

Ankur K. Patel, MD

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Department of Radiation Oncology
UPMC Hillman Cancer Center
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EDUCATION

The Ohio State University College of Medicine • Columbus, OH Doctor of Medicine	2012-2016
Miami University • Oxford, OH B.S. Zoology, <i>summa cum laude</i> B.A. Biochemistry, <i>summa cum laude</i> B.A. Economics, <i>summa cum laude</i> <i>Graduation with Honors and with Distinction</i>	2008-2012

MEDICAL RESIDENCY TRAINING

Radiation Oncology Univ. of Pittsburgh Medical Center, Hillman Cancer Center, Dept. of Radiation Oncology Pittsburgh, PA Anticipated Graduation: June 2021	2017-present
Internal Medicine Allegheny Health Network, Department of Internal Medicine • Pittsburgh, PA	2016-2017

CERTIFICATIONS, LICENSURE AND PROFESSIONAL DEVELOPMENT

Quality Oversight Committee, UPMC Department of Radiation Oncology Review and discuss solutions for radiation therapy medical events	2019-2020
AVARO Course (Applied Virtual Anatomy for Radiation Oncology) Online contouring course for radiation oncology residents Tata Medical Center	2018
SRS/SABR Training Course Department of Radiation Oncology, UPMC Hillman Cancer Center Pittsburgh, PA	2018
Gamma Knife Radiosurgery Course Department of Neurological Surgery, University of Pittsburgh School of Medicine Pittsburgh, PA	2017

United States Medical Licensing Examination Step 1, Step 2 CS, Step 2 CK, Step 3	2013-2016
Pennsylvania Graduate Medical Training License	2016-present
American Heart Association Advanced Cardiac Life Support	2012-present
American Heart Association Basic Life Support	2012-present

HONORS AND AWARDS

Landacre Honor Society Honorary society for medical students with achievement in medical research at The Ohio State University College of Medicine	2016
Dr. Robert B. Drury Memorial Scholarship Selected by committee to receive this award for academic performance and involvement on and off campus at The Ohio State University College of Medicine	2015
Outstanding Academic Scholar Award Recognizes students of The Ohio State University College of Medicine who finish in the top 25%	2014, 2015
Honors Recognizes students in The Ohio State University College of Medicine Class of 2016 who finish in the top 15% at the end of the first two years of medical school	2014
Carnes-Bartz Memorial Scholarship Selected by committee to receive this award for outstanding academic performance at The Ohio State University College of Medicine	2014
Phi Beta Kappa <i>Miami University</i> America's oldest and most widely known academic honor society, Phi Beta Kappa celebrates and advocates excellence in the liberal arts and sciences	2012
Macroeconomics Award Recognizes seniors in Miami University's Department of Economics with interest and achievement in macroeconomics	2012
George E. Thatcher Award Recognizes seniors in Miami University's Department of Economics for outstanding academic achievement, \$1000 award	2012
Junior Scholar in Department of Economics Recognizes students in Miami University's Department of Economics for outstanding academic achievement	2010, 2011

- John H. Buckingham Award** 2010
Recognizes students in Miami University's Department of Chemistry and Biochemistry for outstanding achievement, \$500 award
- Malcolm E. Switzer, M.D. Award** 2010
Recognizes pre-meds in Miami University's Department of Chemistry and Biochemistry for outstanding achievement, \$500 award

GRANTS AND FELLOWSHIPS

- American College of Radiation Oncology Travel Grant** 2020
\$500 grant to fund travel to the 2020 ACRO Annual Meeting to present *Acute Patient-Reported Bowel Quality of Life and Rectal Bleeding with the Combination of Prostate External Beam Radiation, Low Dose-Rate Brachytherapy Boost, and SpaceOAR*
- UPMC Shadyside Hospital Foundation Grant** 2019
\$5000 grant to fund research on *The Impact of Clinical Pathways on Adoption of Hypofractionated External Beam Radiation in Patients with Low- or Intermediate-Risk Prostate Cancer*
- UPMC Shadyside Hospital Foundation Grant** 2018
\$5000 grant to fund research on *Hypofractionated Whole-Breast Irradiation in Large-Breasted Women - Is There a Dosimetric Predictor for Acute Skin Toxicities?*
- The Ohio State University College of Medicine Bennett Research Award** 2013
\$3000 living stipend to fund research on *Retrospective Analysis of Prognostic Factors Influencing Pathologic Complete Response to Neoadjuvant Chemoradiation in Locally Advanced Esophageal Cancer*
- Miami University Dean's Scholar** 2011
\$1500 research stipend to fund research on *Analysis of Glyoxalase 2-1 Active Site Mutations to Understand its β -lactamase Activity*
- Miami University Undergraduate Summer Scholar Research Grant** 2010
\$2600 living stipend plus \$1000 research stipend to fund research on *Analysis of Glyoxalase 2-1 Active Site Mutations to Understand its β -lactamase Activity*
- Miami University College of Arts & Science Research Grant** 2010
\$873 research stipend to fund research on *Analysis of Glyoxalase 2-1 Active Site Mutations to Understand its β -lactamase Activity*

PUBLICATIONS

Physician-Predicted Prognosis and Palliative Radiotherapy Utilization at the End-of-Life: An Audit of a Large Cancer Center Network

Mojica-Márquez AE, Rodríguez-López JL, **Patel AK**, Ling DC, Rajagopalan MS, Beriwal S.
Accepted June 2020 in *Journal of Pain and Symptom Management*

External Validation of Life Expectancy Prognostic Models in Patients Evaluated for Palliative Radiotherapy at the End of Life

Mojica-Márquez AE, Rodríguez-López JL, **Patel AK**, Ling DC, Rajagopalan MS, Beriwal S
Accepted June 2020 in *Cancer Medicine*

Acute Patient-Reported Bowel Quality of Life and Rectal Bleeding with the Combination of Prostate External Beam Radiation, Low Dose-Rate Brachytherapy Boost, and SpaceOAR

Patel AK, Houser CJ, Benoit R, Smith RP, Beriwal S
published online ahead of print, 2020 Apr 21. *Brachytherapy*. 2020; S1538-4721(20)30051-9.
doi:10.1016/j.brachy.2020.03.006.

Perineural Invasion Predicts for Locoregional Failure in Patients with Esophageal Adenocarcinoma Treated with Neoadjuvant Chemoradiotherapy

Patel AK, Pan X, Vila DM, Frankel WL, Chen W, Perry K, Merritt R, D'Souza D, Wuthrick EJ, Williams TM
published online ahead of print, 2020 Apr 21. *J Clin Pathol*. 2020; jclinpath-2020-206424.
doi:10.1136/jclinpath-2020-206424.

Declining Brachytherapy Utilization for Cervical Cancer Patients - Have We Reversed the Trend?

Schad MD, **Patel AK**, Glaser SM, Balasubramani GK, Showalter TN, Beriwal S, Vargo JA
Gynecol Oncol. 2020 Jan 7. doi: 10.1016/j.ygyno.2019.12.032.

In Reply to Miranda Degrande and Hanna, Regarding Hypofractionated Whole-Breast Irradiation in Large-Breasted Women—Is There a Dosimetric Predictor for Acute Skin Toxicities?

Patel AK, Ling DC, Beriwal S
Int J Radiat Oncol Biol Phys. 2019 May 1;104(1):221-222.

Hypofractionated Whole-Breast Irradiation in Large-Breasted Women—Is There a Dosimetric Predictor for Acute Skin Toxicities?

Patel AK, Ling DC, Richman AH, Champ CE, Huq MS, Heron DE, Beriwal S
Int J Radiat Oncol Biol Phys. 2019 Jan 1;103(1):71-77.

Locally Advanced Uterine Cancer: A Multimodality Model or Muddle?

Patel AK, Beriwal S
Int J Radiat Oncol Biol Phys. 2018 Feb 1;100(2):287-288.

Submitted Manuscripts

Treatment Selection and Survival Outcomes in Early-Stage Peripheral T-Cell Lymphomas: Does Anaplastic Lymphoma Kinase Mutation Impact the Benefit of Consolidative Radiotherapy?

Rodríguez-López JL, **Patel AK**, Balasubramani GK, Glaser SM, Beriwal S, Vargo JA
Submitted to *Leukemia and Lymphoma*

Outcomes After Definitive Chemoradiation Therapy with Vienna/Venezia Hybrid HDR Brachytherapy Applicators for Cervical Cancer: A Single Institution Experience
Keller AK, Rodríguez-López JL, **Patel AK**, Vargo JA, Kim H, Houser CJ, Sukumvanich P, Berger JL, Boisen MM, Edwards RP, Taylor SE, Courtney-Brooks MB, Orr BC, Olawaiye AB, Beriwal S
Submitted to *Brachytherapy*

Is the Risk of Substantial LVSI in Stage I Endometrial Cancer Similar to PORTEC in the North American Population? - A Single-Institution Study
Pifer PM, Bhargava R, **Patel AK**, Ling DC, Vargo JA, Orr BC, Sukumvanich P, Courtney-Brooks MB, Boisen MM, Berger JL, Taylor S, Olawaiye AB, Comerci JT, Lesnock JL, Edwards RP, and Beriwal S
Submitted to *Gynecologic Oncology*

Patterns of Failure Following Adjuvant Stereotactic Body Radiation Therapy for Pancreatic Cancer with Close or Positive Margins
Patel AK, Rodríguez-López JL, Bahary N, Zureikat AH, Burton SA, Heron DE, Olson AC
Revised manuscript submitted to *Advances in Radiation Oncology*

Long Term Outcomes with Linear Accelerator Stereotactic Radiosurgery for Treatment of Jugulotympanic Paragangliomas
Patel AK, Rodríguez-López JL, Hirsch BE, Burton SA, Flickinger JC, Clump DA
Submitted to *Practical Radiation Oncology*

ORAL ABSTRACTS

Dose the Extent of LVSI Predict for Lymph Node Involvement in FIGO Stage I Endometrial Cancer?
Pifer PM, Bhargava R, **Patel AK**, Ling DC, Orr B, Sukumvanich P, Courtney-Brooks M, Boisen M, Berger J, Taylor S, Olawaiye A, Kelly J, Comerci J, Vargo JA, and Beriwal S
Accepted for the ASTRO annual meeting; October 2020

Quality of Life Outcomes Following Radiation and Surgery in High Stage Oropharyngeal Cancer
Kaffenberger TM, **Patel AK**, Lyu L, Wasserman-Wincko T, Clump DA, Heron DE, Johnson JT, Nilsen ML
Accepted for the American Head and Neck Society annual meeting; July 2021

External Validation of Life Expectancy Prognostic Models in Patients Evaluated for Palliative Radiotherapy at the End of Life
Mojica-Márquez AE, Rodríguez-López JL, **Patel AK**, Ling DC, Rajagopalan MS, Beriwal S
Accepted for the American Radium Society annual meeting; December 2020

Declining Brachytherapy Utilization for Cervical Cancer Patients - Have We Reversed the Trend?
Beriwal S, Schad MD, **Patel AK**, Glaser SM, Balasubramani GK, Showalter TN, Vargo JA
Accepted for the World Congress of Brachytherapy; May 2021

Hypofractionated Whole-Breast Irradiation in Large-Breasted Women—Is There a Dosimetric Predictor for Acute Skin Toxicities?

Patel AK, Ling DC, Richman AH, Champ CE, Huq MS, et al.
ASTRO annual meeting mini-oral session; San Antonio, TX; October 2018

Undergraduate Associates as Peer Leaders in a Sophomore-level Cell Biology Class

Gaietto K, Hawkins K, Magee K, **Patel AK**, Reddy P, Romig B, Simmons T, Traner C, Fernandes J
Lilly Conference on College Teaching; Oxford, OH; November 2011

POSTERS PRESENTATIONS

Report of a Large Cohort of Intermediate-Risk Prostate Cancer Patients Treated with Cs-131 Brachytherapy

Rodríguez-López JL, **Patel AK**, Beriwal S, Benoit RM, Smith RP
Accepted for the ASTRO annual meeting; October 2020

How Does the Number of Positive Biopsy Cores Affect Prognosis in Patients with Intermediate Risk Prostate Cancer Treated with Cs-131 Prostate Brachytherapy?

Smith RP, Rodríguez-López JL, **Patel AK**, Benoit RM, Beriwal S
Accepted for the ASTRO annual meeting; October 2020

Impact of Metastasis Directed Therapy on Progression and Survival in Metachronous Oligometastatic Breast cancer: An Extended Follow-up Study

Musunuru HB, **Patel AK**, Rodríguez-López JL, Brufsky A, Beriwal S
Accepted for the ASTRO annual meeting; October 2020

Adoption of and Adherence to Institutional Dosimetric Guidelines for Hypofractionated Prostate Radiation Therapy in an Integrated Radiation Oncology Network

Schad MD, **Patel AK**, Ling DC, Smith RP, Beriwal S
Accepted for the ASTRO annual meeting; October 2020

Do Air Gaps with Image-Guided Vaginal Cuff Brachytherapy Impact Failure Rates in High Intermediate Risk FIGO Stage I Endometrial Cancer Patients?

Richman AH, **Patel AK**, Rodríguez-López JL, Vargo JA, Kim H, Sukumvanich P, Berger JL, Boisen MM, Edwards R, Taylor SE, Courtney-Brooks MB, Olawaiye A, Orr BC, Lesnock JL, Beriwal S
Accepted for the ASTRO annual meeting; October 2020

Feasibility and Outcomes for Cervical Cancer Patients Treated with Hybrid Brachytherapy Applicators

Keller A, Kim H, Houser CJ, Rodríguez-López JL, **Patel AK**, Sukumvanich P, Berger JL, Boisen MB, Edwards R, Taylor SE, Courtney-Brooks MB, Olawaiye A, Orr BC, Beriwal S.
Accepted for the World Congress of Brachytherapy; May 2021

Does Dose to the Ureter Predict for Ureteral Stenosis? – Analysis of 3D MRI-Based Brachytherapy

Rodríguez-López JL, Mojica-Márquez AE, Ling DC, Kim H, **Patel AK**, Houser CJ, Beriwal S
Accepted for the World Congress of Brachytherapy; May 2021

Linear Accelerator Stereotactic Radiosurgery for Treatment of Glomus Jugulare Tumors: Long-Term Follow-up of 39 patients

Patel AK, Rodríguez-López JL, Burton SA, Flickinger JC, Clump DA
Accepted for the Radiosurgery Society annual meeting; June 2020

Stereotactic Body Radiation Therapy on the Halcyon: Early Clinical Experience

Rodríguez-López JL, **Patel AK**, Lalonde R, Clump DA
Accepted for the American Association for Cancer Research annual meeting; June 2020

Does Metastases Directed Therapy Improve Outcomes in Synchronous Oligometastatic Breast Cancer Patients? A Single Institution Analysis

Musunuru HB, **Patel AK**, Beriwal S
ACRO annual meeting; Ft. Lauderdale, FL; February 2020

Acute Patient-Reported Rectal Bleeding with the Combination of Prostate External Beam Radiation, Brachytherapy Boost, and SpaceOAR

Patel AK, Houser CJ, Benoit R, Smith RP, Beriwal S
ACRO annual meeting; Ft. Lauderdale, FL; February 2020

Physician-Predicted Prognosis and Utilization of Palliative Radiation Therapy at the End-of-Life – An Audit of a Large Cancer Center Network

Mojica-Márquez AE, Rodríguez-López JL, **Patel AK**, Ling DC, Rajagopalan MS, Beriwal S
ACRO annual meeting; Ft. Lauderdale, FL; February 2020

Patterns of Failure after Adjuvant Stereotactic Body Radiation Therapy in Patients with Pancreatic Cancer with Close or Positive Margins

Patel AK, Rodríguez-López JL, Bahary N, Zureikat AH, Burton SA, Heron DE, Olson AC
ASCO Gastrointestinal Cancers Symposium; San Francisco, CA; January 2020

Fluciclovine PET/CT in the Management of Recurrent Prostate Cancer

Patel AK
UPMC American Society of Radiologic Technologists Meeting; Pittsburgh, PA; November 2019

The Impact of Clinical Pathways on Adoption of Hypofractionated External Beam Radiation in Patients with Low- or Intermediate-Risk Prostate Cancer

Patel AK, Ling DC, Smith RP, Heron DE, Beriwal S
ASTRO annual meeting; Chicago, IL; September 2019

Impact of Fluciclovine PET/CT on Management of Patients with Biochemically Recurrent Prostate Cancer

Patel AK, Olson AC, Karlovits Jr. BJ, Beriwal S, Nguyen NC
ASTRO annual meeting; Chicago, IL; September 2019

Patient-Reported Bowel Quality of Life with the Combination of Prostate External Beam Radiation, Brachytherapy Boost, and SpaceOAR

Patel AK, Houser CJ, Benoit R, Smith RP, Beriwal S
ABS annual meeting; Miami, FL; June 2019

Evaluation of Dosimetric Parameters and Quality of Life Outcomes with Use of SpaceOAR in Patients Undergoing Prostate Seed Brachytherapy Boost after External Beam Radiation

Patel AK, Houser CJ, Benoit R, Smith RP, Beriwal S
ABS annual meeting; San Francisco, CA; June 2018

The Prognostic Significant of Perineural Invasion in Patients with Esophageal Adenocarcinoma Treated with Neoadjuvant Chemoradiotherapy

Patel AK; Wieser DM; Pan X; Williams TM; Wuthrick EJ
ASCO Gastrointestinal Cancers Symposium; San Francisco, CA; June 2016

Prognostic Factors Influencing Survival after Neoadjuvant Chemoradiation in Locally Advanced Esophageal Cancer

Patel AK, Wieser DM, Williams TM, Wuthrick EJ
The Ohio State University Wexner Medical Center Trainee Research Day; Columbus, OH; 2015

Retrospective Analysis of Prognostic Factors Influencing Pathologic Complete Response to Neoadjuvant Chemoradiation in Locally Advanced Esophageal Cancer

Patel AK, Wieser DM, Williams TM, Wuthrick EJ
The Ohio State University Wexner Medical Center Trainee Research Day; Columbus, OH; 2014

Nurse Education for the MOVE! Program at the VA

Little J, Murray K, **Patel AK**, Ryan M, Stuber A, White N
The Ohio State University Community Health Project Forum; Columbus, OH; 2014

The Cell Biological Basis of Cancer

Patel AK, Miami University Honors Thesis
Published online on Scholarly Commons at Miami University Libraries, 2012
Miami University Undergraduate Research Forum; Oxford, OH; 2010

Analysis of Glyoxalase 2-1 Mutations to Understand its β -lactamase Activity

Patel AK, Traner C, Makaroff CA.
Miami University Undergraduate Research Forum; Oxford, OH; 2011, 2012

Undergraduate Associates as Peer Leaders in a Sophomore-level Cell Biology Class

Gaietto K, Hawkins K, Magee K, **Patel AK**, Reddy P, Romig B, Simmons T, Traner C, Fernandes J
American Society for Cell Biology annual meeting; Denver, CO; 2011

TEACHING EXPERIENCE

Undergraduate Teaching Associate for Intermediate Macroeconomic Theory 2011
Co-led weekly review sessions for 30+ students

Undergraduate Teaching Associate for Introduction to Cell Biology 2010
Mentored a group of students during a semester-long project on model organisms

LEADERSHIP EXPERIENCE

President , Radiation Oncology Interest Group, OSU College of Medicine Chapter Organized talks to educate medical students about the field of radiation oncology	2013
Secretary , Benjamin Rush Institute, OSU College of Medicine Chapter Organized talks and formal debates about political and financial topics in medicine	2013
Vice President , Honors & Scholars Advisory Board (HSAB), Miami University Co-led an Honors Experience that involved reflecting on students' roles in social issues	2011
President , Economics Club, Miami University Organized talks on current topics in economics	2011
Service & Philanthropy Chair , HSAB, Miami University Led efforts to organize Make A Difference Day, the largest service event at Miami University	2010
Student Member , Honors & Scholars Program Advisory Comm., Miami University Met with Honors Program administrators to review Honors Program curricula	2009
Honors Ambassador , University Honors Program, Miami University Worked with Honors Program administration to recruit potential Program applicants	2009

SERVICE

Introduction to Histology Lecture at MD Camp Created a one-hour lecture for an annual three-day summer camp for high school students who are considered traditionally underrepresented in medicine	2015
Pelotonia Virtual Rider Raised funds for cancer research as part of Pelotonia, a charity bicycle event at The Ohio State University Wexner Medical Center	2015
Picture A Cure, Silent Art Auction and Benefit Dinner Helped coordinate an event that raised \$1859 towards funding medical student research in the Department of Radiation Oncology at The Ohio State University Wexner Medical Center	2013
Community Health Project , <i>Chalmers P. Wylie VA Center</i> Helped implement nursing education about the MOVE! Program – a VA program for weight loss at The Ohio State University Wexner Medical Center	2013
Health Coaching Helped a patient manage his chronic kidney disease, obesity, and diabetes by setting personal health goals at The Ohio State University Wexner Medical Center	2013
Medical Hands for Healing Traveled to Rivas, Nicaragua for a week-long mission trip with a team of surgeons and other medical professionals to provide surgeries to underserved patients	2011

Habitat for Humanity 2010
Served 50+ hours building houses and raising awareness of homelessness;
Helped construct a house in Pensacola, Florida during a week-long build trip

Relay for Life, American Cancer Society 2009-2012
Member of team that was awarded “Silver” in 2009 and 2010 for raising
\$2500-\$4999 towards cancer research

PRIOR EMPLOYMENT _____ •

Department of Zoology, Miami University • Oxford, OH 2011-2012
Dishwasher and lab aide

Buehler’s Fresh Foods • Medina, OH 2006-2007, 2009
Grocery bagger

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS _____ •

American Society for Radiation Oncology 2017-present
The Radiosurgery Society 2017-present
American Brachytherapy Society 2017-present