



SUNY Downstate ORTHOPAEDICS

Alumni Newsletter
AAOS 2017

Annual Update 2017

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Chairman's Message

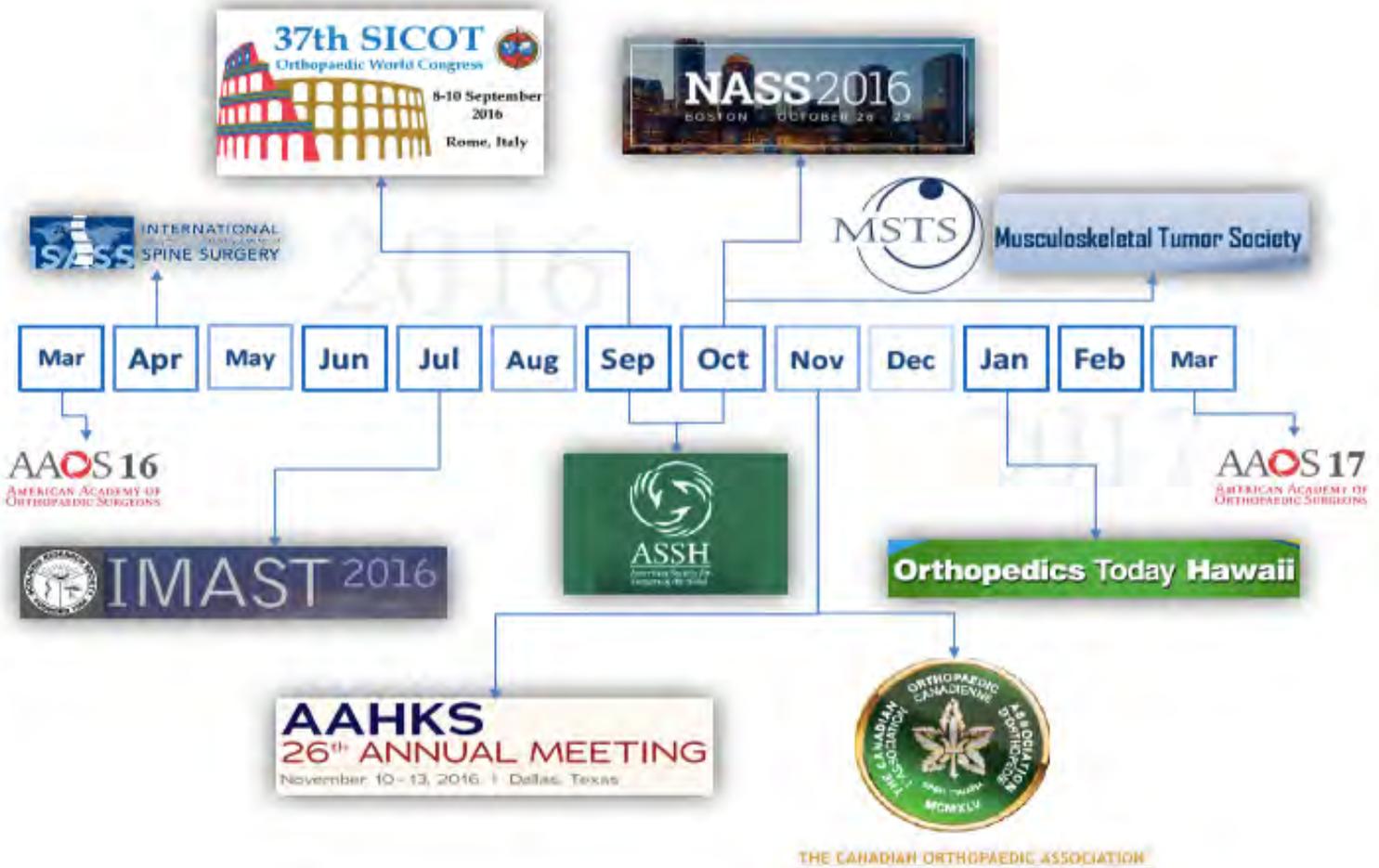


It is my pleasure to welcome everyone to our Annual Alumni Academy Reception. This newsletter became a platform to communicate with graduates of the Downstate Orthopaedics residency program, a group that exceeds 200 fine surgeons. Our objective is for you to stay involved with the academic activities of the program as we grow and continue our efforts to achieve excellence in orthopaedic care. Our graduates of 2017 have all matched into their top choices for fellowships and I would like to take this opportunity to congratulate them. It is also my pleasure to announce the launch of Downstate Orthopaedics Non-Operative Sports Medicine Fellowship. Our department continues to grow as we have recently added new faculty to the Hand and Orthopaedic Traumatology services. Our research campaign continues to succeed as we have 15 studies accepted to The Academy this year as podiums, posters and scientific exhibit. One of our posters (P226) has been selected by the AAOS Central Program Committee as the Best Poster in the Hand and Wrist classification at the 2017 AAOS Annual Meeting. This is the second time in the past three years our research has won the best poster award (Dr. Maheshwari, Best Tumor Poster, AAOS 2015). Thank you for joining us again this year and welcome to the alumni reception.

Program Director



I would like to welcome everyone to the annual alumni reception. This year, the program has a strong presence the academy with a growing body of research both in quality and quantity. Our new focus was to expand collaborative research with local, national and international institutions. In Brooklyn, the department continues to work closely with Downstate College of Medicine to educate and support medical students who are interested in orthopaedic surgery. This year alone, The Downstate Orthopaedic Research Laboratory accommodated 25+ Downstate Medical students and 15+ additional MDs and college students. In a collaborative work with NYU Hospital for Joint Diseases and Hospital for Special Surgery, Downstate Orthopaedic Research fellow Dr. Bassel Diebo was a major contributor to the Medtronic Grant awarded by the Cervical Spine Research Society (CSRS) for the project entitled **“Does Psychological Distress Impact the Clinical Outcomes in Patients Undergoing Cervical Spine Surgery, and Should We Intervene? A Prospective, Blind and Placebo-Controlled Trial”**. Internationally, we continue to work closely with engineers from Laboratory of Biomechanics at University of Saint-Joseph, Lebanon to execute our ongoing research efforts on Motion Analysis before and after scoliosis surgery supported by SRS grant. Finally, it is my pleasure to share with you that between the two academies (AAOS 2016 and AAOS 2017), our research was presented at more than 10 national and international meetings, with the number of podiums and posters presentations exceeding 100. The following is where most of Downstate research was presented in the past academic year:



Downstate ORTHOPAEDICS RESEARCH continues to reach new milestone year after year. Our research was presented at more than 10 scientific conferences this year with an unprecedented number of podiums and posters presentations. Every resident and attending has significantly contributed to this success. However, *Newsletter 2017* features **Dr. Qais Naziri, MD, MBA** (Left: PGY4) and **Dr. Aditya Maheshwari** (Right: Director, Orthopaedic Oncology and Adult Reconstructive Services) for their substantial contributions at numerous meetings.



Featured Research: **Best Poster in AAOS 2017** (Hand and Wrist Category)

A Radiographic Analysis of Closed Reduced Distal Radius Fractures at the Time of Union

Mulchandani, Trouw, Eldib, Ganning, Chatterjee, Kapadia, Illical, Urban

Poster No. P226

Supervised by **Dr. Urban** (Chairman) and **Dr. Illical** (Director, Orthopaedic Trauma), our residents led by **Dr. Mulchandani (PGY5)** and **Dr. Trouw (PGY5)** were able to achieve the **Award for Best Poster in the Hand and Wrist Category**.

The novel study revealed that for close reduced distal radius fractures, radiographic analysis at the time of union showed regression toward initial injury. These findings call into question the radiographic outcomes at the immediate, post-reduction phase of non-operative treatment.



Dr. Urban



Dr. Illical



From left to right:
Drs. Mulchandani (PGY5), Trouw (PGY5), Kapadia (PGY2) and Chatterjee (PGY1)

Orthopaedic Graduates: 2017



Robert Borzio, MD
Joint Recon Fellowship
 NYU Hospital for Joint Diseases, NY



Sergei Pushilin, MD
Trauma Fellowship
 University of Pittsburgh Medical Center, PA



Colin Copper, MD
Trauma Fellowship
 University of Kentucky Hospital, KY



Allison Spitzer, MD
Pediatrics Fellowship
 Scottish Rite Hospital for Children, GA



Neil Mulchandani, MD
Sports Medicine Fellowship
 Lenox Hill Hospital, NY



Arie Trouw, MD
Upper Extremity Fellowship
 UConn Health, CT



The orthopaedic program had another fantastic fellowship match with all the chiefs matching at their top choice at top tier fellowship programs.

Welcome to a New Faculty Member



Niladri Basu, MD

Dr. Niladri Basu joined our hospital in October of 2016. He was born in Manhattan and raised in Queens where he attended Stuyvesant High School. He continued his education at Stony Brook University where he studied Anthropology, Biology and Biomedical Engineering. After college, Niladri Basu worked for several years as a project manager and preformulation scientist. He decided to pursue a career in medicine, and graduated medical school from SUNY Upstate where he was elected into Alpha Omega Alpha Honor Society. Niladri then completed his orthopaedic surgery residency at SUNY Downstate Medical Center and performed the majority of training at Kings County Hospital. He then went on to complete a trauma fellowship at Virginia Commonwealth University, and was selected for an AO/ASIF Trauma fellowship which he completed in November of 2016. He is pleased to return to Kings County Hospital where he is dedicated to the care of complex polytrauma patients. Outside of work, Niladri has pursued his hobbies of auto mechanics and weightlifting.

Brooklyn Orthopaedic Society Highlights

At the beginning of this academic year, Dr. Carl Paulino was named as the president of Brooklyn Orthopaedic Society (BOS), Dr. Emmanuel Illical is the Secretary and Dr. Bassel Diebo was assigned as Liaison of the society. BOS has four traditional meetings each year and two of them already took places in December and February. The following are the dates and distinguished speakers for this extremely successful BOS' year:



December 1st, 2016
Frank J. Schwab, MD
 Chief of Spine Service
 Hospital for Special Surgery, New York



February 16th, 2017
Pablo Castaneda, MD
 Chief of Pediatric Orthopaedics
 NYU Hospital for Joints Diseases,
 New York



April 27th, 2017
Mark Myerson, MD
 Former Director of Foot and Ankle
 Service
 Mercy Medical Center, Maryland



July, 2017 Tentative commitment
Michael A. Mont, MD
 Chairman of Orthopaedics
 Cleveland Clinic, Cleveland

Residents' Didactics: Labs, Academic Lectures, and Journal Clubs



Spine Cadaver Lab

Dr. Carl Paulino is teaching the residents most recent spinal deformity techniques.



Dissection Cadaver Lab

Supervised by a Chief Resident: Dr. Pancholi (PGY3) is preparing the surgical approach for the academics.



Wound Closure Lab

Drs. Pivec (PGY3), Abraham (PGY3), Pancholi (PGY3), Bloom (PGY2), Hayden (PGY2) and Yang (PGY2).

Special thanks to:



> **Dr. Scott Barbash** and **Dr. Danielle Casagrande** for this year's academic curriculum with their vision and organization.
 > **Dr. Stanley Gordon** for organizing and leading the *Journal Club* by discussing current techniques and future advancements.
 > **Faculty, alumni, and staff** from various Departments for their contribution. Interested in coming back to give a lecture?
 Email: Kino.Williams@downstate.edu or Scott.Barbash@Downstate.edu



Human Performance Lab at Downstate ORTHOPAEDICS

Downstate ORTHOPAEDICS house several laboratories vital to advancing musculoskeletal research. The Human Performance Laboratory, also known as **The Gait Lab**, is directed by **Dr. Ellen Godwin** with substantial assistance of **Westley Hayes, MS**. The gait lab allows for three dimensional force and motion analysis of patients with different neuromuscular or musculoskeletal disorders. Currently, several ongoing clinical studies utilize the gait lab, including one that evaluates the impact of scoliosis surgery on patients' walking patterns; directed by **Dr. Carl Paulino**, Chief of Spine Service.

In the media:

Orthopedic This Week (OTW), the most widely read publication in orthopaedic industry, recently featured The Gait Lab and ongoing projects at Downstate Orthopaedics. *OTW* interviewed **Dr. Bassel Diebo**, our research fellow who briefed the Journal on the concepts and evidence based data coming out of **The Gait Lab** research.

In AAOS 2017:

The Gait Lab continues to produce high quality research that has been presented at numerous scientific meeting. This year, the gait study on AIS patients is a **podium** presentation and a **scientific exhibit** at AAOS 2017. They will be presented by **Drs. Diebo**, and **Robert Pivec (PGY3)**, respectively.

Winner of the MORE Award for Journalistic Excellence in Orthopedics



RRT Publications Orthopedic Decisions Start Here

Beyond The Radiograph: Improved Scoliosis Treatment

If anyone is NOT static, it's children. So why rely on static technology to guide treatment decisions for their medical care? That was the reason for collaboration between several of the researchers at the Hospital for Special Surgery (HSS) and the State University of New York (SUNY) Downstate Medical Center. The team set out to get "beyond the radiograph" when it comes to caring for young scoliosis patients. The team, led by spine surgeons Dr. Carl Paulino and Dr. Ashish Patel, and on their behalf, Bassel Diebo, M.D, told *OTW*, "For decades, physicians have leaned on X-rays to plan surgical treatments and assess outcomes for their scoliosis patients. We have reached the limit of the information a two-dimensional static radiograph can provide us. We now want to understand how spinal deformities affect patients dynamically. This tool has already been in practice when planning and treating patients with cerebral palsy. Life is composed of dynamic events, all in three dimensions, and so doctors should be able to plan and evaluate their treatment outcomes based on dynamic requirements."

"We conducted our dynamic testing using the gait analysis lab at SUNY Downstate. We place dozens of reflective markers on our patients, as they do when making sporting video games, and then ask them to walk within a defined area monitored via high speed cameras and force plates to assess their kinetic and kinematic function. For patients that met the criteria for surgical correction for their advanced scoliosis we conducted our gait analysis both before and after their surgery. Our primary objective was to learn whether intraoperative de-rotational maneuvers that aim to correct the axial plane deformity of AIS (manifested by the twisted rib prominence) were effective at improving overall axial plane motion interestingly, we discovered that children with scoliosis have an abnormal gait pattern that is different than that of children without this condition. The children with scoliosis are limited in their thoracic/shoulder rotation...their thoracic spines are locked, and they are unable to rotate toward the side of their spinal deformity. By evaluating and correcting their preoperative axial plane dysfunction, we are working toward restoring their ability to rotate the thorax and to give these children a closer to normal axial plane motion."

"The fact is that the surgeries we are doing are falling short of the mark... we need to do a better job of getting these kids back to normal." To that end, with the collaboration with spine service at HSS led by Drs. Frank Schwab and Virginie Lafage, we are moving forward with a grant from the Scoliosis Research Society (SRS) that will enable us to determine how we can improve our surgical techniques for these children using gait analysis technology."

"One issue is that with scoliosis not only is the spine curved, but it is also twisted. Much of our focus the last few decades has been on correcting the spinal curvature and we have become very good at it. We now need to focus on the other aspects of the spinal deformity, specifically the rotational component. Gait analysis allows us to do this in an objective way. Ideally, industry will work with surgeons to develop more efficient spinal de-rotational devices. Another issue is that not every surgeon objectively assesses spinal axial rotation of every scoliosis patient; doing so would let him or her have a better understanding of their patients' deformity and thus deliver a better personalized treatment."



Dr. Paulino



Dr. Diebo



Dr. Pivec

Resident Social Events

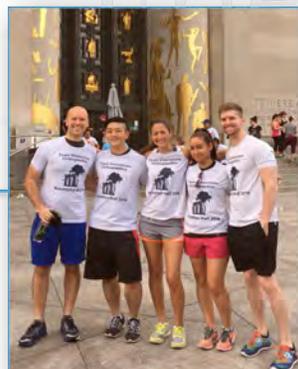
Graduation's Dinner
Drs. Walker, Spitzer,
Dekis and Keuhn



Chief's Dinner
Drs. Pushilin,
Spitzer, Borzio,
Trouw and Cooper



Brooklyn Half Marathon
Drs. Tejani, Oh, Spitzer,
Walker and Hayden



New Year's Eve
Drs. Dixit, Onuoha, and
Cooper



AAOS Podium Presentations 2017

Treatment of the Non–united Scaphoid: A Meta–analysis of the Last 20 Years

Jauregui, Seger, Shasti, Hayden, Stracher, Abzug
Paper # 110 (Tues 11:00 AM) Room 5

Does Depression Affect Outcomes Following Primary Total Knee Arthroplasty?

Bonutti, Elmallah, Issa, Kapadia, Mont, Naziri, Pierce, Pivec, Vashist
Paper # 144 (Tues 2:30PM) Room 29

The Mortality of Periprosthetic Hip Fracture

Boylan, Riesgo, Paulino, Slover, Egol, Zuckerman
Paper # 165 (Tues 3:18PM) Room 6B

Is Orthopaedic Department Teaching Status Associated with Adverse Outcomes of Primary Total Knee Arthroplasty?

Boylan, Perfetti, Naziri, Maheshwari, Paulino, Mont
Paper # 227 (Wed 8:06AM) Room 6A

Is Day of Surgery Associated with Adverse Clinical and Economic Outcomes Following Primary Total Knee Arthroplasty?

Boylan, Perfetti, Naziri, Maheshwari, Paulino, Mont
Paper # 229 (Wed 8:24AM) Room 6A

Atrial Septal Defect Increases the Risk of Postoperative Stroke Following Total Hip Arthroplasty

Perfetti, Chughtai, Boylan, Mistry, Elmallah, Naziri, Paulino, Maheshwari, Mont
Paper # 407 (Wed 4:06 PM) Room 6D

Is Day of Admission Associated with Variation in Geriatric Hip Fracture Care?

Boylan, Riesgo, Perfetti, Paulino
Paper # 544 (Thurs 10:54AM) Room 5

Is Orthopaedic Department Teaching Status Associated with Adverse Outcomes of Primary Total Hip Arthroplasty?

Perfetti, Boylan, Naziri, Elmallah, Maheshwari, Paulino, Mont
Paper # 587 (Thurs 1:36 PM) Room 6A

Have Periprosthetic Hip Infection Rates Plateaued?

Perfetti, Boylan, Naziri, Elmallah, Maheshwari, Paulino, Mont
Paper # 593 (Thurs 2:24 PM) Room 6A

Moving Beyond Radiographs: Dynamic, Three–Dimension Analysis of Gait Patterns after Adolescent Idiopathic Scoliosis Realignment Surgery

Patel, Varghese, Diebo, Pivec, Godwin, Chatterjee, Lafage, Naziri, Paulino
Paper # 684 (Thurs 5:00 PM) Room 7

Short–term Outcomes of Total Hip Arthroplasty: Osteoarthritis Versus Osteonecrosis

Perfetti, Boylan, Naziri, Chughtai, Elmallah, Paulino, Maheshwari, Mont
Paper # 905 (Fri 5:42 PM) Room 29

AAOS Spine Scientific Exhibit SE5 2017

Utilizing Motion Analysis to Assess Function Following Surgical Correction of Adolescent Idiopathic Scoliosis

Pivec R, Patel A, Godwin E, Paulino C

Motion analysis may represent a new direction for assessing outcomes of AIS surgery and may be of great value for reporting more relevant detail on functional outcomes than with radiographs alone.

AAOS Poster 2017

The Mortality of Periprosthetic Infection

Boylan, Iorio, Paulino, Riesgo, Schwarzkopf
Poster No. P056

Best Poster in the Hand and Wrist Category

A Radiographic Analysis of Closed Reduced Distal Radius Fractures at the Time of Union

Mulchandani, Trouw, Eldib, Ganning, Chatterjee, Kapadia, Illical, Urban

6 of 8 Poster No. P226

Featured - Peer Reviewed Publications 2016 - 2017

2017

Role of Ethnicity in Alignment Compensation: Propensity Matched Analysis of Differential Compensatory Mechanism Recruitment Patterns for Sagittal Malalignment in 288 ASD Patients From Japan, Korea, and United States.

Diebo BG, Gammal I, Ha Y, Yoon SH, Chang JW, Kim B, Matsumoto M, Yamato Y, Takeuchi D, Hosogane N, Yagi M, Taneichi H, Schwab F, Lafage V, Ames C; International Spine Study Group (ISSG).. Spine (Phila Pa 1976). 2017 Feb 15;42(4). PMID: 28207663

Novel Index to Quantify the Risk of Surgery in the Setting of Adult Spinal Deformity: A Study on 10,912 Patients From the Nationwide Inpatient Sample.

Diebo BG, Jalai CM, Challier V, Marascalchi BJ, Horn SR, Poorman GW, Bono OJ, Cherkalin D, Worley N, Oh J, Naziri Q, Spitzer A, Radcliff K, Patel A, Lafage V, Paulino CB, Passias PG. Clin Spine Surg. 2017 Feb 6. PMID: 28169941

Venous Thromboembolic Disease in Revision vs Primary Total Knee Arthroplasty.

Boylan MR, Perfetti DC, Kapadia BH, Delanois RE, Paulino CB, Mont MA. J Arthroplasty. 2017 Jan 11. PMID: 28209273

A biomechanical analysis of tibial ACL reconstruction with graft length mismatch.

Gaines EB, Lau D, Naziri Q, Hayes W, Jauregui JJ, Kapadia BH, Urban WP, Zikria BA. J Orthop Surg (Hong Kong). 2017 Jan 25. PMID: 28211291

2016

Prostaglandin E1 Treatment for Lumbar Spinal Canal Stenosis: Review of the Literature.

Yoshihara H. Pain Pract. 2016 Feb;16(2):245-56 PMID:

Down Syndrome Increases the Risk of Short-Term Complications After Total Hip Arthroplasty.

Boylan MR, Kapadia BH, Issa K, Perfetti DC, Maheshwari AV, Mont MA. J Arthroplasty. 2016 Feb;31(2):368-72. PMID: 26482683

Does Chronic Corticosteroid Use Increase Risks of Readmission, Thromboembolism, and Revision After THA?

Boylan MR, Perfetti DC, Elmallah RK, Krebs VE, Paulino CB, Mont MA. Clin Orthop Relat Res. 2016 Mar;474(3):744-51. PMID: 26552804

Revision Surgery for "Real" Recurrent Lumbar Disk Herniation: A Systematic Review.

Yoshihara H, Chatterjee D, Paulino CB, Errico TJ. Clin Spine Surg. 2016 Apr 3 PMID: 27002374

Strength of Syndesmosis Fixation: Two TightRope versus One TightRope with Plate-and-Screw Construct.

Tsai J, Pivec R, Jauregui JJ, Hayes WT, McLeold M, Naziri Q, Kapadia BH, Saha S, Uribe JA. J Long Term Eff Med Implants. 2016;26(2):161-165. PMID: 28094740

Does Preadmission Cutaneous Chlorhexidine Preparation Reduce Surgical Site Infections After Total Knee Arthroplasty?

Kapadia BH, Zhou PL, Jauregui JJ, Mont MA. Clin Orthop Relat Res. 2016 Jul 7. PMID: 26956247

Does Hemophilia Increase the Risk of Postoperative Blood Transfusion After Lower Extremity Total Joint Arthroplasty?

Kapadia BH, Boylan MR, Elmallah RK, Krebs VE, Paulino CB, Mont MA. J Arthroplasty. 2016 Jul 7 PMID: 26869059

Spine Injuries in Child Abuse.

Jauregui JJ, Perfetti DC, Cautela FS, Frumberg DB, Naziri Q, Paulino CB. J Pediatr Orthop. 2016 Sep 22.

Total Shoulder Arthroplasty Demographics, Incidence, and Complications-A Nationwide Inpatient Sample Database Study.

Issa K, Pierce CM, Pierce TP, Boylan MR, Zikria BA, Naziri Q, Festa A, McInerney VK, Scillia AJ. Surg Technol Int. 2016 Oct 26. PMID: 27608744

Prosthetic hip infection with Edwardsiella tarda in sickle cell beta thalassemia disease: A case report.

Frumberg DB, Epstein SE, Jauregui JJ, Pivec R, Maheshwari AV. J Clin Orthop Trauma. 2016 Oct-Dec 7.(Suppl 1):130-133. PMID: 28018092

Progression of bisphosphonate-associated impending atypical femoral fracture despite prophylactic cephalomedullary nailing: A case report and review of literature.

Maheshwari AV, Yarmis SJ, Tsai J, Jauregui JJ. J Clin Orthop Trauma. 2016 Oct-Dec;7(Suppl 1):92-98. PMID: 28018083

National trends and in-hospital outcomes in patients with rheumatoid arthritis undergoing elective atlantoaxial spinal fusion surgery.

Yoshihara H, Yoneoka D, Margalit A. Clin Exp Rheumatol. 2016 Nov-Dec PMID: 27464243

Prosthetic Dislocation and Revision After Primary Total Hip Arthroplasty in Lumbar Fusion Patients: A Propensity Score Matched-Pair Analysis.

Perfetti DC, Schwarzkopf R, Buckland AJ, Paulino CB, Vigdorich JM. J Arthroplasty. 2016 Nov 23. PMID: 27998660

Relationship Between Ulnar Variance, Cortical Bone Density, and Load to Failure in the Distal Radius at the Typical Site of Fracture Initiation.

Casagrande DJ, Morris RP, Carayannopoulos NL, Buford WL. J Hand Surg Am. 2016 Dec 4. PMID: 27707565

Does the saline load test still have a role in the orthopaedic world? A systematic review of the literature.

Browning BB, Ventimiglia AV, Dixit A, Illical E, Urban WP, Jauregui JJ. Acta Orthop Traumatol Turc. 2016 Dec;50(6):597-600. PMID: 27979366

Welcome the New Residency Coordinator



We are pleased to announce the addition of **Yvonne Henry** to the staff of the Department of Orthopaedic Surgery and Rehabilitation Medicine. Yvonne started with the institution on November 3, 2016 as the Residency Coordinator of the Orthopaedic Surgery Residency Program. Yvonne comes to us with a strong background in graduate medical education with over 10 years of experience as a Housestaff Coordinator at Brookdale Hospital and Medical Center's office of Graduate Medical Education. She is a graduate of NYC Technical College and is a licensed notary public.

Downstate Orthopaedics launches
Non-Operative Sports Medicine Fellowship



William Urban, MD
Chief, Sports Medicine
Orthopedic Surgery



Scott Barbash, MD
Sports Medicine
Orthopedic Surgery



Richard Chang, MD
Sports Medicine
Physiatry



Christine Persaud, MD
Sports Medicine
Family Medicine



Walter Valesky, MD
Sports Medicine
Emergency Medicine

At our **Division of Sports Medicine**, excellence in Orthopaedic Surgery does not preclude us from optimizing non-operative care. Today, Downstate ORTHOPAEDICS offers a **multi-disciplinary fellowship** that provides a great opportunity for two physicians trained in a variety of primary specialities to obtain **fellowships in sports medicine**.

Alumni Reception at AAOS 2017

Save the Date - Friday March 17, 2017

Time: 7:00 - 11:00 PM

Embassy Suites, The Monterey Ballroom,
601 Pacific Highway, San Diego, CA, 92101

Fundraising and Community Outreach



The Stanley Gordon, MD,
Library and Resident Education
Fund

Residents and Fellows Alumni
Society



NYU Lutheran Medical Center



Brookdale University Hospital

Affiliated Hospitals



Kings County Hospital Center



Veterans' Administration
Harborview Medical Center



Staten Island University Hospital