### Preliminary Program

#### WEDNESDAY, NOVEMBER 1, 2017

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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 AM-5:00 PM</td>
<td>Autonomic Disorders Workshop for Generalists</td>
<td>Dunes I-II (separate registration required)</td>
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<tr>
<td>3:00-5:00 PM</td>
<td>Case Discussion</td>
<td>Dunes I-II (open to Workshop and AAS Meeting registrants)</td>
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<tr>
<td>5:00-6:30 PM</td>
<td>Registration</td>
<td>Dunes Foyer</td>
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<tr>
<td>6:30-9:00 PM</td>
<td>Poster Session I and Trainee Poster Competition</td>
<td>Dunes IV-V (cheese &amp; wine)</td>
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#### THURSDAY, NOVEMBER 2, 2017

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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>8:00-8:30 AM</td>
<td>Continental Breakfast</td>
<td>Pelican/Heron</td>
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<tr>
<td>8:30-9:15 AM</td>
<td>Robertson Plenary Lecture</td>
<td>Pathophysiology of supine hypertension in autonomic failure</td>
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<td></td>
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<td>Italo Biaggioni, M.D.</td>
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<td>Nashville, TN, USA</td>
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<td>Chair: Satish Raj</td>
<td>Dunes I-III</td>
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**Session 1: Treatment of Orthostatic Hypotension Symposium**  
**Sponsored by Lundbeck**  
**Chairs: Christopher Gibbons, Jens Jordan and Cyndya Shibao**  
Dunes I-III  

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<tr>
<th>Time</th>
<th>Event</th>
<th>Authors/Institutions</th>
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</table>
9:30-9:45 AM | AAS-Lundbeck Travel Fellowship Award
Renal conversion of L-dihydroxyphenylserine (droxidopa) to norepinephrine in levodopa-untreated patients with neurogenic orthostatic hypotension
G. Lamotte, C. Holmes, P. Sullivan, D.S. Goldstein
Washington, DC, USA

9:45-10:00 AM | AAS-Lundbeck Travel Fellowship Award
Vasovagal syncope patients have a reduced quality of life and greater psychological distress compared to healthy subjects
J. Ng, R.S. Sheldon, D. Ritchie, V. Raj, S.R. Raj
Calgary, AB, Canada

10:00-10:15 AM | AAS-Lundbeck Travel Fellowship Award
Initiation of droxidopa during hospital admission for management of refractory neurogenic orthostatic hypotension in severely ill patients
Nashville, TN, USA

10:15-10:30 AM | Effect of acetylcholinesterase inhibition on orthostatic blood pressure and plasma norepinephrine in individuals with spinal cord injury and uninjured controls
Bronx, NY, USA

10:30-10:50 AM | Presentations from Top 4 Posters
(4 @ 5 min each)
Chairs: Cyndya Shibao & Wolfgang Singer

10:50-11:25 AM | Coffee Break
Dunes Foyer

11:25-12:30 PM | Groundbreaking Research Plenary Lecture
The sacral autonomic outflow is sympathetic
Jean-François Brunet, M.D., Ph.D.
Paris, France
Chair: David S. Goldstein
Dunes I-III

12:30-2:30 PM | Poster Session II
(box lunch)

2:30-4:00 PM | Free Time

4:00-5:00 PM | Trainee Round Tables
(mentor-mentee activities)
Pelican

5:00-6:00 PM | Trainee Social
Pelican

6:00-6:45 PM | Streeten Plenary Lecture
Lessons my patients taught me
Horacio Kaufmann, M.D.
New York, NY, USA
Chair: William P. Cheshire
Dunes I-III

Session 2: Cardiovascular Autonomic Regulation
Chairs: Amy Arnold, Mark Chapleau & Jens Jordan
Dunes I-III
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<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
<th>Location</th>
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<tr>
<td>6:45-7:00 PM</td>
<td>Best Basic Science Autonomic Research</td>
<td>R.A. Larson, M.K. Kafa, M.Z. Cicha, R.M. Weiss, R. Sabharwal, M.W. Chapleau</td>
<td>Iowa City, IA, USA</td>
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<td>2016 AAS-Lundbeck Research Fellowship Awardee</td>
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<td></td>
<td>Exploring neuro-cardiovascular dysregulation in a mouse model of hypertrophic cardiomyopathy</td>
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<td>7:00-7:15 PM</td>
<td>Streeten Travel Fellowship Award</td>
<td>N. Nazarenko, J. Manuel Sánchez, P. Stahl, K. Heusser, J. Jordan, J. Tank, F. Beissner</td>
<td>Hannover, Germany</td>
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<td></td>
<td>In-vivo measurement of brainstem and hypothalamic centers involved in blood pressure regulation in humans: a high-resolution fMRI study with LBNP</td>
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<td>7:15-7:30 PM</td>
<td>AAS-Lundbeck Travel Fellowship Award</td>
<td>B.M.W. Illigens, P.J. Marotta, J. White, I. Bonyhay, C.H. Gibbons, G.K. Adler, R. Freeman</td>
<td>Boston, MA, USA</td>
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<td>QT interval lengthening and recovery following experimental hypoglycemia using the hyperinsulinemic clamp procedure</td>
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<td>7:30-7:45 PM</td>
<td>FMS/Penaz Wesseling Travel Fellowship Award</td>
<td>J.K. Limberg, W.W. Holbein, B.D. Johnson, N. Covassin, M.J. Joyner, V.K. Somers</td>
<td>Rochester, MN, USA</td>
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<td>Muscle sympathetic nerve activity is not altered by experimental sleep restriction in healthy humans</td>
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<td>7:45-8:00 PM</td>
<td>FMS/Penaz Wesseling Travel Fellowship Award</td>
<td>N. Covassin, J. Bukartyk, A.D. Calvin, L. Ruzek, F. Soucek, E.K. St Louis, V.K. Somers</td>
<td>Rochester, MN, USA</td>
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<td></td>
<td>Blood pressure response to experimental sleep restriction: effect of family history of hypertension</td>
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<td>8:00-8:15 PM</td>
<td>Differential effect of meal on alpha1-adrenoceptor function in the mesenteric circulation in healthy humans</td>
<td>R. Meshulam, F. Zreik, O. Shibolet, G. Jacob</td>
<td>Tel-Aviv, Israel</td>
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<tr>
<td>8:15-8:30 PM</td>
<td>Awards Presentations</td>
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<td>Recognition of Fellows of the American Autonomic Society</td>
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<td>Recognition of Longtime Supporters</td>
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<td>Chairs: William P. Cheshire &amp; Satish Raj</td>
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FRIDAY, NOVEMBER 3, 2017

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<th>Speaker(s)</th>
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<tr>
<td>8:00-8:30 AM</td>
<td>Continental Breakfast</td>
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<td>Pelican/Heron</td>
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<tr>
<td>8:30-9:15 AM</td>
<td>MSA Plenary Lecture</td>
<td>Pietro Cortelli, M.D.</td>
<td>Bologna, Italy</td>
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<td>Sleep disorders in multiple system atrophy</td>
<td>Chair: Horacio Kaufmann</td>
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| 9:15-9:30 AM | Intrathecal administration of autologous mesenchymal stem cells in multiple system atrophy – a Phase I/II dose-escalation trial  
Rochester, MN, USA |
| 9:30-9:45 AM | Profound myocardial norepinephrine deficiency in Parkinson’s disease  
D.S. Goldstein, P. Sullivan, Y. Sharabi  
Bethesda, MD, USA |
| 9:45-10:00 AM | Loss of bulbospinal inhibitory neurons in the ventrolateral medulla in multiple system atrophy  
A.M. Schmeichel, E.A. Coon, J.E. Parisi, P.A. Low, E.E. Benaroch  
Rochester, MN, USA |
| 10:00-10:15 AM | Don Summers Memorial Multiple System Atrophy Travel Award  
Preliminary results of the Global Multiple System Atrophy Registry (GLOMSAR): an internet-based patient-reported registry  
J.A. Palma, A. Porciuncula, F. Krismer, W. Meissner, H. Kaufmann, L. Norcliffe-Kaufmann  
New York, NY, USA |
| 10:15-10:30 AM | Alpha-synuclein deposition in a longitudinal study of Parkinson’s disease  
C.H. Gibbons, N. Wang, J. Garcia, L. Shih, R. Freeman  
Boston, MA, USA |
| 10:30-10:45 AM | Simultaneous assessment of alpha-synuclein deposition and catecholaminergic innervation by immunofluorescence confocal microscopy in autonomic failure  
R. Isonaka, P. Sullivan, C. Holmes, D.S. Goldstein  
Bethesda, MD, USA |
| 10:45-12:00 PM | Genetics of Autonomic Disorders Symposium  
Sponsored by Alnylam Pharmaceuticals, Dysautonomia Foundation and PTC Therapeutics  
Hereditary sensory and autonomic neuropathies (HSAN)  
Lucy Norcliffe-Kaufmann, Ph.D.  
New York, NY, USA  
Autonomic dysfunction in familial amyloidosis  
Alejandra Gonzalez-Duarte, M.D.  
Mexico City, Mexico  
The genetics of multiple system atrophy  
Lucia Schottlaender, M.D.  
London, England  
**Chairs: Roy Freeman & Jose-Alberto Palma** |
| 12:00-12:30 PM | Box Lunch  
Dunes I-III |
# Session 4: Autonomic Contribution to Hypertension and Metabolism

**Chairs:** Qi Fu, Alfredo Gamboa & Jens Tank  
**Dunes I-III**

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<th>Time</th>
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<th>Authors</th>
<th>Location</th>
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<tr>
<td>12:45-1:00 PM</td>
<td>Use of Mayer wave amplitudes to demonstrate aberrant cardiovascular autonomic control following concussion</td>
<td>M.F. LaFountaine, A.J. Testa, J.P. Weir South Orange, NJ, USA</td>
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<td>1:00-1:15 PM</td>
<td>Angiotensin-(1-7) does not acutely lower blood pressure in patients with essential hypertension</td>
<td>A.C. Arnold, J.E. Celedonio, S.Y. Paranjape, I. Biaggioni, A. Gamboa Hershey, PA, USA</td>
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| 1:15-1:30 PM    | **AAS-Lundbeck Travel Fellowship Award**  
The use of lidocaine lubricant in bowel management practices does not improve autonomic dysreflexia in spinal cord injury: a randomized clinical trial | V.E.M. Lucci, M.S. McGrath, R. Willms, V.E. Claydon Burnaby, BC, Canada                             |
| 1:30-1:45 PM    | African Americans with CD36 partial deficiency have enhanced cardiovascular parasympathetic tone | S.E. Mehr, J.E. Celedonio, A. Diedrich, N.N. Abumrad, C.R. Flynn, N.A. Abumrad, C.A. Shibao Nashville, TN, USA |
| 1:45-2:00 PM    | Autonomic and metabolic dysregulation in a novel mouse model of metabolic syndrome | R. Sabharwal, L. Yang, M.W. Chapleau Iowa City, IA, USA                                             |
| 2:00-7:00 PM    | **Free Time**                                                          |                                                                                                   |
| 2:30-4:30 PM    | **AAS Board Meeting**                                                  | Ibis                                                                                              |
| 4:30-5:30 PM    | **CAR Editorial Board Meeting**                                        | Ibis                                                                                              |
| 5:30-6:30 PM    | **AAS Committee Meetings**                                             | Pelican/Heron                                                                                     |
| 7:00-10:00 PM   | **Presidential Dinner**                                                | Pool Deck                                                                                         |

**SATURDAY, NOVEMBER 4, 2017**

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<th>Time</th>
<th>Event</th>
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<tr>
<td>8:00-8:30 AM</td>
<td><strong>Continental Breakfast</strong></td>
<td>Pelican/Heron</td>
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<td>8:30-9:15 AM</td>
<td><strong>POTS Symposium</strong>&lt;br&gt;Pediatric POTS: the blind men, the elephant, and the drone&lt;br&gt;Jeffrey R. Boris, M.D.&lt;br&gt;Philadelphia, PA, USA&lt;br&gt;<strong>Chair: Satish Raj</strong>&lt;br&gt;Dunes I-III</td>
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<td><strong>Session 5: Postural Tachycardia Syndrome and Autonomic Neuropathy Symposium</strong>&lt;br&gt;Sponsored by Dysautonomia International&lt;br&gt;<strong>Chairs: Amanda Peltier &amp; Satish Raj</strong>&lt;br&gt;Dunes I-III</td>
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<tr>
<td>9:30-9:45 AM</td>
<td>Postural tachycardia in hypermobile Ehlers-Danlos syndrome: symptom burden and healthcare utilization&lt;br&gt;M.G. Miglis, B. Schultz, S. Jaradeh, S. Muppidi&lt;br&gt;Palo Alto, CA, USA</td>
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<td>9:45-10:00 AM</td>
<td>Microneurographic evidence of primary hyperadrenergic POTS&lt;br&gt;L.E. Okamoto, E.M. Garland, K. Sato, L. Diedrich, R. Furlan, G. Jacob, D. Robertson, I. Biaggioni, A. Diedrich&lt;br&gt;Nashville, TN, USA</td>
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<td>10:00-10:15 AM</td>
<td>A double blind-placebo controlled trial of IVIG in the treatment of AAG: results, implications and lessons learned&lt;br&gt;C.H. Gibbons, S. Rajan, J. Garcia, R. Freeman&lt;br&gt;Boston, MA, USA</td>
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<td>10:15-10:45 AM</td>
<td><strong>Coffee Break</strong>&lt;br&gt;Dunes Foyer</td>
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<td><strong>Session 6: Pediatric Autonomic Disorders</strong>&lt;br&gt;<strong>Chairs: Gisela Chelimsky &amp; Julian Stewart</strong>&lt;br&gt;Dunes I-III</td>
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<td>10:45-11:00 AM</td>
<td>Expanding the genetic and phenotypic spectrum of hereditary sensory and autonomic neuropathies: role of whole exome sequencing&lt;br&gt;J.A. Palma, L. Norcliffe-Kaufmann, S.A. Slaugenhaupt, H. Kaufmann&lt;br&gt;New York, NY, USA</td>
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<td>11:00-11:15 AM</td>
<td>Percutaneous electrical nerve field stimulation (PENFS) increases vagal tone in adolescent functional abdominal pain disorders (aFAPDs)&lt;br&gt;K. Kovacic, A. Miranda, T. Chelimsky, L. Zhang, P. Simpson, G. Chelimsky&lt;br&gt;Milwaukee, WI, USA</td>
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<td>11:45-12:00 PM</td>
<td>Baro-receptor sensitivity (BRS) in children and young adults: comparing normal controls to POTS (postural orthostatic tachycardia syndrome) and neurocardiogenic syncope patients M. Alnoor, H. Varner, I. Butler, M. Numan Houston, TX, USA</td>
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<td>12:00-12:30 PM</td>
<td><strong>AAS Business Meeting</strong></td>
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<td>Dunes I-III</td>
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<tr>
<td>12:30-12:45 PM</td>
<td><strong>CLOSING REMARKS</strong></td>
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<td>William P. Cheshire, M.D.</td>
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<td>President, American Autonomic Society</td>
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<td>Dunes I-III</td>
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<td>Afternoon</td>
<td><strong>Patient Seminar: Updates from the 2017 AAS Meeting</strong></td>
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<td>2:00-4:00 PM</td>
<td>Organized by Dysautonomia International</td>
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<td>Dunes I-III</td>
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## POSTER SESSION I
WEDNESDAY, NOVEMBER 1, 2017
6:30-9:00 PM
Dunes IV-V

**Trainee Poster Competition*** Judges: AAS Board Members

### Autonomic Failure: PAF, MSA, Parkinson’s Disease

| Poster #1* | The effect of exercise on heart rate variability during sleep in Parkinson’s disease
| Birmingham, AL, USA |
| Poster #2 | Depression in multiple system atrophy: association with disease progression and autonomic symptoms
| J.M. Martinez, J.A. Palma, L. Norcliffe-Kaufmann, H. Kaufmann
| New York, NY, USA |
| Poster #3 | Psychosis in multiple system atrophy
| J.A. Palma, C.R. de Camargo, J. Martinez, L. Norcliffe-Kaufmann, H. Kaufmann
| New York, NY, USA |
| Poster #4 | Cold-induced sweat: an uncommon presentation of pure autonomic failure
| New York, NY, USA |
| Poster #5 | Recurrent episodes of loss of consciousness; a case of seronegative autoimmune autonomic ganglionopathy with features of postural orthostatic tachycardia syndrome treated with plasmapheresis: a prospective case study
| R.A. Khan, M. Mazhar, C.E. Kaufman
| Oklahoma City, OK, USA |

### Autonomic Regulation: Basic Science & Animal Studies

| Poster #6 | 2016 AAS-Lundbeck Research Fellowship Awardee
| Activation of hypothalamic oxytocin neurons restores oxytocin release to parasympathetic cardiac vagal neurons of the brainstem in left ventricular hypertrophy induced heart failure
| J. Dyavanapalli, D. Mendelowitz
| Washington, DC, USA |

### Cardiac Autonomic Innervation: Humans

| Poster #7 | Differentiating positive and negative blood pressure variations in the computation of baroreflex sensitivity in amyotrophic lateral sclerosis
| B. De Maria, A. Porta, G. Galizia, R. Sideri, K. Marinou, G. Mora, L. Dalla Vecchia
| Milan, Italy |
| Poster #8 | Centripetal degeneration of cardiac sympathetic nerves in Lewy body diseases
| D.S. Goldstein, P. Sullivan, Y. Sharabi
| Bethesda, MD, USA |
| Poster #9* | Patients with a history of mild traumatic brain injury have impaired autonomic responses to unpleasant odorous stimuli  
M. Liu, F. Ammon, J. Markus, R. Wang, K.M. Hösl, T. Hummel, M.J. Hilz  
Erlangen, Germany |
|---|---|
| Poster #10 | Blood pressure variability accurately quantifies the evolution of autonomic cardiovascular control in acute spinal cord injury  
V.E.M. Lucci, J.A. Inskip, O.A. Sandberg, S.S. Bajaj, I. Ruiz-Romero, M.S. McGrath, B.K. Kwon, V.E. Claydon  
Burnaby, BC, Canada |
| **Cardiorespiratory Coupling, Dysautonomia in Schizophrenia** |
| Poster #11 | Paced breathing enhancements of cardiorespiratory coupling: a potential therapy to schizophrenia dysautonomia  
B. Goubran, L. Firulescu, A. Dumenigo, R. Aguirre, R.W. May, F.D. Fincham, J.D. Oms, M.A. Sanchez-Gonzalez  
South Miami, FL, USA |
| **Cardiovascular Disease, Obesity & Aging: Human Studies** |
| Poster #12* | Autonomic symptoms in pre-bariatric surgery patients and at 3 months post surgery  
V.M. Ponnusamy, A.P. Owens, C.J. Mathias, H. Chahal, S. Purkayastha, V. Iodice  
London, UK |
| **Cerebral Blood Flow Regulation** |
| Poster #13 | The relationship between cardiovascular and cerebrovascular responses to head-up tilt in patients with orthostatic intolerance  
La Jolla, CA, USA |
| Poster #14* | Position-dependent changes of blood flow in carotid arteries assessed by camera-based photoplethysmography  
O.V. Mamontov, T.V. Krasnikova, M.A. Volynsky, E.V. Shlyakhto, A.A. Kamshilin  
St. Petersburg, Russia |
| Poster #15 | Differential perfusion between the cerebral hemispheres depicted by near-infrared spectroscopy during head up tilt table test  
H. Elfadeel, H. Varner, J. Lankford, I. Butler, M. Numan  
Houston, TX, USA |
| **Diabetic, Autoimmune & Other Autonomic Neuropathies** |
| Poster #16 | Toenail changes in autonomic neuropathy  
G.A. Cook, Y. Ma  
Portsmouth, VA, USA |
| Poster #17 | A case of a patient with tonic pupil and hypohydrosis  
H.N. Jeong, S.W. Kim  
Seoul, South Korea |
| Poster #18 | Clarification of hypoglycemic symptoms in patients with autonomic dysfunction  
J.L. Gilden, B. Osmani, E. Ariano, E. Abousaad, A. Al-Khazaali, M. Siddiqui, A. Moid, B.G. Theckedath  
North Chicago, IL, USA |
| **Gastrointestinal & Urogenital Systems, IBS, Cystitis** |
### Poster #19*
**Effect of the autonomic nervous system on splanchnic circulation before and after meals**
F. Zreik, R. Meshulam, O. Shibolet, G. Jacob  
Tel Aviv, Israel

### Poster #20
**Gastric myoelectrical and neurohormone changes associated with nausea during tilt-induced syncope**
G.L. Heyer, L.H. Boles, R.A. Harvey, M.J. Cismowski  
Columbus, OH, USA

### Poster #21
**Inhibition of somatostatin release from enteric neurons of the guinea pig tenia coli by neurohumoral peptides of the vasoactive intestinal peptide (VIP)-secretin family**
J.R. Grider, K.S. Murthy, G.M. Makhlof  
Richmond, VA, USA

### Poster #22
**Impairment of mitochondrial bioenergetics in functional disorders does not improve with clinical amelioration**
Milwaukee, WI, USA

### Genetic Autonomic Disorders

#### Poster #23*
**Arterial stiffness: a possible link between orthostatic intolerance and Ehlers-Danlos syndromes**
Hershey, PA, USA

#### Poster #24*
**Incidence and prevalence of cancer and neoplasia in familial dysautonomia**
C.R. de Carmargo, J.A. Palma, L. Norcliffe-Kaufmann, H. Kaufmann  
New York, NY, USA

### Microneurography & Cardiovascular Reflexes in Humans

#### Poster #25
**Muscle sympathetic nerve activity peaks in the first trimester in healthy pregnancy: a longitudinal case study**
Sydney, NSW, Australia

#### Poster #26*
**Effect of chronic anxiety on sympathetic vasoconstrictor and cardiac responsiveness in humans**
Iowa City, IA, USA

### Novel Therapies & Clinical Trials

#### Poster #27*
**Can intermittent calf compression improve orthostatic tolerance?**
B.C.D. Hockin, L.J. Rietche, V.E. Claydon  
Burnaby, BC, Canada

#### Poster #28
**Intranasal dexmedetomidine for adrenergic crisis in familial dysautonomia**
C.L. Spalink, E. Barnes, J.A. Palma, L. Norcliffe-Kaufmann, H. Kaufmann  
New York, NY, USA

#### Poster #29*
**The effect of dipeptidyl peptidase IV inhibition on norepinephrine release in the setting of neuropeptide Y infusion**
S.A. Hubers, J.R. Wilson, C.A. Shibao, N.J. Brown  
Nashville, TN, USA
| Poster #30 | Stimulation of the dorsal root ganglion (DRG) for medicine refractory chronic neuropathic pain: is there sympathetic involvement? Y.B. Sverrisdóttir, J. Fitzgerald, A. Kent, J. Kramer, A.L. Green  
Oxford, UK |
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<td><strong>Orthostatic Hypotension and Syncope</strong></td>
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| Poster #31* | Orthostatic heart rate-blood pressure relationship identifies neurogenic orthostatic hypotension  
A. Velasco, L.E. Okamoto, E.M. Garland, Y. Chang, I. Biaggioni  
Birmingham, AL, USA |
| Poster #32* | Validity and reliability of orthostatic and non-orthostatic symptoms scores derived from the Orthostatic Discriminant and Severity Scale – a new instrument to discriminate orthostatic from non-orthostatic symptoms  
J. Baker, J. Paturel, K. Kimpinski  
London, ON, Canada |
| Poster #33* | Recent syncopal burden, but not prior syncope burden, predicts quality of life  
J. Ng, R.S. Sheldon, D. Ritchie, V. Raj, S.R. Raj  
Calgary, AB, Canada |
| Poster #34* | Quality of life improves in vasovagal syncope patients regardless of fainting in follow-up: role of syncope expert?  
J. Ng, R.S. Sheldon, C. Maxey, D. Ritchie, S.R. Raj  
Calgary, AB, Canada |
| Poster #35* | Initial cardiovascular response to head-up tilt (HUT) in vasovagal syncope (VVS)  
S. Balegh, J. Benoît, B. Ditto, R. Schondorf  
Montréal, QC, Canada |
| **Postural Orthostatic Tachycardia Syndrome (POTS)** | |
| Poster #36 | Symptom relief from median arcuate ligament syndrome corrective surgery in patients with postural orthostatic tachycardia syndrome and median arcuate ligament syndrome  
McKinney, TX, USA |
| Poster #37 | Effectiveness of droxidopa in children with postural orthostatic tachycardia syndrome  
B. Kakavand, K. Pires  
Orlando, FL, USA |
| Poster #38 | Prospective screening for intracranial aneurysms in patients with Ehlers-Danlos syndrome presenting with POTS  
D.S. Saperstein  
Phoenix, AZ, USA |
| Poster #39* | Employment and economic impacts of postural tachycardia syndrome: insights from a cross-sectional community-based survey  
Calgary, AB, Canada |
| Poster #40 | Educational and social impacts of postural tachycardia syndrome: insights from a cross-sectional community-based survey  
East Moriches, NY, USA |
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| Poster #41* | Coagulopathies in postural orthostatic tachycardia syndrome  
McKinney, TX, USA |
| Poster #42 | Effects of Ivabradine on autonomic parameters in postural orthostatic tachycardia syndrome (POTS) patients  
McKinney, TX, USA |
| Poster #43 | Pseudobulbar affect in postural tachycardia syndrome  
R.K. Khurana  
Baltimore, MD, USA |
| Cognitive Dysfunction in Autonomic Disorders |
| Poster #44* | Autonomic contributions to psychological symptomatology in clinical disorders of autonomic hyperarousal  
A.P. Owens, D.A. Low, V. Iodice, H.D. Critchley, C.J. Mathias  
London, UK |
| Pupillary Autonomic Modulation |
| Poster #45* | Disease duration and severity correlate with reduced pupillary modulation in patients with relapsing-remitting multiple sclerosis  
Erlangen, Germany |
| Sleep Dysfunction in Autonomic Disorders |
| Poster #46* | Sleep and autonomic impairment in Ehlers-Danlos syndrome: a case series  
B. Schultz, C. Guilleminault, S. Jaradeh, M.G. Miglis  
Palo Alto, CA, USA |
| Sympathovagal Balance, Spectral Analysis |
| Poster #47* | The equivalency of non-invasive measures of vagal baroreflex sensitivity and their relationship to orthostatic cardiac responses  
M.G. Lloyd, M. Koehle, R.J. Drapala, V.E. Claydon  
Burnaby, BC, Canada |
| Poster #48* | Fingolimod discontinuation restores cardiovagal gain in patients with relapsing-remitting multiple sclerosis  
Erlangen, Germany |
| Poster #49* | Effects of cigarette smoking on blood pressure and heart rate variability in habitual smokers  
E.V. Saperova, D.A. Dimitriev  
Cheboksary, Russia |
| The Science of Clinical Practice |
| Poster #50 | Autonomic lifestyles and Fitbit pitfalls: how personal biosensors are changing medical practice  
W.P. Cheshire  
Jacksonville, FL, USA |
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| **POSTER SESSION II**  
**THURSDAY, NOVEMBER 2, 2017**  
**12:30-2:30 PM**  
Dunes IV-V |
| **Autonomic Dysfunction in Carcinomas** |
| Poster #51 | Role of heart rate variability and pulse wave analysis to quantify subclinical autonomic dysfunctions in cancer patients  
E. Khandelwal, S. Tripathi  
Raipur, India |
| **Autonomic Failure: PAF, MSA, Parkinson’s Disease** |
| Poster #52 | Addressing orthostatic hypotension in Parkinson disease patients in a neurology resident continuity clinic  
E.P. Golden, T. Le, L.S. Brown, P. Khemani  
Dallas, TX, USA |
| Poster #53 | Low CSF DOPA and DOPAC predict Parkinson’s disease  
D.S. Goldstein, C. Holmes, G.J. Lopez, T. Wu, Y. Sharabi  
Bethesda, MD, USA |
| Poster #54 | Smoking and alcohol use influence age of onset in multiple system atrophy  
Rochester, MN, USA |
| Poster #55 | Association between complexity analysis of the systolic arterial pressure and heart rate variability and rate of disease progression in patients with amyotrophic lateral sclerosis  
B. De Maria, G. Mora, K. Marinou, R. Sideri, R. Furlan, F. Barbic, A. Porta, L. Dalla Vecchia  
Milan, Italy |
| Poster #56 | Vagal baroreflex sensitivity reflects the progression of Parkinson’s disease  
K.J. Park, H. Jeong, E.B. Cho, T. Yang, S. Jung, J.Y. Chang  
Jinju, The Republic of Korea |
| **Autonomic Testing** |
| Poster #57 | Electrochemical skin conductance and the relationship to autonomic structure and function in diabetes  
C.H. Gibbons, J. Garcia, M. Casasola, R. Freeman  
Boston, MA, USA |
| Poster #58 | Does physiological volume status affect Q-Sweat volume?  
J.A. Gehrking, D.M. Sletten, T.L. Gehrking, K. Minota, W. Singer, P.A. Low  
Rochester, MN, USA |
| **Diabetic, Autoimmune & Other Autonomic Neuropathies** |
| Poster #59 | Small fiber neuropathy associated with IgG monoclonal gammopathy  
H.N. Jeong, S.W. Kim  
Seoul, South Korea |
| Poster #60 | Positive GAD-65 antibodies in patients with autonomic dysfunction  
L. Vlahovic, L. Kipp, L. Nguyen, J. Dunn, S. Jaradeh  
Stanford, CA, USA |
|---|---|
| Poster #61 | A randomized, blinded, parallel group lifestyle intervention study improves the expiration:inspiration ratio in subjects with diabetic neuropathy  
L. Zilliox, M. Morado, P. Kumar, K. Fleishmann, J.W. Russell  
Baltimore, MD, USA |
| **Epidemiology of Autonomic Disorders** |
| Poster #62 | Prevalence and incidence rates of autonomic disorders among U.S. Military Healthcare System beneficiaries never diagnosed with diabetes  
G.A. Cook, C.A. Shibley, E. Williams IV  
Portsmouth, VA, USA |
| **Exercise, Temperature Regulation & Hypoxia** |
| Poster #63 | PEARL™: Parkinson Exercise Autonomic Response Level — a bedside rating scale to estimate exercise capabilities in Parkinson diseases  
B. Weinstock  
Brooklyn, NY, USA |
| Poster #64 | Can resting heart rate influence heart rate recovery after submaximal exercise test?  
Brasilia, Brazil |
| **Genetic Autonomic Disorders** |
| Poster #65 | Autonomic neuropathy in Wolfram syndrome  
W.P. Cheshire, C.E. D’Souza, R.J. Uitti  
Jacksonville, FL, USA |
| Poster #66 | Allgrove syndrome (triple A syndrome): two cases and the fourth “A”  
A.B. Murphy, J.A. Palma, H. Kaufmann  
New York, NY, USA |
| **Microneurography & Cardiovascular Reflexes in Humans** |
| Poster #67 | Role of corin in blood pressure regulation during pregnancy in humans  
Q. Fu, S. Park, J.K. Yoo, M. Hieda, Y. Okada, S.S. Jarvis, A.S. Stickford, S.A. Best, B.D. Levine  
Dallas, TX, USA |
| Poster #68 | Interindividual differences in sympathetic baroreflex sensitivity and vascular transduction  
S.L. Hissen, V.G. Macefield, R. Brown, C.E. Taylor  
Sydney, NSW, Australia |
| Poster #69 | The effect of 6 weeks of high-intense training on MSNA levels in hypertensive males  
T.S. Ehlers, T.P. Gunnarsson, M. Fiorenza, M.P. Nyberg, J. Bangsbo, Y.B. Sverrisdóttir  
Copenhagen, Denmark |
| **Music and the Autonomic Nervous System** |
| Poster #70 | Effect of tempo and harmony on the autonomic nervous system  
K.R. Chémali, K. McNeeley, D. Russell  
Norfolk, VA, USA |
| **Neuroimaging in Brain & Heart** |
| Poster #71 | Comparison of 3T and 7T MRI imaging of the periaqueductal gray region (PAG)  
Milwaukee, WI, USA |
| Poster #72 | Correlation of autonomic dysfunction with the atrophy of central autonomic brain areas in SCA patients  
New Delhi, India |
| Poster #73 | Neuroimaging biomarkers of putamen and cardiac catecholamine deficiency identify early Parkinson’s disease  
Bethesda, MD, USA |

**Orthostatic Hypotension and Syncope**

| Poster #74 | Syncopedia: filling the physician’s knowledge gap on transient loss of consciousness  
J.S.Y. de Jong, W. Wieling, F.J. de Lange, on behalf of the Syncopedia Editorial Board  
Amsterdam, The Netherlands |
| Poster #75 | Topical diagnostics of arterial baroreflex dysfunction in patients with orthostatic hypotension.  
O.V. Mamontov, A.V. Kozlenoc, E.V. Shlyakhto  
St. Petersburg, Russia |
| Poster #76 | Implications of initial orthostatic hypotension seen during tilt table testing  
A. Barboi, V. Patel, S. Pocica, S. Moffat, M. Plonka  
Evanston, IL, USA |
| Poster #77 | Role of potential confounders in affecting hospital admission because of syncope  
Rozzano, Italy |
| Poster #78 | Is hospital admission useful for syncope patients? Preliminary results of a propensity analysis  
F. Dipaola, E. Pivetta, G. Costantino, J. Quinn, A. Ungar, M. Solbiati, F. Barbic, M. Gatti, R. Furlan  
Milan, Italy |
| Poster #79 | Neurogenic orthostatic hypotension burden of illness patient and caregiver survey: impact of symptoms  
Nashville, TN, USA |
| Poster #80 | Orthostatic responses to lunar and Martian gravity loads  
Cologne, Germany |

**Migraine & Sleep**

| Poster #81 | Sleep induction following cranial nerve modulation in migraine subjects  
Los Angeles, CA, USA |

**Pediatric Autonomic Disorders**

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| Poster #82 | Vagal modulation in pediatric Functional Pain and Autonomic Disorders (pFPAD) improves as disability improves: preliminary report  
G. Chelimsky, L. Zhong, E. Awe, D. Johannes, K. Kovacic, T. Chelimsky  
Milwaukee, WI, USA |
| Poster #83 | Afferent baroreflex failure in children and young adults  
J.A. Palma, L. Norcliffe-Kaufmann, H. Kaufmann  
New York, NY, USA |
| Poster #84 | How long to tilt in pediatrics? 10 minutes is not enough!  
M. Witzlib, T. Chelimsky, G. Chelimsky  
Children’s Hospital of Wisconsin and Medical College of Wisconsin, Milwaukee, WI, USA |
| **Postural Orthostatic Tachycardia Syndrome (POTS)** | **Poster #85** Utilization of medications to reduce the symptoms in pediatric patients with postural orthostatic tachycardia syndrome  
J.R. Boris, T. Bernadzikowski  
Philadelphia, PA, USA |
| | **Poster #86** The diagnostic journey and costs in postural tachycardia syndrome: insights from a cross-sectional community-based patient survey.  
East Moriches, NY, USA |
| | **Poster #87** Case report of May-Thurner syndrome surgery in postural orthostatic tachycardia syndrome  
McKinney, TX, USA |
| | **Poster #88** POTS after an acute viral infection: role of reversed A:G ratio in clinical diagnosis  
P. Kumar, S. Gupta, S. Raghavan  
New Delhi, India |
| | **Poster #89** Postural orthostatic tachycardia syndrome (POTS) - its impact on school and work participation  
T.S. Ahern  
La Jolla, CA, USA |
| | **Poster #90** Irritable heart syndrome without orthostatic tachycardia  
H.J. Snapper  
Atlanta, GA, USA |
| | **Poster #91** Droxidopa management in postural orthostatic tachycardia syndrome (POTS) patients  
McKinney, TX, USA |
| | **Poster #92** Median arcuate ligament surgery in postural orthostatic tachycardia syndrome (POTS) – is post operative celiac artery velocity (POCAV) a success marker?  
McKinney, TX, USA |
| Poster #93 | Autonomic parameters in postural orthostatic tachycardia syndrome patients before and after median arcuate ligament syndrome surgery  
McKinney, TX, USA |
| Poster #94 | Vitamin D deficiency study in postural orthostatic tachycardia syndrome (POTS) patients  
K. Kommera, Z. Rehman, C. Ashanagri, A. Suleman  
McKinney, TX, USA |
| **Serious Mental Illness and Autonomic Dysfunction** |
| Poster #95 | Time course of improvement in autonomic function and attention in acute psychosis: a case report  
R.R. Aguirre, M. Zirio Mustafa, A. Dumenigo, S. Schulz, A. Voss, R. Dumenigo, M.A. Sanchez-Gonzalez  
South Miami, FL, USA |
| **Supine Hypertension and Neurogenic Orthostatic Hypotension** |
| Poster #96 | Assessment of autonomic function during ictal and interictal period of migraine  
S. Bansal, A.K. Srivastava  
New Delhi, India |
| **Sympathovagal Balance, Spectral Analysis** |
| Poster #97 | Correlation of autonomic and cognitive impairment in patients with a history of traumatic brain injury  
M.J. Hilz, K. Hösl, C. de Rojas Leal, S. Roy, M. Liu, R. Wang  
Erlangen, Germany |
| Poster #98 | Cardiovascular autonomic control during paced-respiration hypnosis  
E. Brunetta, M. Minonzio, F. Barbic, D. Lopane, C. Poggio, F. Dipaola, C. Margotti, P.R. Tomasin, R. Furlan  
Rozzano, Italy |
| Poster #99 | Optical imaging of baseline and stimulus-induced changes in facial perfusion  
M. Cortez, N. Rea, J. Theriot, K.C. Brennan  
Salt Lake City, UT, USA |
| Poster #100 | Sympathetic cardiovascular modulation increases after three years of Fingolimod therapy  
Erlangen, Germany |
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