# ALUMNI PULSE





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For information about the Dept. of PM&R, you may visit our website at:

njms.rutgers.edu/rehab

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#### **AUGUST 2013**



Onan o Como

UMDNJ No Longer Exists....
Welcome to Rutgers New Jersey Medical School

By: Patrick Foye, M.D.,
Professor and Interim Chair,
Department of Physical Medicine and Rehabilitation
New Jersey Medical School,
Rutgers, The State University of New Jersey

Serving as interim Chair of our PM&R Department here at NJMS over the past year has been a terrific honor, and a responsibility that I have not taken lightly. I am happy to report that we have made many positive changes this year and we look forward to many continued successes. As I continue serving in this capacity, here are a few highlights of the year gone by...

Ch-ch-changes: This past year has included exciting milestones for our PM&R department. In July 2012 we began our *first* academic year without Dr. DeLisa, who retired after 25 years as department Chair. It was also our *last* year as part of UMDNJ (University of Medicine and Dentistry of New Jersey), since the July 1, 2013 merger with Rutgers University means that UMDNJ no longer exists. The schools that were previously part of UMDNJ have mostly now become part of Rutgers, including both allopathic medical schools (New Jersey Medical School and Robert Wood Johnson Medical School, each of which remains a separate medical school but now under the umbrella of Rutgers rather than UMDNJ). Meanwhile, UMDNJ's School of Osteopathic Medicine (SOM) in Stratford (~ southern NJ) has become part of Rowan University.

The UMDNJ-Rutgers merger means that Rutgers University now has more than 65,000 students and ranks as one of the top 25 universities in the nation in research funds. All current faculty at NJMS are now simultaneously faculty at Rutgers University. Residents and Fellows who graduate from our programs after July 1, 2013, will receive diplomas from Rutgers New Jersey Medical School. (The new official name is "New Jersey Medical School, Rutgers, The State University of New Jersey", sometimes abbreviated as "Rutgers New Jersey Medical School".)

University Hospital separated from the University: The same state legislation that ended UMDNJ and merged NJMS into Rutgers also re-created University Hospital, Newark, as a separate entity from NJMS. U.H. is now owned directly by the State of N.J., but will continue to serve as the primary teaching site for NJMS students and the main site for many NJMS residencies.

**Student rotation changes**: Along with a number of other clinical departments at NJMS, we changed our process of handling medical student rotations in PM&R so that now they are mostly taken care of more centrally by NJMS

administration which helps to efficiently standardize the necessary scheduling, grading, etc., across clerkships in various different departments. Our department draws more elective rotations from visiting students than any other department in the medical school.

Residents/Faculty Reunion at AAPM&R: For the first time in decades (maybe ever?), at the annual AAPM&R conference our department had a reunion of former residents, fellows, and faculty. In Atlanta in November 2012, it was fantastic to re-connect with so many physiatrists from around the country. Big thanks to our outgoing chief residents (especially Christine Greiss) for helping me with this. We look forward to making this an annual tradition and hope you will join us for a gettogether at the AAPM&R conference in Washington DC this October 2013... further details coming!

Grand Rounds and Faculty Meetings: I am enjoying attending these monthly sessions at our various affiliated sites, some of which I had not visited in years. The Grand Rounds speakers this year presented a range of great topics covering everything from pelvic floor dysfunction, to boxing injuries, to yoga exercises, to national healthcare issues (given by the immediate past President of the American Medical Association), to Randy Braddom sharing pearls such as how he built a platform that allowed him to do his textbook editor duties while running on a treadmill! I enjoyed the chance to spend time with faculty at their various sites.

**Grants, Lectures, Publications, etc.**: Our department remains extensively productive; see further details in the on subsequent pages of this newsletter.

**Graduation**: Congrats to all our graduates of our post-doctoral fellowships, our clinical fellowships, and our residency program. Also congrats to Faculty and Alumni who were honored with awards at this year's graduation dinner. (See listings of graduates and awardees on subsequent pages of this newsletter.) Also a big welcome to the new folks who have joined us!

Help us to Rename this newsletter: For years we have called this department newsletter "Alumni Pulse". Some have commented that the title is pretty generic, since it reflects nothing to imply PM&R nor NJMS, etc. Also, NJMS already publishes a magazine called 'Pulse'. I'm open to renaming our department newsletter if you send in some good ideas for possible names. So put on your creative thinking caps! Send you ideas to Doreen Muhammad at pmrresid@rutgers.njms.edu.

# From the residency director... By Susan Garstang, M.D.

The faculty and trainees welcome the following members of the PM&R residency & fellowship classes starting in 2013

#### New Residents

#### Raisa Bakshiyev, MD

UMDNJ-New Jersey Medical School, NJ

PGY-1: Jersey Shore University Medical Center, NJ

#### Priya Bolikal, MD

UMDNJ-New Jersey Medical School, NJ

PGY-1: UMDNJ-New Jersey Medical School, NJ

#### Javier, Cerra-Franco, MD

Ponce School of Medicine, PR

PGY-1: San Juan VA Medical Center, PR

#### Michelle Didesch, MD

Washington University, St. Louis, MO

PGY-1: Englewood Hospital, NJ

#### Stephen Hampton, MD

UT Medical School Houston, TX

PGY-1:St. Elizabeth Medical Center, MA

#### Milagros Llull-Vera, MD

Ponce School of Medicine, PR

PGY-1: New York Downtown Hospital, NJ

#### Tory Speert, MD

UMDNJ-SOM, NJ

PGY-1: Christ Hospital, NJ

#### Rui Zhang, MD

Medical Center of Fudan University, China

PGY-1: Montefiore Medical Center, NY

#### New Clinical Fellows

#### Dana Clark, MD

Spinal Cord Injury

Residency: Rehab Institute of Chicago

#### Renee Enriquez. MD

Musculoskeletal/Pain/Spine

Residency: North Shore - Long Is. Jewish Health System

#### Christine Greiss, DO

Traumatic Brain Injury

Residency: UMDNJ-New Jersey Medical School

#### Sara Salim, MD

Musculoskeletal/Pain/Spine

Residency: UMDNJ-New Jersey Medical School

#### Nora Taha, MD

Musculoskeletal/Pain/Spine

Residency: SUNY Downstate Medical Center

#### Vishal Rekhala, DO

Musculoskeletal/Pain/Spine

Residency: Kingsbrook Jewish Medical Center

#### ...and Bids Farewell to the Class of 2013!

#### **Graduating Residents**

**Melissa Fleming, MD** - Children's National Memorial Hospital, Pediatric Rehabilitation Fellowship

Christine Greiss, DO - Rutgers/Kessler, TBI fellowship

Jay Jani, MD - Private Practice

Joslyn John, MD - Baylor College of Med, Houston, TX, academic practice

Jong Kim, MD - private practice, Valley Hospital, NJ

Shounuck Patel, DO - OSS York PA, Dr. Furman, Sports fellowship

Sara Salim, MD - Rutgers/PMR, Musculoskeletal fellowship

Jiaxin Tran. MD - TBD

Ian Wendel, DO - Mt. Sinai Medical Center, NY, Sports fellowship

#### **Graduating Clinical & Postdoctoral Fellows**

Katherine Bentley, MD - Pediatric Fellow
Susan DiStasio, DO - Musculoskeletal Fellow
Abhijit Das, PhD - Postdoctoral Fellow
Amanda Farag, MD - Spinal Cord Injury Fellow
Lawanda Ford-Johnson, MD - Postdoctoral Fellow
Michael Goldin, MD - Musculoskeletal Fellow
Emerald Lin, MD- Traumatic Brain Injury Fellow
Kristen Maul, PhD - Postdoctoral Fellow
Justin Mendoza, MD - Musculoskeletal Fellow
Megan Mitchell, PhD - Postdoctoral Fellow
Christine Roque-Dang, DO - Musculoskeletal Fellow
Jelena Stojanovic-Radic, PhD - Postdoctoral Fellow



#### PM&R residents by Year and School of Origin

#### <u>PGY-4</u>

Adam Bartlett, MD, University of Colorado, HSCMS Alice Hon, MD- UMDNJ-NJMS Gwen Lacerda, MD, UC Davis, SOM Pooja Mundrati, DO, UMDNJ-SOM Steven Neuman, MD – UMDNJ-RWJ Rana Rand, DO – UMDNJ-SOM Miranda Smith, MD - NY Medical College Justin Waltrous, MD - U Maryland, SOM

#### PGY-3

Patrick Buchanan, MD - Saint Georges University Ummais Khan, MD - UMDNJ-NJMS Lawrence Lai, MD - Drexel Univ. College of Medicine Victoria Lin, MD - USLA Geffen Leroy Lindsay, MD - University of Rochester, SOM Yan Liu, MD - New York Medical College Michael Monfett, MD - Saint Georges University Ravi Patel, MD - Drexel College of Medicine Wesley San, MD - Saint Georges University

#### PGY-2

Raisa Bakshiyev, MD - UMDNJ-NJMS NJ Priya Bolikal, MD - UMDNJ-NJMS Javier, Cerra-Franco, MD - Ponce School of Medicine Michelle Didesch, MD - Washington University Stephen Hampton, MD - UT Medical School Houston Milagros Llull-Vera, MD - Ponce School of Medicine Tory Speert, MD - UMDNJ-SOM Rui Zhang, MD - Medical Center of Fudan University

#### Congratulations on a successful Match!

We had fantastic results in the residency Match this year. The following physicians will start in our residency in July 2014:

Dena Abdelshahed, UMDNJ-New Jersey Medical School Kevin Berry, UMDNJ- New Jersey Medical School Pavli Demian, New Jersey Osteopathic Medicine Beverly Hon, UMDNJ-RW Johnson Medical School Ondrea McKay, UMDNJ- New Jersey Medical School Reina Nakamura, New York Osteopathic Medicine Peter Shupper, New York Medical College Nicole Wagaman, Des Moines Osteopathic Medicine



Chief Residents for 2013-2014. The following residents are congratulated for being selected as chief residents for academic year 2013-14. (Note that our chief residents are nominated by vote of both residents and faculty with equal weighting.) The Administrative Chief is responsible for call schedules, vacation schedules, and other administrative issues. The Academic Chief Resident is responsible for the didactic curriculum, including coordination and scheduling of lectures, and administering the quarterly exams.

- Justin Waltrous, MD., Administrative Chief Resident
- · Adam Bartlett, MD., Academic Chief Resident



#### **Positions Held by Residents**

#### National:

AAPMR Resident Physician Council - Justin Waltrous

AAP residents/fellows council member - Alice Hon

#### Local:

Sports Coordinator - Mike Monfett

QI / Patient Safety Housestaff Council - Ravi Patel

Housestaff Union representative - Leroy Lindsay

Medical Student Interest Group - Alice Hon, P. Buchanan

Rehab in Review - Alice Hon

Social Committee - R. Patel, P. Buchanan, Mike Monfett

GME Committee - Alice Hon, Rana Rand

Resident Council - Alice Hon, Rana Rand

Chief Residents: Adam Bartlett, Justin Waltrous

EMG Course Directors: Miranda Smith, Adam Bartlett

#### "Health Care Finances in America: 101"

John R. Bach, M.D. Professor, PM&R, New Jersey Medical School

The United States gross domestic product (GDP) for 2012 was \$15.6 trillion. The federal debt was \$16.5 trillion or about 110% of GDP (today \$16.9 trillion), not including about \$3.1 trillion in regional and local debts or over 125% of GDP and increasing by over 1% per month. This amounts to \$60,317 for every American but it grossly understates the problem. Unfunded Medicare liability in 2012 was \$24.8 trillion or \$212,500 per household. The 77 million Baby Boomers who turn 65 this year will qualify for Medicare and augment the liability. Despite a federal deficit that he more than doubled from \$5 to \$12 trillion by the end of his presidency and no suggestion of how to pay for it, in 2003 George W. Bush signed the Medicare Prescription Drug, Improvement, and Modernization Act for free medications for all seniors. As a result of these entitlements, federal and state unfunded commitments for Medicaid, Medicare, Social Security, pensions, and military benefits are now \$73.2 trillion, \$650,000 per household, or \$232,381 per American. Americans may not be born with original sin but they certainly are born with original debt! This \$73.2 trillion deficit can be compared to Americans total assets which in March 2013 were \$61.1 trillion, not including the country's infrastructure which, considering it current state of degradation, is probably not worth more than a few extra trillion. Thus, like so many individual Americans, the United States is mortgaged beyond its equity.

The United States spent \$2.8 trillion on health care in 2011 or about twice its budget deficit of \$1.5 trillion. This included \$360 billion for health care administrative costs in a system that has twice as many employees working for the government to operate entitlement systems as working in private industry. In 1960 U.S. health care costs were 5.1% of gross domestic product (GDP), then 10.1% in 1985, 13% from 1993 through 2000, 18% in 2012, and soon to exceed 20%. 2012 rates are two and one-half times those per capita for the Japanese who live 4 years longer than we do despite much higher smoking rates and 75% more per capita than Canadians who live 2.5 years longer and almost 5 times more than for Singapore where they live 5 years longer than us. The World Health Organization ranks the United States with Slovenia, 37<sup>th</sup> worldwide in overall health care performance.

When the federal government passed the Emergency Medical Treatment and Active Labor Act (EMTALA) in 1986 mandating an entitlement for emergency medical care for everyone who enters any emergency department for any reason and regardless of citizenship, legal status, or ability to pay, since it was an unfunded mandate with no reimbursement provisions, hundreds of hospitals across the United States closed. Mexican ambulances typically cross the border to deliver their clients to American emergency rooms. As of March 2013, University Hospital in Newark had 10 undocumented aliens with no insurance or ability to pay already hospitalized for over 1 year, several of whom in intensive care. It would have been far cheaper for

taxpayers had these aliens been given Medicaid and been discharged to less expensive facilities. The government's failure to control immigration has resulted in millions of illegal immigrants, often homeless and with no ability to pay, burdening public hospitals and their emergency services. Inner city not for-profit hospitals could only survive by cutting services that in some cases could compromise care. Despite doing so, as of 2013 some hospitals, including University Hospital in Newark, are losing money at a rate of \$10-20 million per year and UH serves up to 40% of the "charity care" patients of the state of New Jersey, illegal aliens, and many with out-of-state Medicaid.

More fun to come...



Congratulations to
Michael D. Stubblefield, MD
2013 NJMS/PM&R
Graduation Speaker & Recipient
of the National Speaker Award

On May 23, 2013, Dr. Stubblefield, Chief of Rehabilitation Medicine Service and Associate Attending Physiatrist at Memorial Sloan-Kettering Cancer Center in New York City presented a lecture on the topic of *Cancer Rehabilitation: Our past, present and future.* 

Dr. Michael D. Stubblefield is board certified in Physical Medicine and Rehabilitation (PM&R), Internal Medicine, and Electrodiagnostic Medicine. His primary clinical expertise is in the identification, evaluation, and treatment of neuromuscular, musculoskeletal, and functional complications of cancer and its therapy, particularly those caused by radiation and neurotoxic chemotherapy. In addition to authoring numerous articles, book chapters, and reviews in the field of cancer rehabilitation, Dr. Stubblefield is senior editor of Cancer Rehabilitation: Principles and Practice, the only comprehensive textbook in this emerging field. Stubblefield is heavily involved in a variety of research endeavors both within his own field and as a collaborator with other oncologic disciplines. Dr. Stubblefield has served on the Board of the American Association of Neuromuscular and Electrodiagnostic Medicine and is currently on the editorial board of the journal Muscle and Nerve and Chair of the Medical Council of the American Association of Physical Medicine and Rehabilitation. Dr. Stubblefield is a fierce advocate for the development of cancer rehabilitation and survivorship programs and works tirelessly to champion further adoption of such programs at comprehensive cancer centers and other oncology care facilities as key to restoring function and quality of life to cancer patients.

# Resident/Fellow Presentations 2012-2013

Controlling for reaction time is important in understanding task-related functional brain activation in Multiple Sclerosis, **Abhijit Das**, Victoria M Leavitt, John DeLuca, Nancy Chiaravalloti, Glenn R Wylie

**Ford-Johnson, L.**, Lengenfelder, J., A., Smith, A., Chiaravalloti, N.D., & DeLuca, J. Examination of Executive Functions in TBI using the DKEFS

**Ford-Johnson, L.**, Lengenfelder, J., Genova, H., Sumowski, J., DeLuca, J., & Chiaravalloti, N.D. The Relationship between Medication Adherence and Cognitive and Emotional Functioning in MS

**Ford-Johnson, L.,** Lengenfelder, J., Wylie, G., Binder, A., Chiaravalloti, N.D., & DeLuca, J. Examination of the Cognitive and Emotional Sequelae Effecting Medication Adherence in MS

**Ford-Johnson,** L., Lengenfelder, J., Santana, E., & Chiaravalloti, N.D. Quantification of External Muscle Force During Standing With Electrical Stimulation: Pilot Study on repeatability and Sensitivity. **Megan Mitchell, PhD** 

Neurophysiological Assessment Tool of Trunk Activity: Reliability of sEMG and Potential to Determine Neurorecovery After SCI, **Megan Mitchell, PhD**, Daniel Pierce, BS, Erica Garbarini, PT, Mathew Yarossi, MS, Gail Forrest, PhD

Association between Cognitive Reserve and White Matter Integrity in Multiple Sclerosis J. **Stojanovic-Radic,** A. Das, P. Girgis, H. Genova, N. Chiaravalloti, J. DeLuca, Sumowski, J., and G. Wylie

Functional magnetic resonance imaging (fMRI) and near infrared spectroscopy (NIRS): Extent of agreement between two imaging methods when studying brain activation, **J. Stojanovic**, G. Wylie, G.T. Voelbel, Nancy C & J. DeLuca.

Neuroimaging and Cognition using Nearest Infrared Spectroscopy in Multiple Sclerosis, **J. Stojanovic**, G. Wylie, G.T. Voelbel, & J. DeLuca.

#### **AAPM&R 2012**

Foix-Alajouanne Syndrome, A Reversible Cause of Paraplegia, A Case Study, **Gwen Lacerda, MD** Barbara T. Benevento, MD, presented at the AAPM&R 2012.

The Role of Singing as a Rehabilitation Intervention, **Joslyn John, MD**, Gautam Malhotra, MD, presented at the AAPM&R 2012.

Spinal Cord Injury After Roller Coaster Ride in a Patient with Previously Undiagnosed Ankylosing Spondylitis: A Case Report, **Sara Z. Salim, MD**, Peter Yonclas, MD, presented at the AAPM&R 2012.

Maggot Therapy for the Treatment of a New Decubitus Ulcer in a Chronic Spinal Cord Injury Patient: A Case Report, **Miranda B. Smith, MD,** Carol Gibson-Gill, MD, Keith Claffey, presented at the AAPM&R 2012.

Hemoglobin SC Disease Presenting as Hip Pain and Urinary Retention: A Case Report, **Jiaxin Tran, MD,** Robert Lee Johnson, MD, FAAP, Eric L. Altschuler, MD, PhD, presented at the AAPM&R 2012.

#### **AAP- 2013**

Gaglion Cyst at the Fibular Head Causing Common Peroneal Neuropathy Diagnosed with Ultrasound, **Lawrence P. Lai, MD, MS,** Boqing Chen, MD, PhD, Justin Mendoza, MD, Patrick M. Foye, MD, Todd P Stitik, MD, presented at the AAP meeting 2013

Combination of Ultrasound & Neurostimulator Guidance for Intercostal Nerve Block in a Cancer Survivor with Chest-Wall Pain after Total Laryngectomy and Partial Sternal Resection – **Shounuck I. Patel, DO,** presented at the AAP 2013

Upper Brachial Plexopathy from Primary Nerve Sheath Tumor Mimicking Stretch injury Post Stroke, Rana Rand, **Patrick Buchanan, MD,** DO, Stephen F. Levinson, MD, Mooyeon Oh-Park, MD, presented at the AAP 2013

Bilateral Upper and Lower Trunk Brachial Plexopath of Unknown Etiology: A Case Report of A New Potential Syndrome, **Alice J. Hon, MD**, Ondrea McKay, BA, John R. Bach, MD, Erick L. Altschuler, MD, PhD, presented at the AAP 2013

Left Lower Limb Deep Vein Thrombosis in a Patient with May-Thurner Syndrome: A Case Report, **Pooja Mundrati, DO**, Elinor Anan, MD, presented at the AAP 2013

An Unusual Cause of Facial Numbness and Foot Drop: A Case Report, **Ian W. Wendel, DO**, Kevin Dunn, MD, presented at the AAP 2013

Speaking Chinese after Traumatic Brain Injury: A Case Report, **Victoria Lin, MD**; Neil Jasey, MD, presented at the AAP 2013

Over-Correction of Leg Length Discrepancy as an latrogenic Cause of Musculoskeletal Pain, **Miranda B. Smith, MD,** Rex Ma, MD, Gautam Malhotra, MD, presented at the AAP 2013

#### **ACSM - 2013**

The Effect of Stretching on Running Speed: A Review of the Literature:, **Sara Z. Salim**, **MD**, Nigel Shenoy, MD, presented at the 60<sup>th</sup> Annual Meeting and 4<sup>th</sup> World Congress on Exercise and Medicine (ACSM)

#### AOCPM&R- 2013

Ultrasound and Neurostimulator Guidance for Intercostal Nerve Block: Technique in a Case of a Cancer Survivor with Chest-wall Pain after Extensive Thoracic Cage Surgery, **Shounuck Patel, DO**; Meeta V. Joshi, MD

#### **ISPRM - 2013**

Medial Calcaneal Neuropathy After AchillesTendon Surgery: Two Case Reports, **Jiaxin Tran, MD**, Mooyeon Oh-Park, MD, presented at the ISPRM conference, Beijing China, 2013

#### ISIS- 2013

Congrats to **Susan Distasio**, **DO**, Musculoskeletal Fellow in the department of PM&R for her platform presentation presented at the 21<sup>st</sup> Annual Scientific Meeting (ASM0 as a podium presentation in New York City, Vascular Penetration Rate in Kambin's Triangle, Susan DiStasio, Boqing Chen, Todd Stitik, Lawrence Lai, and Patrick Fove



#### **Faculty Appointments**

Since the last publication of the *Alumni Pulse*, the following faculty appointments have been approved. Congrats to:

Megan Mitchell (Damcott), PhD - to Instructor Lawanda Ford-Johnson, PhD - to Instructor Kristen Maul, PhD - to Instructor Olga Nikelsphur, PhD - to Instructor John O'Neil, MD - to Professor Jelena Stojanovic-Radic, PhD - to Instructor Starla Weaver, PhD - to Instructor Guang Yue, MD - to Professor

Although Dr. DeLisa retired from his position as Chair in June of 2012, he has since been appointed to the title of Professor Emeritus and is the only Emeritus Professor in the Department of PM&R at NJMS.



#### **Faculty Promotions**

We congratulate the following faculty on their recent promotions in academic titles, effective July 1, 2013:

Patrick Foye, MD to Professor
Gail Forrest, PhD to Associate Professor
Trevor Dyson-Hudson, PhD to Associate Professor
Gautam Malhotra, MD to Clinical Associate Professor
Glenn Wylie, PhD to Associate Professor

#### Faculty & Trainee Awards/Honors

Each year at our graduation dinner, several awards are presented to recognize outstanding accomplishment on the part of our faculty and trainees. At this year's dinner on May 29, 2013 the following awards were presented:

#### **Award**

# Annual Teaching Award Alumni Award Mentor Award Resident-as-Teacher Award Resident Research Award Areti Award Fellow Research Award National Speaker Award Resident Teaching Resident Award

#### 2013 Awardee

Mooyeon Oh-Park, MD Christopher Visco, MD Vipul Shah, MD Shounuck I. Patel, DO Jong Kim, MD Jiaxin Tran, MD Katherine Bentley, MD Michael B. Stubblefield, MD Melissa Fleming, MD



Additionally, on May 9, 2013, Dr. Patrick Foye, PM&R Clerkship Director, presented the PM&R Medical Student Award to Dena Abdelshahed, a fourth-year medical student.



#### **Faculty Publications**

#### **PUBLICATIONS**

Amato, M.P., Langdon, D., Montalban, X., Benedict, R.H.B., **DeLuca**, **J.**, Krupp, L.B., Thompson, A.J. & Comi, G. (2013). Treatment of cognitive impairment in multiple sclerosis: position paper. Journal of Neurology, 260(6), 1452-1468.

**Botticello, AL**, Chen, Y., **Tulsky, D**. Geographic variation in participation for physically disabled adults: The contribution of area economic factors to employment after spinal cord injury. Social Science & Medicine, 2012, 75 (8): 1505-1513.

Brandler T, Wang C, **Oh-Park M**, Holtzer R, Verghese J; Walking while talking: Investigation of alternate forms. Gait and Posture, 35(1):164-6, 2012.

Carlozzi, N.E., Fyffe, D., Morin, K.G., Byrne, R., Tulsky, D.S., Victorson, D., Lai, J.S. & Wecht, J.M. (2013). The Impact of Blood Pressure Dysregulation on Health-Related Quality of Life in Persons with Spinal Cord Injury: A Conceptual Model. Archives of Physical Medicine and Rehabilitation, doi: 10.1016/j.apmr.2013.02.024. [Epub ahead of print].

- Chen, P & Botticello, AL. Spouses of Stroke Survivors are at Risk of Poor Cognitive Functioning: A Cross-sectional Population-Based Study. Topics in Stroke Rehabilitation, 2013, 20(4): 369-378.
- **Chen, P.,** Goedert, K.M., Shah, P., Foundas, A.L., & **Barrett, A.M.** (2013). Integrity of medial temporal structures may predict better improvement of spatial neglect with prism adaptation treatment. Brain Imaging and Behavior E-pub ahead of print. PMID: 22941243 [PubMed].
- **Chen, P., McKenna, C.**, Kutlik, A.M., & Frisina, P.G. (2013). Interdisciplinary communication in inpatient rehabilitation facility: Evidence of under-documentation of spatial neglect after stroke. Disability and Rehabilitation, 35(12), 1033-1038.
- Cirnigliaro, C.M., LaFountaine, M., Emmons, R., **Kirshblum, S.C.**, Asselin, P., Spungen, A.M., & Bauman, W.A. (2013). Prediction of limb lean tissue mass from bioimpedance spectroscopy in persons with chronic spinal cord injury. Journal of Spinal Cord Medicine, Epub DOI: 10.1179/2045772313Y.0000000108.
- **Das, A., Botticello, A.L. & Wylie, G.** (2013). Neurological disability: a hidden epidemic for india. Neurology, (79)12: 2146-2147.
- DeJong, G., Tian, W., Hsieh, C., Junn, C., Karam, C., Ballard, P.H., Smout, R.J., Horn, S.D., **Zanca, J.M.**, Heinemann, A.W., Hammond, F.M., & Backus, D. (2013). Rehospitalization in the First Year of Traumatic Spinal Cord Injury After Discharge from Medical Rehabilitation. Archives of Physical Medicine and Rehabilitation, 94(4, Suppl 2), S87-97.
- **Deluca, J., Leavitt, V.M., Chiaravalloti, N., Wylie, G.** (2013). Memory impairment in multiple sclerosis is due to a core deficit in initial learning. Journal of Neurology. [Epub ahead of print]. PMID: 23832311.
- Dijkers, M.P., & **Zanca, J.M**. (2013) Factors complicating treatment sessions in spinal cord injury rehabilitation: nature, frequency and consequences. Archives of Physical Medicine and Rehabilitation, 94(4 Suppl 2), S115-24.
- **Dobryakova, E., DeLuca, J., Genova, H. M., Wylie, G.** (2013). Neural correlates of cognitive fatigue: Cortico-Striatal Circuitry and Effort-Reward Imbalance. [Review]. Journal of International Neuropsychological Society, 19, 1-5.
- Feinstein, A., **DeLuca, J.,** Baune, B.T., Filippi, M., & Lassman, H. (2013). Cognitive and neuropsychiatric disease manifestations in MS. Multiple Sclerosis and Related Disorders, 2, 4-12.
- Frisina, P.G., Kutlik, A.M., & **Barrett, A.M**. (2013). Left brain injury associated with more hospital-acquired infections during inpatient rehabilitation. Archives of Physical Medicine and Rehabilitation, 94(3), 516-521.

- **Genova, H.M., DeLuca, J., Chiaravalloti, N. & Wylie, G.** (in press). The Relationship between Executive Functioning, Processing Speed and White Matter Integrity in Multiple Sclerosis. Journal of Clinical and Experimental Neuropsychology, 35(6), 631-641. doi: 10.1080/13803395.2013.806649
- Goedert, K.M, Chen, P., Botticello, A.L., Masmela, J, Adler, U., Barrett, A.M. Psychometric Evaluation of Neglect Assessment in an Acute Post-Stroke Sample Reveals Novel Predictor of Functional Outcomes. Archives of Physical Medicine and Rehabilitation. 2012, 93(1).
- Hung, C., **Barrett, A.M., & Oh-Park, M.** The severity of spatial neglect predicts life-space among right hemipsheric stroke survivors, Association of Academic Physiatrist, American Journal of Physical Medicine & Rehabilitation. 92(3):a77, March 2013.
- **Kirshblum, S.** (2013). The Academy of SCI Professionals: multidisciplinary or interdisciplinary? Journal of Spinal Cord Medicine, 36(1), 3.
- LaFountaine, M.F., Wecht, J.M., Cirnigliaro, C.M., **Kirshblum, S.C.**, Spungen, A.M., & Bauman, W.A. (2013). Testosterone replacement therapy improves QTaVI in hypogonadal men with spinal cord injury. Neuroendocrinology, 97(4): 341-346.
- Lai L.P., & Oh-Park, M (2013). Entrapment of the lateral plantar nerve distal to the tarsal tunnel. International Journal of Physical Medicine & Rehabilitation, 1(3), 119.
- Lee S, Kim S, **Oh-Park M**; Ganglion cyst of radiocapitellar joint mimicking lateral epicondylitis: Role of ultrasonography: visual vignette. American Journal of Physical Medicine and Rehabilitation. 91(4):
- **McKenna, C.**, Thakur, U., Marcus, B., & **Barrett, A.M.** (2013). Assessing limb apraxia in traumatic brain injury and spinal cord injury. Frontiers in Bioscience Scholar, 5, 732-742.
- **Nolan, K. J.**, Yarossi, M., & Ramanujam, A. (2013). Measuring Ambulation in Adults with Central Neurologic Disorders. Physical Medicine and Rehabilitation Clinics, 24(2).
- **Oh-Park M.**, Holtzer R, Mahoney J, Wang C, Raghavan P, Verghese J; Motor dual-task effect on gait and task of upper limbs in older adults under specific task prioritization: pilot study. Aging Clinical Experimental Research, 25(1):99-106;2013.
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**Strober, L.B., Chiaravalloti, N.,** Moore, N.B., & **DeLuca, J.** (In Press). Unemployment in multiple sclerosis (MS): Utility of the MS functional composite and cognitive testing. *Multiple Sclerosis Journal*.

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## GRANTS & MONETARY AWARDS



#### Kessler Foundation Receives Record \$10.8 Million in Grants

The Kessler Foundation received external research awards of \$10.8 million in 2012 to fund discoveries aimed at improving quality of life for people with disabilities. Members of New Jersey Medical School's Departments of Physical Medicine and Rehabilitation (PM&R) and Neurosciences are part of the Kessler team making these discoveries. **John DeLuca, PhD**, professor in the Departments of PM&R and Neurosciences at New Jersey Medical School, is Kessler Foundation's vice president for research and training.

The amount represents the highest-ever annual total in Kessler Foundation history, more than doubling the \$4.05 million generated in 2011. Highlights include: A \$2.2 million, five-year grant through the U.S. Department of Education/National Institute on Disability and Rehabilitation Research (NIDRR) to fund rehabilitation services for people with traumatic brain injury; two three-year grants (\$660,000) from the NJ Commission on Brain Injury Research to study ways to improve cognitive function after

traumatic brain injury; a \$596,000, three-year NIDRR grant to study optimal treatment for hidden disabilities in survivors of right-sided stroke; and a \$554,000, five-year NIH grant to study the role personality, coping and health-related behaviors play in unemployment of individuals with multiple sclerosis.

**P.I.:** Bach JR. Grant for research and clinical programs. Bernard F. and Alva B. Gimbel Foundation, \$9,500, 2/11/13-present.

#### P.I.: Pilkar, R.

Title: Changes in Postural Control Strategies with the use

of FES in Stroke Population

Sponsor: NIH

Prime Organization: Kessler Foundation

Awarded: \$153,000

Inclusive dates: 04/01/13 - 03/31/15

#### P.I.: Botticello, A.L.

Eunice Kennedy Shriver National Institute Of Child Health & Human Development (NIH-NICHD). # 4R00HD065957-03. *Community Effects on Long-Term Rehabilitation Outcomes in SCI.*. (10/12 – 09/15). \$738.216.

This project investigates geographic variation and the role of community as predictors of long-term health, functioning, and participation following rehabilitation for spinal cord injury.

#### P.I.: Barrett, A.M.

Title: A Randomized, Double-Blinded, Placebo-Controlled, Multicenter Pivotal Study of the SMARTPATCH peripheral Nerve Stimulation (PNS) System for the Treatment of Chronic Post-Stroke

Shoulder Pain

Sponsor: SPR Therapeutics

Prime Organization: Kessler Foundation

Awarded: \$131,506

Inclusive Dates: 03/28/13 - end of study

#### PI: Barrett, A.M.

#### Co-Investigator: Oh-Park, M.

Impact of Prism Adaptation Therapy for Spatial Neglect

on Home and Community Outcomes Type: HD13312020 Department of

Education/OSERS/National Institute for Disability and

Rehabilitation Research (NIDRR) Inclusive Date: 10/01/2012-09/30/2015

#### P.I.: Kirshblum, S.

Title: Medtronic Neuromodulation ITB Therapy

Fellowship - 2013-2014 Sponsor: Medtronic

Prime Organization: Kessler Institute for Rehabilitation

Awarded: \$25,000

Inclusive Dates: 07/01/13 - 06/30/14

#### P.I.: Chiaravalloti, N.

Title: Impact of Age on Cardiovascular, Cerebrovascular

and Cognitive Health in Spinal Cord Injury

Sponsor: NJCSCR

Prime Organization: Kessler Foundation

Awarded: \$596,152

Inclusive Dates: 06/15/13 - 05/31/16

#### P.I.: Forrest. G.

Title: Non-Ambulatory SCI Walk Using a Robotic

Exoskeleton: Effect on Bone and Muscle

Sponsor: NJCSCR

Prime Organization: Kessler Foundation

Awarded: \$574,976

Inclusive Dates: 06/15/13 - 05/31/16

#### P.I.: Odle, B.

Title: Quantitative Measure of Force During Electrical Stimulation: An Exploratory Study on the Development,

Reliability and Sensitivity

Sponsor: NJSCR

Prime Organization: Kessler Foundation

Awarded: \$50,000

Inclusive Dates: 06/15/13 - 05/31/14

#### P.I.: Leavitt, V.

Title: A Randomized Controlled Trial of Aerobic Exercise

to Improve Memory in Sponsor: NJCBIR Prime Organization: Kessler Foundation

Awarded: \$175,296

Inclusive Dates: 06/15/13 - 05/31/15

#### P.I.: Lengenfelder, J.

Title: Neural Substrates of Facial Emotion Processing in

Individuals with TBI Sponsor: NJCBIR

Prime Organization: Kessler Foundation

Awarded: \$397,941

Inclusive Dates: 06/15/13 - 05/31/16

#### P.I.: Barrett, A.M.

Title: Personalized Treatment for Reading Impairment in

**Aphasia** 

Sponsor: Flory Charitable Trust

Prime Organization: Kessler Foundation

Awarded: \$10,000

Inclusive Dates: 10/1/13 - 09/30/15

#### P.I.: Kirshblum, S.

Title: SCIM Fellowship 2013-2014Sponsor: NIDRR Prime Organization: Kessler Institute for Rehabilitation

Awarded: \$91,920

Inclusive Dates: 07/01/13 - 06/30/14

National Institute on Disability and Rehabilitation Research (NIDRR), H133G090078 Improving New Learning and Memory in TBI: Applying fMRI to Measure Outcome. **Nancy Chiaravalloti, Ph.D,** PI. Role: Co-Investigator. 10/1/09 - 9/30/13.\$591,030, total costs.

#### P.I.: Findley, T.W.

Title: Patient Centered care Personal Health Inventory -

Evaluation and Validation. VA PCC.

Awarded: \$100,000 Dates: 2012-2013

The general purpose of this project is to evaluate the Personal Health Inventory (PHI) as an instrument to enhance and improve person-centered care and veteran health self-care in a local (New Jersey) VA Medical Center, through both quantitative analysis of responses from the PHI and comparison of PHI to CPRS (the clinical medical record) as well as interviews and listening groups with veterans and clinical staff.

#### P.I.: Findley, T.W.

Title: Integrative Care for Prostate Cancer (Private donation to Veterans Biomedical Research Institute)

Awarded: \$15,000 Dates: 2012-2013

National Multiple Sclerosis Society. MB 0024. Mentor-Based Postdoctoral Fellowship Program \$382,865. 2012-2017.Principal Investigator National Institute on Disability and Rehabilitation Research. Northern New Jersey Traumatic Brain Injury System (NNJTBIS) Co PI, with **Nancy Chiaravalloti, Ph.D.** October 1, 2012 – September 30 2017. \$2,237,500.

National Multiple Sclerosis Society, RG 4810A1/1 Resting state functional connectivity as a predictor of memory decline in MS Role: Co-investigator Primary investigator. **Victoria Leavitt, Ph.D.,** Pl. 2013-2018. \$619,618.43 total costs.

National Multiple Sclerosis Society, PP1952 Stylistic memory enhancement Role: Co-investigator. Primary Investigator: **Nancy Chiaravalloti, Ph.D.** 2013-2014. \$43,494 total costs.

New Jersey Commission on Brain Injury Research The Longitudinal Examination of the Relationship between White Matter Pathology and Cognitive Impairment in TBI using Diffusion Tensor Imaging. **Helen Genova, Ph.D.,** PI Role: Co-investigator. 6/1/2012 – 5/31/2015. \$462,103, total costs.

01A1. Unemployment in Multiple Sclerosis (MS): The Role Of Personality, Coping and Health-related behaviors. **Lauren Strober, Ph.D,** Pl. Role: Primary Mentor. 4/1/2012 - 3/31/2017. \$579,689 total costs.

Foundation of the Consortium of MS Centers, MS Clinician-Scientist Award Consortium of Multiple Sclerosis Centers **Lauren Strober, Ph.D**, Pl. Role: co-investigator. 2012 -2017. \$155,000 total costs. Not accepted due to receipt of K23 award.

National Multiple Sclerosis Society, RG3935A2/2. Improving cognitive rehabilitation strategies for learning and memory in MS Co-investigator. **Yael Goverover**, **Ph.D.**, Pl. 2008-2012. \$369,694 total costs.

National Institute on Disability and Rehabilitation Research (NIDRR), H133A070037. Major site specific project in the TBI Model Systems Grant. Improving Learning in TBI: A Randomized Clinical Trial. **Nancy Chiaravalloti, Ph.D**, PI.Role: Co-Investigator. 10/1/07 - 9/30/12. \$611,307 total direct costs.

National Institute for Disability and Rehabilitation Research, Spinal Cord Injury Model System Centers (Pls: **Dyson-Hudson & Kirshblum**; Co-Pl: **Botticello**, **AL**), H133N110022, 10/01/11 – 09/30/16, \$2,284,996.

HealthPoint Ltd. #011-101-09-043 Comparison of HP011-101 to Standard of Care in the Management of Stage I-II Pressure Ulcers in Subjects with Traumatic Spinal Cord Injury. \$60,575. (2012-2014).

Craig H. Neilsen Foundation Grant. Educational Grant for Spinal Cord Injury Medicine Fellowship. (\$75,000) (2012-13).

Medtronics Fellowship Educational Grant \$15,000 (2012-2013).

Craig H. Neilsen Foundation Grant. Educational Grant for Spinal Cord Injury Medicine Fellowship. (\$100,000) (2013-14).

Healthcare Foundation of New Jersey. Prism therapy for stroke-related functional vision problems. (Co-PI: **Oh-Park, M.**) 09/28/2012-09/27/2013



Thanks to the following individuals for their generous contributions to the *PM&R Residency Training Program Fund*. These contributions go a long way in keeping our program going strong. Please consider making a donation.

Boqing Chen, M.D., Ph.D.
Center for Advanced Pain Management & Rehabilitation
Metuchen, New Jersey



And also to



Special thanks for their generous contribution to this year's graduation



#### **FACULTY & ALUMNI NEWS**

Golden Apple Nominations - A total of 9 nominations were awarded to NJMS-PMR Faculty and Housestaff which is a great achievement. Actually being awarded the Golden Apple Award is very uncommon within our department (the awards are decided by democratic student vote, and for a department such as ours with a short rotation, there is no single PM&R resident/faculty that the majority of the students would have rotated with, unlike the structure within other departments). Nevertheless, the nominations are an honor that reflects favorably upon our department overall. Congratulations and many thanks to the following nominees for their time, efforts and contributions to the teaching of our medical students:

#### PM&R Faculty:

Drs. JenFu Cheng, Patrick Foye, Susan Garstang, Gerard Malanga and Todd Stitik

#### PM&R Housestaff:

Drs. Christine Greiss, Victoria Lin, Leroy Lindsay, and Justin Waltrous



John R. Bach, MD, named in America's Top Doctors, Castle Connelly Guide, 2001-13



JenFu Cheng, MD, was awarded the Case Foundation Finding Fearless Changemaker Award in 2012 for his work with the non-profit that he founded, Peak Potential (www.peakclimb.org). The award came with a

\$10,000 grant that is being used this year to expand Peak Potential's program to include an outdoor climbing program. The Case Foundation's website describes the Finding Fearless Changemaker Award: "Did you make a big bet that paid off? Did you experiment over and over again before coming up with the right one? Did you learn from failure, succeed through uncommon alliances and partnerships, or let urgency conquer your fears? Yes? Then you are probably a Fearless Changemaker and didn't even know it! We are looking for stories of the unsung, unnoticed, and uncelebrated individuals in communities across the country that have a successful track record of tackling social challenges because their approach is bold, uncommon, experimental, unconventional, and fearless."



Nancy Chiaravalloti, PhD, Associate Professor in PM&R, was honored at the Hudson County's 2013 Women's History Month Ceremony on March 19. This year's theme, "Women Inspiring Innovation through Imagination,' honors women

in Hudson County who have made significant contributions in the fields of science, technology, engineering and mathematics (STEM).



John DeLuca, PhD, Vice President for Research at Kessler Foundation Research Center and Professor in the Departments of PM&R and Neurology and Neurosciences at the

Rutgers New Jersey Medical School is the recipient of the American Psychological Association's 2012 Roger G. Barker Distinguished Research Contribution Award. This award recognizes an individual who has made an outstanding lifelong contribution to rehabilitation psychology.

**Dr. DeLuca,** was named amongst the honorees at the Musical Moments for MS held on December at the NJ Performing Arts Center in Newark with singer/actress Olivia Newton-John.

**Dr. DeLuca** delivered the keynote address at the inaugural meeting of the International Progressive Multiple Sclerosis Collaborative in Milan, Italy on February 8. Dr. DeLuca's lecture was titled, "Cognitive Rehabilitation and Progressive MS." James J. Peters Lectureship Award, Academy of Spinal Cord Injury, 2012



*Gail Forrest, PhD,* Associate Professor in PM&R and Assistant Director of the Human Performance & Engineering Lab at Kessler Foundation is featured in the Spring/Summer

edition of the *UMDNJ* Magazine in an article titled, "First Steps with the EKSO Robot" Dr. Forrest is the principal investigator of the study focusing on the effect of walking and standing on the health issues of those who are paralyzed. The devise's manufacturer Ekso Bionics initially approached Dr. Kirshblum, as they were establishing a consortium of organizations to study the practical applications of the device. Kessler is part of a core group of 10 centers to partner with the company to develop protocols and examine the effects of waking with Ekso on the health of people with spinal cord injuries. Says Dr. Forrest, "The psychological benefits to paraplegics of standing up and walking are incalculable. The patients in the study were thrilled to be able to stand up and take steps



**Jelena Stojanovic-Radic, PhD**, recent postdoctoral fellow graduate in Neuropsychology and neuroscience research at Kessler Foundation and an Instructor in the department

of PM&R received the Research Award for her platform presentation, "Neuroimaging and Cognition Using Nearest Infrared Spectroscopy in Multiple Sclerosis at the 2012 Annual Meeting of the Consortium of Multiple Sclerosis (MS) Centers held in San Diego. The presentation was coauthored by three other neuroscientists from KFRC; Glenn Wylie, DPhil; Gerard Voelbel, PhD (a former graduate of the PD program); and John DeLuca, PhD.

### Nuptíal





Amanda Farag & Chuck Poole entered into holy matrimony on April 20, 2013. The ceremony was held at Long Hill Chapel in Chatham, NJ and the reception was held at the Rockleigh Country Club. Tears of joy were everywhere when Amanda's

father who is a wheelchair user due to progressive MS, who after months of physical therapy and a new KAFO brace, was able to stand and walk her down the aisle. The day was a 'dream come true' for the bride.

Christine Greiss & Mina Abadeer were blissfully wed on May 27,2013 at the Venetian in Garfield, NJ. It was a fairly large wedding with approximately 400 guests with most of the R2 and R3 classes in attendance.





Sara Salim & Adeel Safdar pledged their eternal love on December 23, 2012 in a ceremony fit for the 'queen and her king'.

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#### **Upcoming NJMS/PM&R Events**

AAPM&R 75<sup>th</sup> Annual Conference (National Harbor, MD): October 3-6

**AAP Conference** 

(Nashville, TN): February 26—March 1, 2014

AAP Abstract Deadline: September 9

(<a href="http://www.physiatry.org/?page=abstracts">http://www.physiatry.org/?page=abstracts</a>)

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#### Philosophical Sayings/Quotes:

"Man had always assumed that he was more intelligent than dolphins because he had achieved so much - the wheel, the dolphins

had ever done was muck about in the water having a good time. But, conversely, the dolphins had always believed that they were far more intelligent than man - for precisely the same reasons."

~ Douglas Adams

"Things turn out best for the people who make the best of the way things turn out." ~ <u>Craig Lancaster</u>

"Focus on making yourself better, not on thinking that you are better." ~ *Bohdi Sanders* 



# SAY 'CHEESE'



Drs. Foye, Stubblefield (Graduation Speaker) & Gans



Dena Abdelshahed, NJMS Class of 2013, received the PM&R Medical Student Award, presented by Dr. Foye



Dr. Foye presented Dr. Chris Visco the Alumni Award



July 2013: Cranes removed UMDNJ signage & replaced them with the Rutgers branding



Resident Research Night at JFK -Johnson Rehabilitation Institute



Drs. Patel: Pankaj, Ravi & Shounuck, at the Dept. Holiday Party in January

[Hey, this is not Jong Kim, it's David Seto]



Jong Kim- where are you??? –
[David, we knew you could not leave us for good]



2013 Graduating Postdocs Kristen Maul, Megan Mitchell, Abhijit Das, Jelena Stojanovic-Radic & Lawanda Ford-Johnson



Mooyeon Oh-Park, MD, of the Kessler Foundation, Recipient of the 2013 Teaching Award



Dr. Foye with graduating Musculoskeletal Fellows, Justin Mendoza, Michael Golden, Susan Distasio & Christine Roque-Dang



at the Malhotra home

[Thank you Dr. & Mrs. Malhotra for hosting a fantastic evening]



PM&R Student Interest Group at NJMS... [what a great turn-out!]



Dr. Shah is congratulated by Dr. Foye on receiving the Mentor Award





# And presenting....the future Physiatrists of America ~ our PMR graduating class of 2013





(L-R) S Patel, J John, J Jani, I Wendel, M Fleming, J Kim, C Greiss, S Salim, J Tran



& cut...okay folks...that's a rap.....

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Assistant at <a href="mailto:muhammade@njms.rutgers.edu">muhammade@njms.rutgers.edu</a>

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