

AKUL PATEL, MD

EDUCATION

University of North Carolina School of Medicine
Chapel Hill, NC
M.D.

May 2017

Duke University
Durham, NC
B.S. with Distinction in Chemistry, Cum Laude

May 2011

BOARD CERTIFICATION

American Board of Orthopaedic Surgery

July 2025

WORK EXPERIENCE

Board Certified Spine Surgeon, Delaware Orthopaedic Specialists

September 2023-Present

Spine Surgery Fellow, University of Maryland

August 2022-August 2023

Orthopedic Surgery Resident Physician, Temple University Hospital

June 2017 – June 2022

Secondary Mathematics Teacher, Teach for America

June 2011-June 2013

- North Side High School, Fort Worth, TX
- Instructed pre-calculus, algebra, and remediation mathematics courses for secondary students
- Created SAT preparation course for upper classmen preparing for undergraduate applications
- Coordinated academic competitions for science and mathematics students

AWARDS

Temple Orthopaedics Resident Research Day Top 3 Presentation

May 2022

AOA C. McCollister Evarts Resident Leadership Forum

June 2021

AANS Section on Pediatric Neurological Surgery Top Abstract

October 2020

- Title: *Risk Factors for Proximal Junctional Kyphosis in Pediatric Spinal Deformity Patients Treated with Halo Gravity Traction and Posterior Spinal Fusion*

John B. Graham Research Society

November 2014

NC Ophthalmology Society Research Award

October 2014

- Awarded for best poster in the medical students and residents category
- Title: *The Effect of posterior vitreous detachment and pars plana vitrectomy on retinal vessel oxygenation*

Carolina Medical Student Research Grant

May 2014-Aug 2014

- Summer research project at UNC-Chapel Hill
- Recipient of funding from the NIH and Office of Research at UNC-CH

Teach for America Amgen Fellowship

May 2011

- Awarded to incoming Teach for America teachers who demonstrate great potential in the instruction of secondary mathematics and science

Duke University Graduation with Distinction

May 2011

Duke University Cum Laude

May 2011

PUBLICATIONS

Qazi S, Girgis M, **Patel A**, Lu X, Yu D, Slattery S, Sowards J. Gender and Racial Bias in Letters of Recommendation for Orthopedic Surgery Residency Positions. *Journal of Surgical Education*. Accepted August 2022.

DiMaria S, Karamian B, Siegel N, Lambrechts M, Grewal L, Jeyamohan H, Robinson W, **Patel A**, Canseco J, Kaye ID, Woods B, Radcliff K, Kurd M, Hilibrand A, Kepler C, Vaccaro A, Schroeder G. Does Interbody Cage Lordosis and Position Affect Radiographic Outcomes after Single Level Transforaminal Lumbar Interbody Fusion?. *Clinical Spine Surgery*. April 2022.

Amanullah A, **Patel A**, Samdani A, Pahys J, Toll B, Ackshota N, Kim A, Hwang S. Do Drains Help Reduce the Risk of Complications After Thoracoplasties in Posterior Spinal Fusions for Adolescent Idiopathic Scoliosis?. *Child's Nervous System*. Dec 2021; online ahead of print.

Patel A, Pahys J, Samdani A, Newton P, Bastrom T, Shah S, Miyanji S, Hwang S, Harms Study Group. Early and Late Hospital Readmissions in Adolescent Idiopathic Scoliosis. *Spine Deformity*. July 2021; 9(4): 1041-1048.

Lowery A, **Patel A**, Ames R, Ramsey F, Slattery B, Pazonis T. Prevalence of Venous Thromboembolism Following Acute Spinal Cord Injury in an Urban Inner City Hospital. *Int Journal of Spine Surgery*. June 2021; 15(3): 562-569.

Lowery A, Naran V, Ames R, **Patel A**, Ramsey F, Slattery B, Pazonis T. Risk Stratification Algorithm for Orthopedic Trauma Patients at Risk for Fat Embolism Syndrome. *Indian Journal of Orthopaedics*. Feb 2021; 55(4): 879-885.

Patel A, Rogero R, Slattery B, Pazonis T. Bone Morphogenetic Protein Use to Achieve Successful Arthrodesis in the Lumbar Spine: A Review of the Recent Literature. *Temple University Journal of Orthopedic Surgery and Sports Medicine*. 2020;15.

Cerezo J, Togun A, **Patel A**, Mooar P. Assessing Numeracy and Mathematical Literacy in an Urban Population Being Considered for Elective Total Joint Arthroplasty. *Temple University Journal of Orthopedic Surgery and Sports Medicine*. 2020;15.

Inyang N, **Patel A**, Torg J. Fatal and Near Fatal Asthma Attacks in Young Athletes: A Literature Review of Incidence, Risk Factors, and Guidelines. *Temple University Journal of Orthopedic Surgery and Sports Medicine*. 2019;14:57-61.

MANUSCRIPTS UNDER REVIEW

Patel A, Lowery A, Hafner R, Ames R, Slattery B, Ramsey F, Ali S, Sardar Z, Pazonis T. Combining Flexion Lateral Radiographs with a Supine MRI is Superior to a Combination of Flexion and Extension Lateral Radiographs at Detecting Vertebral Instability in Patients with Spondylolisthesis. *Clinical Spine Surgery*. Submitted December 2021

Amanullah A, **Patel A**, Samdani A, Pahys J, Toll B, Kim A, Hwang S. Thoracic and Lumbar Compensatory Curves in Congenital Cervical Scoliosis. *Spine Deformity*. Submitted October 2021.

ORAL/PODIUM PRESENTATIONS

Amir Amanullah, **Akul Patel**, Brandon Toll, Joshua Pahys, Amer Samdani, Steven Hwang. Accepted for Oral Presentation at the American Association of Neurological Surgeons Pediatric Section Annual Meeting (December 2020). *Risk Factors for Proximal Junctional Kyphosis in Pediatric Spinal Deformity Patients Treated with Halo Gravity Traction and Posterior Spinal Fusion*

Amir Amanullah, **Akul Patel**, Brandon Toll, Joshua Pahys, Amer Samdani, Steven Hwang. Accepted for Oral Presentation at the American Association of Neurological Surgeons Pediatric Section Annual Meeting (December 2020). *In Congenital Cervical Scoliosis, the Lumbar Compensatory Curve has a Higher Correlation with the Cervical Curve than the Thoracic Compensatory Curve*.

Andrew Lowery, **Akul Patel**, Robert Ames, Frederick Ramsey, Theresa Pazonis. Accepted for Oral Presentation at Pennsylvania Orthopaedic Society Virtual Meeting (October 2020). *Prevalence of Venous Thromboembolism following Acute Spinal Cord Injury in an Urban Inner City Hospital*.

Akul Patel, Andrew Lowery, Ryan Hafner, Robert Ames, Bridget Slattery, Sayed Ali, Zeeshan Sardar, Theresa Pazonis. Accepted for Podium Presentation at the North American Spine Society International Meeting (September 2020, meeting cancelled due to COVID 19 pandemic). *Combining Flexion Lateral Radiographs with a Supine MRI is Superior to a Combination of Flexion and Extension Lateral Radiographs at Detecting Vertebral Instability in Patients with Spondylolisthesis*.

Akul Patel, Sohail Qazi, Mina Girgis, Xiaoning Lu, Doahai Yu, Bridget Slattery, Joseph Sowards. Presented at Temple University Department of Orthopedics Resident Research Day (May 2020). *Gender and Racial Bias in Letters of Recommendation for Orthopedic Surgery Residency Positions*.

Akul Patel, Joshua Pahys, Amer Samdani, Peter Newton, Suken Shah, Firoz Miyanji, Harms Study Group, Steven Hwang. Presented at Temple University Department of Orthopedics Resident Research Day (May 2020). *Causes of Early and Late Readmissions after Spinal Deformity Surgery in Pediatric Patients with Adolescent Idiopathic Scoliosis*.

RESEARCH POSTER PRESENTATIONS

Andrew Lowery, Vineet Naran, **Akul Patel**, Robert Ames, Theresa Pazonis. Poster and Abstract. Accepted for Poster Presentation at Mid America Orthopaedic Association Annual Meeting (2021). *Risk Stratification for Orthopedic Trauma Patients at Risk for Fat Embolism Syndrome.*

Amir Amanullah, Steven Hwang, **Akul Patel**, Brandon Toll, Joshua Pahys, Amer Samdani. Poster and Abstract. Presented at the Philadelphia Orthopedic Trauma Symposium (June 2020). *Risk Factors for Proximal Junctional Kyphosis in Pediatric Patients Undergoing Posterior Spinal Fusion after Halo Gravity Traction.*

Amir Amanullah, **Akul Patel**, Steven Hwang, Brandon Toll, Joshua Pahys, Amer Samdani. Poster and Abstract. Presented at the Philadelphia Orthopedic Trauma Symposium (June 2020). *In Congenital Cervical Scoliosis, the Lumbar Compensatory Curve has a Higher Correlation with the Cervical Curve than the Thoracic Compensatory Curve.*

Akul Patel, Sohail Qazi, Mina Girgis, Xiaoning Lu, Doahai Yu, Bridget Slattery, Joseph Sowards. Poster and Abstract. Presented at the American Orthopedic Association Annual Meeting (June 2020). *Gender and Racial Bias in Letters of Recommendation for Orthopedic Surgery Residency Positions.*

Akul Patel, Selene Parekh. Poster and Abstract. Presented at the American Orthopedic Association Annual Meeting (June 2017) and the American Orthopedic Foot and Ankle Society Annual Meeting (July 2017). *The NFL Combine as a Predictor of On-field Success.*

Akul Patel, Edward Jernigan, Joshua Tennant. Presented at the Philadelphia Orthopedic Trauma Symposium (June 2018). Poster and Abstract. *Comparing 1 Year Cost, 90 Day Readmission Rate, Length of Hospital Admission and Subsequent Orthopaedic Procedures in Ankle and Hip Fracture Patients with and without Type 2 Diabetes Mellitus and Type 2 Diabetes Mellitus with Neuropathy.*

Matthew Avery, **Akul Patel**, Mary Mynatt, Kaitlin Healy, Daniel Del Gaizo. Poster and Abstract. Presented at the University of North Carolina Department of Surgery Research Day (May 2016) *The Effect of a Mandatory Smoking Cessation Program on the Perioperative Smoking Habits of Total Joint Replacement Patients.*

Akul Patel, Odette Houghton, Maurice Landers, Sarah Moyer, Elle Alexander. Poster and Abstract. Presented at the American Medical Association national meeting (October 2014), North Carolina Ophthalmology Society meeting (November 2014), and Carolina Student Research Day (January 2015). *The Effect of Posterior Vitreous Detachment and Pars Plana Vitrectomy on Retinal Vessel Oxygenation.*