

Nick N. Patel, M.D.

EDUCATION

Harvard University's Brigham and Women's Hospital
Adult Reconstruction Fellowship

Boston, MA
Aug 2020 – Jul 2021

Emory University School of Medicine
Orthopaedic Surgery Residency

Atlanta, GA
July 2015 – June 2020

Emory University School of Medicine
Doctor of Medicine

Atlanta, GA
July 2011 – May 2015

Georgia Institute of Technology
B.S. in Biomedical Engineering, Graduated with Highest Honors
Dual Degree Program with Emory

Atlanta, GA
Aug 2009 – May 2011

Emory University
B.S. in Biology
Dual Degree Program with Georgia Tech

Atlanta, GA
Aug 2006 – May 2009

HONORS & AWARDS

Joseph B. Whitehead Surgery Scholarship: Merit based scholarship received annually during medical education

Alpha Omega Alpha: Inducted based on academic and clinical performance

Alpha Eta Mu Beta National Biomedical Engineering Honor Society: Invited to join after being in top one-fifth of BME class

Tau Beta Pi Engineering Honor Society: Invited to joined after being in the top one-eighth of the overall engineering class

Georgia Tech Faculty Honors: Recognized for academic achievement and graduating with a 4.0 GPA

Emory University Dean's List: Recognized for academic achievement at Emory University

First Place in the 2009 Emory Research Symposium

PEER REVIEWED PUBLICATIONS

Fletcher ND, Lazarus DE, Desai MJ, **Patel NN**, Bruce RW. Medicaid insurance is associated with larger curves in patients who require scoliosis surgery. *Am J Orthop.* 2015 Nov;44(11):E454-7.

Wise BT, **Patel NN**, Wier G, Labib SA. Outcomes of ACL Reconstruction With Fixed Versus Variable Loop Button Fixation. *Orthopedics.* 2017 Mar 1;40(2):e275-e280.

Patel NN, Labib SA. The Achilles Tendon in Healthy Subjects: An Anthropometric and Ultrasound Mapping Study. *J Foot Ankle Surg.* 2018 Mar - Apr;57(2):285-288.

Patel NN, Guild GN, Erens GA. Femoral Head-Trunnion Dissociation in Metal-on-Polyethylene Total Hip Arthroplasty – A Unique Case Report. *Reconstructive Review.* 2017 Dec;7(4).

Patel NN, Bruce RW. Transcapsular Buttonholing of the Proximal Ulna as a Cause for Irreducible Pediatric Anterior Elbow Dislocation. *Case Rep Orthop.* 2018 May 9;2018:8986230.

Gottschalk MB, **Patel NN**, Boden AL, Kakar S. Treatment of Basilar Thumb Arthritis: A Critical Analysis Review. *JBJS Rev.* 2018 Jul 10.

Patel NN, Guild GN, Kumar AR. Intra-wound Vancomycin in Primary Hip & Knee Arthroplasty - A Safe and Cost-effective Means to Decrease Early Periprosthetic Joint Infection. *Arthroplasty Today*, 2018. 4(4): p. 479-483.

Patel NN, Shah JA, Sadlack CK. Post-Operative Thrombotic Thrombocytopenic Purpura After Total Hip Arthroplasty: A Case Report and Review of the Literature. *Case Rep Orthop.* 2018 Oct 23;2018:9716170.

Patel NN, Shah JA, Erens GA. Current Trends in Clinical Practice for the Direct Anterior Approach Total Hip Arthroplasty. *J Arthroplasty.* 2019 Apr 18. pii: S0883-5403(19)30357-2.

Shah JA, **Patel NN**. Decreased Early Complication Rates Associated with Rheumatoid Arthritis Compared to Alternate Indications for Total Elbow Arthroplasty. *Int J Orthop.* 2019; 6(5). Epub 2019 Oct 28.

Shah JA, **Patel NN**, Michael KW. Spontaneous Spinal Epidural Hematoma: Atypical clinical presentation and discussion of management. *Int J Spine Surg.* 2020 Apr 30;14(2): 158-161.

PATENTS

“Access Device for Surgery” – Co-inventor

Patent number US8771173 B2

Issued July 8, 2014

- A surgical device that provides minimally invasive access for sterile endoscopes to organs including the beating heart
- Applications include delivery of therapeutics, transmyocardial revascularization, ablation, echo-probe diagnostics, LAA isolation and procedural observation

“Devices and Methods for Surgical Induction Heating” – Co-inventor

Patent number US20200121495 A1

Filed Oct 18, 2019

- A system that utilizes an external electromagnetic field to precisely heat implanted hardware to help clear peri-implant infection

SOCIETY MEMBERSHIPS

American Association of Hip and Knee Surgeons

American Academy of Orthopaedic Surgeons

American Medical Association

PRESENTATIONS

Podium Presentations

Outcomes of ACL Reconstruction with Fixed Versus Variable Loop Button Fixation

Wise BT, Patel NN, Wier G, Labib SA

Eastern Orthopedic Association

Amelia Island, FL

Oct 22, 2014

The Achilles Tendon in Healthy Subjects: An Anthropometric and Ultrasound Mapping Study

Patel NN, Labib SA

Eastern Orthopedic Association

New Orleans, LA

Oct 20, 2016

Fractures of the Pediatric Upper Extremity

Emory Orthopaedic Surgery Department Grand Rounds

Atlanta, GA

Oct 6, 2017

Intra-wound Vancomycin in Hip & Knee Arthroplasty – A Safe and Cost Effective Means to Decrease PJI

Patel NN, Guild GN, Kumar AR

2018 Kelly Day Research Session

Atlanta, GA

June 8, 2018

Current Trends in Clinical Practice for the Direct Anterior Approach Total Hip Arthroplasty

Patel NN, Shah JA, Erens GA

2020 Kelly Day Research Session

Atlanta, GA

June 5, 2020

CardioScout Surgical Device for Minimally Invasive Delivery of Therapies to the Beating Heart

Patel NN, Jorgensen C, Haque T, Rego K

Made presentations on multiple occasions which included live demonstration of device on human heart models. Presentations include:

- Georgia Tech Alumni Association Board
Invited by the board president to speak to all trustees during a board meeting
Atlanta, GA
Aug 19, 2011
- Georgia Tech and Emory Department of Biomedical Engineering Advisory Board
Presented to distinguished faculty as well as BME industry executives
Apr 27, 2011
- Surgical Invention Convention
Presented and demonstrated device to potential investors and industry leaders
Apr 7-8, 2011
- Georgia Tech Advisory Board
Invited to present to board members, which included numerous Fortune 500 company executives
Apr 4, 2011
- Georgia State Capitol: Presented to the House Science and Technology Committee
Hour-long presentation to GA Tech President Bud Peterson, Committee Chairman Amos Amerson, and other representatives
Feb 9, 2011
- Saint Joseph’s Translational Research Institute
Presented to GA Tech President Bud Peterson and members of the Georgia Board of Regents
Nov 8, 2010

Poster Presentations

Intra-wound Vancomycin in Primary Hip & Knee Arthroplasty - A Safe & Cost-effective Means to Decrease PJI Las Vegas, NV
Patel NN, Guild GN, Kumar AR Mar 14, 2019
AAOS 2019 Annual Meeting

Outcomes of ACL Reconstruction with Fixed Versus Variable Loop Button Fixation Atlanta, GA
Wise BT, Patel NN, Wier G, Labib SA Apr 23, 2015
Annual Emory Research Symposium

Novel Device for Stem Cell Delivery to the Beating Heart Under Direct Visualization via Subxiphoid Approach Washington, DC
Patel NN, Jorgensen C, Haque T, Rego June 8-11, 2011
International Society for Minimally Invasive Cardiothoracic Surgery

CardioScout Novel Device for Minimally Invasive Cardiac Surgery Atlanta, GA
Patel NN, Jorgensen C, Haque T, Rego March 29-30, 2011
South Eastern Medical Device Association Conference

Alveolar Macrophage Function in Sickle Cell Disease Atlanta, GA
Patel NN, Chappa P, Archer DR Apr 24, 2009
2009 Emory Research Symposium – 1st place overall

WORK EXPERIENCE

Tim Plastics, Inc. North East, MD
Design Engineer

- Designed molds for various plastic bottles using CAD software
- Designed multiple containers for clients including McCormick Spice Company

ACTIVITIES

GA Tech BME Department Atlanta, GA
Senior Design Project Advisor

- Mentored a team of biomedical and mechanical engineering students with developing technology to solve an unmet need in orthopaedics

Thomas Whitesides Orthopaedic Society Atlanta, GA
Student Mentor

- Mentored medical students interested in pursuing a career in orthopaedic surgery

SKILLS

- ACLS, BLS certified
- Proficient with computer aided design (CAD) software including Autodesk Inventor and SolidWorks