The Third Annual Meeting of the Greater Washington Chapter of the American Physiological Society (dmvCAPS) was hosted by the George Washington University in Washington, DC on October 23, 2016. The meeting hosted 80 attendees, representing 10 institutions: Children's National Medical Center (CNMC), George Mason University (GMU), The George Washington University (GWU), Georgetown University (GU), Howard University (HU), John's Hopkins University (JHU), National Institutes of Health (NIH), Uniformed Services University (USU), United States Food and Drug Administration (US FDA), and Walter Reed Army Institute of Research (WRAIR). Of those attending, 23/80 (29%) were faculty members, 20/80 (25%) were postdoctoral trainees, 22/80 (27%) were graduate students, 11/80 (14%) were undergraduate students, and 4/80 (5%) were research assistants.

After an early morning of registration, breakfast and coffee, Nikki Posnack [President dmvCAPS, Children's National Medical Center] welcomed attendees and speakers. Attendees were also greeted by special guest, Marty Frank [Executive Director of The American Physiological Society] who was also in attendance at the annual dmvCAPS meeting. The oral sessions began immediately following the opening remarks, and included a range of topics from cell physiology, biomedical engineering, cancer biology and regulatory science.

The first session was kicked off by Dexter Lee, PhD, HU, who presented his research on “Peroxisome Proliferator Activated Receptor – alpha’s Regulation of Sodium Transport and Mean Arterial Pressure during Angiotensin II Hypertension.” This presentation was followed by two presentations chosen by the Conference Organizing Committee from submitted abstracts: Sabyasachi Sen, MD, PhD, GWU presented his research titled, “Genetically modified Human Mesenchymal Stromal Cells (MSCs) Improve Glucose Homeostasis in Diet induced Obese (DIO) Diabetic Mouse Models” and Amrita Pai, MS, GU, presented her work, titled, “Cytotoxic CD8+ T-cells Play a Role in Hypertension-Associated Inflammatory Responses in Female Dahl Rats.” Presentations were followed by a collective 10-minute question and answer session, moderated by Nikki Posnack [Children's National Medical Center].

The second session started with Emilia Entcheva, PhD, GWU, presenting her biomedical engineering research on “Massively-parallel all-optical cardiac electrophysiology for drug screening”. This presentation was followed by two more presentations chosen from abstracts: Beverley Dancy, PhD, NIH, shared her research on “The mitochondrial interactome visualized by crosslinking mass spectrometry” and Aaron Brown, BS, GU, led the audience to their lunchtime break with his talk, “Aldosterone and ENaC regulation in mice with collecting-duct-principal cell select knockout of the mammalian-target-of-rapamycin (mTOR).” Presentations were followed by a collective question and answer session, moderated by Matthew Kay [George Washington University].

After lunch, Jason Tilan, PhD, GU, presented his research titled "Beyond hemostasis: investigating the role of platelets in Ewing sarcoma metastasis." Following was the final of the presentations chosen from abstracts, with Cassandra Moshfegh, BS, GWU, talking about the “Effects of Essential Oil on Fear Memory and the Immune Response; A Potential Alternative Therapy for Post-Traumatic Stress Disorder (PSTD)”. The final speaker of the afternoon, Ronald Brown, US FDA, spoke about the “Use of Computational Toxicology in Regulatory Science” and inspired the attendees to ask many questions. A collective question and answer session was moderated by Luther Swift [George Washington University].

A highlight of the afternoon session was the “Minute to Win It”. In this session, each poster presenter was given 60 seconds to tell the audience about their research, why it is important, and convince conference attendees to visit their poster to learn more. The enthusiastic trainees embraced this opportunity and spoke with passion, clarity, and brevity. This session energized the attendees for the poster session that immediately followed.

The poster session featured a total of 60 posters, which were grouped into 3 categories: undergraduate/pre-graduate students, graduate students, and postdoctoral trainees. Poster judges were extremely impressed with the work of these junior scientists. A total of (7) winner and (2) runner-up awardees were chosen, who received printed awards along with $100 prizes for winners and $60 for runner-up. Winners were announced by dmvCAPS President Nikki Posnack, at the end of the poster session.
The business meeting followed the awards ceremony, and was chaired by Nikki Posnack. Treasurer Sarah Kuzmiak-Glancy [George Washington University] discussed the Chapter’s expenses, donations, and budget for the current year. Secretary Kara Garrott [George Washington University] discussed current membership numbers and updates being made to the registration process and Chapter website. Additional discussion was focused on forming and updating committees to assist with the next dmvCAPS annual meeting, sponsorship, and community outreach – including PHuN week. Attendees expressed enthusiasm regarding the level of research conducted by trainees, and the diversity of the institutions represented at the 3rd annual dmvCAPS meeting. Based on a formal follow-up poll, attendees are eager to organize a 4th annual conference in Fall 2017, with the goal of increasing interaction and networking opportunities between trainees and more senior members of the society.

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Poster presentation award winners
Poster presentation session

“Minute to win it” session, and special guests