master Teachers, a unique academic organization dedicated to teaching. Dr. Ameredes was recognized for more than 20 years of directing medical and dental courses while teaching skeletal and smooth muscle physiology plus pulmonary mechanics and physiology to medical, dental, and graduate students.

Gary A. Cohen: an Outstanding Teacher at the Medical College of Wisconsin

Dr. Cohen, an Associate Professor in the Department of Pediatrics, was recently awarded the T. Michael Standing Ovation Award from students for being a faculty member whose efforts have enhanced the quality of campus life for
Medical College of Wisconsin students while exceeding their duties to provide exemplary educational, social, or organizational improvements within the student community. During 2010, Prof. Cohen was responsible for Case Integration Rounds for all M-3 students who rotated through pediatrics, for Biochemistry Case Discussions with M-1 students, and for daily rounds with M-3 students concerned with the special or normal care of newborns within the nursery.

John Dobson: a Promising Teacher at The University of Florida

In 2010, Senior Lecturer Dobson was selected by the Teaching Section of APS to receive the New Investigator Award in recognition of his manuscripts published in Advances in Physiology Education pertaining to the learning and evaluation of exercise physiology information in the classroom and laboratory. Dr. Dobson’s teaching responsibilities include providing instruction in undergraduate and graduate courses concerned with human, environmental, exercise, and clinical physiology.

Jeff C. Falcone: an Outstanding Teacher at the Louisville School of Dentistry

Dr. Falcone is an Associate Professor within the Department of Physiology and Biophysics who was selected to receive the 2010 Doyle Outstanding Teacher of the Year in the Basic Sciences. The Doyle Award is determined from student nominations forwarded to officials located within the School of Dentistry. Prof. Falcone’s responsibilities include teaching physiology to 80 dental students.

Samir N. Ghadiali: an Outstanding Teacher at The Ohio State University

The 2010 Herman R. Weed Excellence in Teaching Award for Ohio State University Biomedical Engineering faculty members who have demonstrated excellence and innovation within their classrooms was presented to Assoc. Prof. Ghadiali. He was nominated by the 18 majors (juniors) who completed his new course (BME 403), which was designed to introduce students to quantitative models of different physiological systems as well as to how such models could elucidate physiological mechanisms. It is highly probable that the BME 403 course will be scheduled in the immediate future.

Shane T. Kanatous: an Outstanding Teacher at Colorado State University

The Department of Biology of Colorado State University (Fort Collins, CO) selected Assoc. Prof. Kanatous to receive the Colorado State University Excellence in Graduate Education and Mentoring Award. Nominated by both students and faculty members, Dr. Kanatous has successfully taught marine physiological ecology, extreme environments, and physiological ecology to both undergraduate and graduate students, served with distinction on the Graduate Committee, and was effective in having students receive recognition outside the classroom.

Norman R. Kreisman: an Outstanding Teacher at Tulane University

During 2009–2010, the Owl Club of Tulane University (New Orleans, LA) bestowed three distinct honors on Prof. Kreisman of the Department of Physiology. Composed of medical students who maintain a liaison with the faculty of the School of Medicine, the Owl Club selected Dr. Kreisman for the following honors:

- The Award for Directing the Best Course of the Freshman Year (Human Physiology)
- An Honor Mention Award for the Best Professor of the First Year
- The Trophy for the Best Teaching Department in the School of Medicine (shared with Dr. Gabriel Navar)

Sidney M. Morris, Jr.: an Outstanding Teacher at the University of Pittsburg School of Medicine

Each year, the Curriculum Committee of the Office of Medical Education at the University of Pittsburg School of Medicine presents the Kenneth E. Schuit Award to recognize Master Educators among their basic science and clinical faculty. In 2009, it selected Prof. Morris, Jr., for this award because of his effectiveness as Course Director and Primary Instructor for the first-year class in Fuel Metabolism with 146 students.

Steven Oppenheimer: an Outstanding Teacher and Educator at California State University

On January 6, 2010, at the White House in Washington, DC, Steven Oppenheimer, Professor of Biology at California State University (Northridge, CA), received the United States Presidential Award from President Obama for Excellence in Science, Mathematics, and Engineering Mentoring. Dr. Oppenheimer was recognized, in part, for his achievements in science education, which included 200 published manuscripts, abstracts, presentations, and books that involved more than 700 student coauthors.

Steven Pulver: a Teacher at the University of Cambridge

In 2009, Dr. Pulver of the Department of Zoology at the University of Cambridge was awarded the APS Teaching Career Enhancement Award. Associated with the award was a 2-wk visit to Cornell University, where a group designed undergraduate physiology laboratory experiments concerning Drosophila neurogenetics. The experiments were successful, and a report has been submitted to APS and a manuscript is in press.

Thomas R. Shannon: an Outstanding Teacher at Rush University Medical Center

The 2010 graduating class from Rush University Medical Center selected Assoc. Prof. Shannon as the faculty member who best demonstrated outstanding teaching ability and dedicated services within the basic and behavior sciences during the past 4 yr. During the last academic year, Dr. Shannon taught cardiovascular and membrane physiology to ~140 first-year medical students.
Paul R. Stanley: an Outstanding Teacher at the University of Arizona College of Medicine

The Vernon and Virginia Furrow Award for Excellence in Basic Science Teaching for Medical Students was presented to Prof. Stanley at the University of Arizona (Phoenix, AZ) graduation of the class of 2010. Each year, Dr. Stanley teaches ~48 preclinical medical students the essentials of cardiovascular, pulmonary, and renal physiology; the molecular basis of life and disease; the musculoskeletal system; and the gastrointestinal system.

Robert Walker: an Outstanding Teacher at the University of Calgary

At the University in Calgary (Calgary, AB, Canada), Senior Instructor Walker was selected to receive the Student Union Teaching Excellence Award for the Faculty of Science. Dr. Walker was the choice of ~240 students who had been enrolled in a year-long Human Physiology course.

John B. West: an Outstanding Teacher at the University of California-San Diego

First-year medical students (n = 125) in the School of Medicine enrolled in the Medical Physiology course nominated Prof. West for the 2010 Kaiser Excellence in Teaching Award. Prof. West lectured on topics related to respiratory and exercise physiology.

Raphael J. Witorsch: an Outstanding Teacher at the Medical College of Virginia

During the academic year, Emeritus Prof. Witorsch taught ~180 first-year medical students while serving both as the Director and instructor of the physiology course for first-year dental students (n = 110). His performance was not unnoticed, as he was selected to receive the prestigious Faculty Teaching Excellence Award by the Medical College of Virginia or their highest honor.