

RIA MULHERKAR
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EDUCATION

Drexel University College of Medicine, Philadelphia, PA

Doctor of Medicine, 15 May 2020

Drexel University, Philadelphia, PA

Bachelor of Science, Biology, June 2016

Certificate in Medical Humanities, June 2016

RESIDENCY TRAINING

University of Pittsburgh Medical Center, Radiation Oncology, Pittsburgh, PA

Residency, July 2021-Present (estimated graduation June 2025)

Lankenau Medical Center, Internal Medicine, Philadelphia, PA

Internship, June 2020-June 2021

HONORS & AWARDS

Alpha Omega Alpha, Member – elected August 2019

Interdisciplinary Translational Research Training in NeuroAIDS Grant – July 2017

Drexel Medical Student Summer Research Fellowship – May 2017

Summa Cum Laude, 4.0 GPA – Drexel University, 2016

Pennoni Honors College – 2013-2016

Dean's List – 2013-2016

National Merit Scholar – 2013-2016A

RESEARCH EXPERIENCE

Summer Research Fellow, Drexel University College of Medicine, Philadelphia, PA

May 2017 – April 2018

Mentor: Dr. Pooja Jain, Department of Microbiology & Immunology

- Identification of T-cell epitopes presented by HTLV-1 infected cells that define protective immunity in silent carriers in order to activate protective immunity in chronically infected patients
- Perform immunoaffinity purifications on T-cell lines and help identify peptide sequences of MHC molecules and presented epitopes
- Perform additional research regarding MEF-2 isoforms and role in oncogenesis
- Additional funding received from NIH T32 Grant

Undergraduate Research Assistant, Drexel University, Philadelphia, PA

October 2013 – February 2016

Mentor: Dr. Tali Gidalevitz, Department of Biology

- Study of protein misfolding and aggregation in *Caenorhabditis elegans* for applications in neurodegenerative diseases
- Performed DNA cloning experiments and observed *C. elegans* phenotypes using fluorescent microscopy

POSTERS

Ria Mulherkar, Andrew Keller, Christopher J. Houser, Hayeon Kim, John A. Vargo, and Sushil Beriwal. “*Institutional Experience of 3D MRI based HDR Brachytherapy with hybrid Multichannel Vaginal Cylinder Applicator and Freehand Needles for Treatment of Vaginal Disease.*”

- June 2021, American Brachytherapy Society Virtual Conference, Philadelphia, PA

Andrew Keller, **Ria Mulherkar**, Siddharth Ghanta, Ronald Benoit, Ryan P. Smith, and Sushil Beriwal. “*Effect of Short-Term Corticosteroid Usage on Acute Urinary Toxicity Following Cs-131 Prostate Brachytherapy.*”

- June 2021, American Brachytherapy Society Virtual Conference, Philadelphia, PA

Ria Mulherkar, Aykan Karabudak, Rashida Ginwala, Xiaofang Huang, Aileen Rowan, Ramilla Philip, Zafar K. Khan, and Pooja Jain. “*In vivo and in vitro immunogenicity of novel MHC class I presented epitopes to confer protective immunity against chronic HTLV-1 infection.*”

- October 2017, Drexel University College of Medicine Discovery Day, Philadelphia, PA
- April 2018, Society on Neuroimmune Pharmacology/International Society for Neurovirology, Chicago, IL

PUBLICATIONS

Mulherkar R, Keller A, Showalter T, Thaker N, Beriwal S. A primer on time-driven activity-based costing in brachytherapy. *Brachytherapy*, 2021. <https://doi.org/10.1016/j.brachy.2021.05.008>

Mulherkar R, Grewal A, Berman AT. Emerging Role of Immunotherapy in Locally Advanced Non–Small Cell Lung Cancer. *Clinical Advances in Hematology & Oncology*. April 2020. 18(4).

Mulherkar R, Hasan S, Wegner RE, Verma V, Glaser SM, Kalash R, Beriwal S, Horne ZD. National patterns of care for early-stage penile cancers in The United States: How is radiation and brachytherapy utilized? *Brachytherapy*. July 2019.

Madugula K, **Mulherkar R**, Khan ZK, Chigbu DI, Patel D, Harhaj EW, Jain P. MEF-2 isoforms’ (AD) roles in development and tumorigenesis. *Oncotarget*. 2019 Feb 26;10(28):2755-87.

Mulherkar R, Karabudak A, Ginwala R, Huang X, Rowan A, Philip R, Khan ZK, & Jain P. In vivo and in vitro immunogenicity of novel MHC class I presented epitopes to confer protective immunity against chronic HTLV-1 infection. *Vaccine* (2018), <https://doi.org/10.1016/j.vaccine.2018.07.002>

Mulherkar, R. H. The Manmade Perils of Ambiguous Sexuality. *Drexel University 33rd Anthology*, 9:77-80. 2016.

- First place in Drexel Publishing Group Writing Competition

PODCASTS

Mulherkar, Ria, Founder. *Spoonful of Sugar* – Medical Podcast. 2019 – Present.

Website: www.spoonfulofsugar.org

Podcast: <https://podcasts.apple.com/us/podcast/introduction/id1476326270?i=1000446749962>

- Founder of *Spoonful of Sugar* medical podcast which reviews important medical topics at the level of USMLE Step 1 in an engaging, question-and-answer based format.
- Hosted over 30 episodes, continues to produce episodes and lead an expanding team of medical students.

COMMUNITY SERVICE

Whosoever Gospel Mission, Philadelphia, PA

September 2017 – April 2018

- Quarterly health screening clinic at the Whosoever Gospel Mission to interview, check vitals, and discuss ongoing health concerns with recovering drug addicts and formerly homeless men staying at the site
- Administered flu shots during winter clinic
- New clinic initiated by the LabakCare Student Organization (see below, Leadership Experience)

Arc of Philadelphia, Philadelphia, PA

October 2016 – April 2017

- Administer healthcare information sessions for adults with intellectual disability on topics such as healthy eating, exercise, and dental hygiene

Old Pine Community Center, Philadelphia, PA

October 2013 – June 2016

- Weekly service at after-school community center in underserved neighborhood tutoring elementary school children in various subjects

VOLUNTEER EXPERIENCE

Drexel University College of Medicine Health Outreach Projects, Philadelphia, PA

September 2016 – April 2018

- Volunteer at local clinics based in underprivileged neighborhoods serving both adult and pediatric populations; interview patients, obtain vitals, and present to attending physician

WORK EXPERIENCE

Author, USMLE Scholar-Rx Qmax Project, Philadelphia, PA

May 2019 – Present

- Write original vignette-based practice questions encompassing various disciplines (e.g. Hematology/Oncology, Endocrinology, Biochemistry) for USMLE-Rx question bank
- Provide detailed answer explanations for correct answer and distractors

Author, USMLE Scholar-Rx Curriculum Project, Pittsburgh, PA

October 2018 – April 2019

- Write learning bricks about Biochemistry and Metabolism to teach medical students foundational concepts geared towards preparing for the USMLE Step 1
- Create original vignette-based practice questions with detailed answer explanations

LEADERSHIP POSITIONS

Academic Coach, Office of Student Affairs, Drexel University College of Medicine, Philadelphia, PA

August 2017 — Present

- Tutor medical students one-on-one and in small groups for year 1 and 2 courses, 3rd year shelf exams, as well as USMLE Step 1 and Step 2

Editor in Chief, The Tincture, Literature and Arts Journal, Philadelphia, PA

October 2017 — October 2018

- Collect literary submissions for Drexel University College of Medicine's literature and arts journal
- Review submissions in collaboration with literary team, select works for publication, and edit works in conjunction with authors and literary team
- Served as Deputy Literary Editor from April 2017 – October 2017

Board Member, LabakCare Student Organization, Philadelphia, PA

October 2016 – Present

- Organize fundraising events for LabakCare Student Organization, a division of the LabakCare Organization dedicated to providing healthcare service in local underprivileged communities as well as healthcare missions to underserved countries such as Nigeria and Haiti
- Volunteer in homeless shelters and local health screening clinics

Co-Founder & Vice President, Impulse, Student Dance Group, Philadelphia, PA

September 2016 — February 2018

- Student-run group that engages in dance forms from diverse cultures and explores the role of dance in wellness and community engagement
- Perform at annual Pediatric Aids Benefit Concert (annual benefit for Dorothy Mann Center for Pediatric and Adolescent HIV at St. Christopher's Hospital for Children)

EXTRACURRICULAR ACTIVITIES

HIPAAcrits – Music Group, Philadelphia, PA

July 2018 – Present

- Singer, pianist, and guitarist in a music group which performed at annual Pediatric Aids Benefit Concert

Medical Spanish Course, Philadelphia, PA

September 2017 – April 2018

- Certified in Medical Spanish via school-offered extracurricular course

Food Committee, Pediatric AIDS Benefit Concert, Philadelphia, PA

November 2016 – February 2017

- Obtain food donations from local restaurants to cater Drexel University College of Medicine's annual benefit for Dorothy Mann Center for Pediatric and Adolescent HIV at St. Christopher's Hospital for Children

Drexel University College of Medicine Journal Club, Philadelphia, PA

August 2016 – Present

- Discuss recent articles in medicine and clinical research to learn more about clinical and epidemiological methods and statistics

Drexel University College of Medicine Medical Humanities Program, Philadelphia, PA

August 2016 – Present

- Acquire greater understanding of the human condition and the human experience of illnesses through humanities electives such as Creative Writing and the Literature & Medicine Book Club
- My final project is a collection of poems entitled *Uncharted* – based on experiences from my 3rd year clerkships

PROFESSIONAL ORGANIZATIONS

American Brachytherapy Society, 2021-Present

American Society for Radiation Oncology, Member, 2018-Present

American Medical Association, Member, 2016-Present

Pennsylvania Medical Society, Member, 2016-Present

INTERESTS

Piano ♦ Guitar ♦ Singing ♦ Reading ♦ Writing ♦ Cooking ♦ Dancing ♦ Exercising ♦ Knitting