Cullen M. Lilley, MD, MS, MA, MB(ASCP)

Resident Pathologist | Educator | Bioethicist Los Angeles, CA 90095

<u>Education</u>		
Additional Training		
Work Experience		
Research Experience		
Teaching Experience		
Books/Book Chapters		
Publications		

Works in Progress
Invited National/Int. Lectures
Major Presentations
Poster Presentations
Leadership
Non-Peer Reviewed Work
Editorial Duties

Professional Affiliations
Certifications/Licensure
Local/Virtual Teaching
Civic Activities
Grants
Awards

EDUCATION

Loyola University Chicago Stritch School of Medicine | Maywood, IL

May 2023

Doctor of Medicine

Cum laude, honors in research, $A\Omega A$ inductee

Loyola University Chicago Neiswanger Institute for Bioethics | Chicago, IL December 2022

Master of Arts in Bioethics and Health Policy

University of Florida | Gainesville, FL

August 2019

Master of Science in Medical Microbiology and Biochemistry

Loyola University New Orleans | New Orleans, LA

May 2017

Bachelor of Science in Biological Sciences Summa cum laude, honors in biology

Loyola University New Orleans | New Orleans, LA

May 2017

Bachelor of Music in Vocal Music with Elective Studies Summa cum laude, endowed music scholar

ADDITIONAL TRAINING

University of California Los Angeles | Los Angeles, CA Anatomic and Clinical Pathology Residency Chief Resident, Ombuds June 2023 - June 2027

Jan 2025 – Present

Center for the Integration of Research Teaching, & Learning | Madison, WI Certificate, Evidence-Based STEM Education

The Pathologist Magazine | Knutsford, UK Fellow in Digital Pathology Communications July 2021 - July 2022

WORK EXPERIENCE

Microbiologist II, Centers for Disease Control and Prevention and IHRC, Inc., Enteric Diseases Laboratory Branch, Atlanta, GA

June 2018 – June 2019

- Performed CLIA validated molecular and phenotypic microbiologic identification and subtyping of enteric bacteria including *Escherichia*, *Shigella*, *Salmonella*, *Vibrio*, *Yersinia*, *Listeria*, and other clinically relevant *Enterobacteriaceae*.
- Trained new laboratory personnel in genomic, molecular, and computation techniques used in the enteric disease laboratories.
- Attended meetings with federal, state, and local public health stakeholders to guide the laboratory work and offer advice and assistance where needed.

Associate Microbiology Technician, WuXi AppTec and Kelly Scientific, General Microbiology
Department, Marietta, GA

June 2017 – June 2018

- Perform laboratory microbial identification for patient samples, investigational studies, and environmental sterility monitoring using phenotypic, MALDI-TOF, genetic, and microscopic analyses.
- Update SOPs using new data and extant literature publications, train personnel, review reports, and manage the working schedule for the laboratory.

RESEARCH EXPERIENCE

University of California Los Angeles | Los Angeles, CA

November 2022 - Present

PI: Yuna Kang, MD; Sarah Dry, MD

- Investigating the career trajectories and specialty choices of post-junior/sophomore pathology fellows to evaluate the program's effectiveness in recruiting medical students into pathology.

PI: Gregory Gates, DO; Diana B. Kneiber, MD

 Perform a retrospective examination of cases of squamoid eccrine ductal carcinoma to determine clinical outcomes in these patients and describe the range of histopathologic presentations on biopsy and excision specimens.

PI: Jonathan E. Zuckerman, MD, PhD

- Examined the clinicopathologic features associated with tubulovenous fistulae in non-neoplastic kidney specimens to determine their significance clinically and survey their histopathologic spectrum.

PI: Shangxin Yang, PhD, D(ABMM), MLS(ASCP)

- Review cases of microbiological identifications from next-generation sequencing with unexpected, novel, or clinically pivotal results to determine the utility of advanced molecular methods in the identification of pathogens in the clinical setting.

Misc PIs: Jeffrey Goldstein, MD; George Sarantopoulos, MD; Gregory Gates, DO; Sepehr Hamidi, MD

- Case reports and case series

Loyola University Medical Center | Maywood, IL

November 2019 - May 2023

Medical Student Researcher, Pathology

PIs: Maria M. Picken, MD, PhD; Vijayalakshmi Ananthanarayanan, MBBS, MD; Kamran Mirza, MD, PhD; Xiuxu Chen, MD, PhD; Amanda Harrington, PhD, D(ABMM)

- Performed clinical research on samples from the pathology department archives including identifying cases, performing additional testing, maintaining a database, chart reviewing, performing statistical analysis, visualizing data, and making illustrative summaries.
- Subspecialties: medical microbiology, hematopathology, GI pathology, head and neck pathology, and medical renal pathology
- Skills: histopathologic analysis, clinicopathologic correlation, statistics, data visualization, manuscript writing, case report writing, literature review

Loyola University Chicago | Maywood, IL

Nov 2020 - Dec 2022

Graduate Bioethics Researcher

- Completed a comprehensive analysis of policies affecting access to molecular pathology.
- Identified key factors contributing to the understudied area of access to pathology/diagnostics in the United States.
- Skills: literature review, thought experimentation, legal analysis, policy analysis, manuscript writing, response to peer review, argument rebuttal/defense

PathElective.com | Chicago, IL

April 2020 - Present

Researcher, Co-founder, Microbiology Faculty

PI: Kamran Mirza, MD, PhD

- Develop, test, and assess the effectiveness of a virtual pathology elective through online learning modules, knowledge-based assessments, and utility surveys.
- Skills: website design, learner analysis, user interface, learning objective writing, statistics

Centers for Disease Control and Prevention | Atlanta, GA

June 2018 - June 2019

Microbiologist II, Enteric Bacteriology and Molecular Microbiology

PIs: Cheryl Tarr, PhD; Zuzana Kucerova, MD, PhD

- Analyzed phenotypic and genomic characteristics of rare *Listeria* spp. and characteristics that could be associated with more severe clinical outcomes.
- Investigated molecular characterization and phylogenetics of *Enterobacteriales* whole genomes and development of a core gene multilocus analysis platform.
- Skills: whole genome sequencing, MALDI-TOF, full biochemical phenotypic analysis, bioinformatics, wgMLST clustering, BioFire multiplex PCR, microscopy, gel electrophoresis, PCR, BSL3 safety precautions

Loyola University New Orleans | New Orleans, LA

May 2015 - May 2017

Research Assistant, Molecular Genetics and Biochemistry

PI: Kimberlee S. Mix, PhD

- Molecularly characterized the temporal and spatial gene expression patterns of proinflammatory cytokines and transcription factors in the hTNF α transgenic mouse model for rheumatoid arthritis.
- Skills: tissue culture, RNA extraction, RT-qPCR, gene expression panels, gel electrophoresis, luciferase assay, lentiviral transduction, histology, immunohistochemistry, data visualization, manuscript drafting

TEACHING EXPERIENCE

Resident Physician, Pathology, UCLA DGSOM

August 2023 - Present

- Serve as the point of contact for select internal and external medical students during their pathology elective month. Provide education on pathology as a career, informal didactic information about the service on which they are assigned, sources for further study/learning, and feedback on their progress through the elective.

Clinical Microbiology Faculty, Microbiology, PathElective

April 2020 - Present

- Designed and presented a five-part massive open online course (MOOC), wrote and graded exams, elicited feedback on and adapted flow of course design.
- Courses taught: molecular microbiology, introduction to microbiology

Step 1 Stritch Group Facilitator, Loyola University Chicago

Sept 2022 - May 2023

 Led a group of 11 students through discussions of challenging/commonly tested materials by organ system. Prepared lesson plans, exam questions, and lectures for each session.

Medical Student Tutor, Loyola University Chicago

Aug 2020 - May 2023

- Helped students in various classes in the pre-clinical curricula, review topics, answer questions, and develop sustainable study plans to enhance learning and retention.
- Courses tutored: molecular cell biology and genetics, physiology, immunology, microbiology, Step 1 preparation, and general pathology

Peer Tutor/Teaching Assistant, Loyola University New Orleans May 2014 - May 2017

- Prepared lesson plans for group sessions, helped students one-on-one, and edited scientific papers for college-level courses.
- Facilitated one-on-one instruction and prepared laboratories for class.
- Courses tutored: general chemistry, organic chemistry, general biology, science labs

BOOKS & BOOK CHAPTERS

Lilley CM, Seth N, Gupta A (eds.). Rhode RE, Yee R, Mushtaq J, Pinedo Pichilingue A, Menon A, Gill HK, Isidan A, Anaya I, Miller LJ, Ahmad, A, Agarwal AN, and Mehrotra H. Ace the Boards: A Concise Review of Clinical Microbiology. 1st edition. June 2024.

Mehta V, Lilley CM, Picken MM. Adenovirus. In "Stains and CD Markers." *Pathology Outlines*. April 2023. https://www.pathologyoutlines.com/topic/stainsadenovirus.html

Lilley CM, Kanakis CE, Harrington AT. Intro to Clinical Microbiology. In *PathElective*. Association of Pathology Chairs. July 2022. https://www.pathelective.com/micro-home

Lilley CM. Molecular Microbiology. In *PathElective*. Association of Pathology Chairs. July 2022. https://www.pathelective.com/mo-micro-home

Gupta A (ed.). Sharma N, Sakria P, Kannan S, **Lilley CM**, Cox B, Nomani L, Sonawane S. Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. 1st edition. July 2021.

- Sharma N, Sivaraj K, Lilley CM, Kale KM. "Infectious Causes of Lymphadenitis" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.
- Skaria P, Lilley CM, Gupta A. "Constitutional Granulocytic Disorders" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.
- Nomani L, **Lilley CM**. "Non-neoplastic disorders of the platelets" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.
- Nomani L, Lilley CM. "Thrombocytosis" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.
- Laxmi DA, Lilley CM, Gupta A. "Infections of Peripheral Blood and Bone Marrow" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.
- Laxmi DA, Lilley CM. "Miscellaneous Non-Neoplastic Disorders and Conditions of the Blood and Bone Marrow" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.
- Nguyen L, **Lilley CM**. "Fluid Specimens" in Gupta A (ed.) Ace the Boards: Non-Neoplastic Hematopathology and Coagulation. July 2021.

PUBLICATIONS

- **Lilley CM** and Zuckerman JE. Microscopic Tubulovenous Communications in Nonneoplastic Kidneys: A Single-Center Case Series and Review of the Literature. *Kidney Medicine*. (accepted)
- **Lilley CM**,* Mirza KM,* Hill KA. The State of Pathology Student Interest Groups in Allopathic and Osteopathic Medical Schools in the United States: Current Practices and Opportunities for Improvement. *Archives of Pathology and Laboratory Medicine*. https://doi.org/10.5858/arpa.2024-0279-oa. PMID: 40031955.
- Bronson A, Zhu J, Genevieve C, **Lilley CM**, Mirza KM. Clinicopathologic Insights and Molecular Oncogenesis: Understanding Epstein-Barr Virus Induced B-Cell Lymphoproliferations. *International Journal of Surgical Pathology*. https://doi.org/10.1177/10668969241266933. PMID: 39166368.
- Plummer MM, Mirza KM, **Lilley CM**, and Eng N. Implementing PathElective as An Organized Means of Supplementing Pathology Education in An Osteopathic Medical School The New York Institute of Technology College of Osteopathic Medicine Experience. *Academic Pathology*. https://doi.org/10.1016/j.acpath.2024.100122. PMID: 38812825; PMCID: PMC11134534.
- Tannenbaum AP,* Lilley CM.* Perspectives from Two Recent Medical School Graduates on Exposure to Pathology During Undergraduate Medical Education: A Narrative Inquiry. Academic Pathology. October 4, 2023. https://doi.org/10.1016/j.acpath.2023.100094. PMID: 37840650; PMCID: PMC10568268.
- Lilley CM, Arnold CA, Arnold M, Booth AL, Gardner JM, Jiang X, Loghavi S, and Mirza KM. Virtual Pathology Elective, Real Education: The PathElective.com Experience as a Model for Novel Pathology Pedagogy and a Primer for Curricular Evolution. *Archives of Pathology and*

- Laboratory Medicine. August 28, 2023. https://doi.org/10.5858/arpa.2022-0259-oa. PMID: 37638521.
- Stone M, Lilley CM, Tang G, Loghavi S, and Mirza KM. Phenotypic Clues That Predict Underlying Cytogenetic/Genetic Abnormalities in Myeloid Malignancies A Contemporary Review. Cytopathology. July 31, 2023. https://doi.org/10.1111/cyt.13280. PMID: 37522274.
- Bronson AS, **Lilley CM**, Zleczewski M, Mirza KM. Polyamine Catabolism is Concentrated in Tumor-Associated Histiocytes in Diffuse Large B-Cell Lymphoma and Classic Hodgkin Lymphoma. *Pathol Res Pract*. June 17, 2023. https://doi.org/10.1016/j.prp.2023.154627. PMID: 37343378.
- **Lilley CM**, Borys E, and Picken MM. Adenovirus-Associated Acute Interstitial Nephritis with Graft Survival and Novel Follow-Up Biopsy Findings Including Karyomegaly: A Case Series. *Cureus Journal of Medical Science*. May 2, 2023. https://doi.org/10.7759/cureus.38452. PMID: 37273386; PMCID: PMC10234624.
- **Lilley CM**, Picken MM. Novel Histopathologic and Ultrastructural Findings in Renal Allografts from Patients with Size and Age Mismatches: A Case Series. *Cureus Journal of Medical Science*. February 1, 2023. https://doi.org/10.7759/cureus.34510. PMID: 36874348; PMCID: PMC9984201
- Yasuda M, Chiodo C, **Lilley CM**, Mehotra S, Ananthanarayanan V, Ziegler A, Thorpe E. Relationship Between Worst Pattern of Invasion and Extranodal Extension in Oral Tongue Squamous Cell Carcinomas. *Head and Neck Pathology*. February 1, 2023. https://doi.org/10.1007/s12105-023-01531-3. PMID: 36723853.
- Lilley CM, Delille M, Mirza KM, and Parilla M. Toward a More Just System of Care in Molecular Pathology. *Milbank Quarterly*. December 1, 2022. https://doi.org/10.1111/1468-0009.12587. PMID: 36454130; PMCID: PMC9836258.
- McIntosh T, Kucerova Z, Katz L, **Lilley CM**, Rowe LA, Unoarumhi Y, Batra D, Burnett E, Smikle M, Lee C. Genome Sequences of Hemolytic and Non-hemolytic Listeria innocua strains from Human, Food and Environmental Sources. *Microbiology Resource Announcements*. November 29, 2022. https://doi.org/10.1128/mra.00723-22. PMID: 36445150; PMCID: PMC9753683.
- Grech J, Lilley CM, Martinbianco E, Ding X, Mirza KM, and Chen X. Nodular Histiocytic/Mesothelial Hyperplasia Mimicking Mesenteric Metastasis. *Cureus Journal of Medical Science*. May 13, 2022. https://doi.org/10.7759/cureus.24971. PMID: 35698687; PMCID: PMC9188811.

- Martinbianco E, Lilley CM, Grech J, Mirza KM, Chen X. Heterotopic Mesenteric Ossification with Trilineage Hematopoiesis. *Cureus Journal of Medical Science*. April 30, 2022. https://doi.org/10.7759/cureus.24620. PMID: 35664416; PMCID: PMC9150764.
- **Lilley C**, Alarcon A, Ngo M, Araujo J, Marrero L, and Mix KS. NFκB and orphan nuclear receptor NR4A2 expression patterns during arthritis progression in hTNF-alpha transgenic mice. *Frontiers in Pharmacology*. April 20, 2022. https://doi.org/10.3389/fphar.2022.835697 PMID: 35529439; PMCID: PMC9067626.
- **Lilley CM**, Grech J, Martinbianco E, Chen X. Human Intestinal Spirochetosis Incompatible with Dysplastic Adenomatous Epithelium. *Cureus Journal of Medical Science*. March 14, 2022. https://doi.org/10.7759/cureus.23140. PMID: 35444914; PMCID: PMC9009974.
- Ponnatt TS, Lilley CM, Mirza KM. Hemophagocytic Lymphohistiocytosis. *Arch Pathol Lab Med.* August 4, 2021. https://doi.org/10.5858/arpa.2020-0802-RA. PMID: 34347856.
- Mirza KM, Lilley CM, Upton MP. Is It Time for a Broader Call to Learn the Language of Pathology and Laboratory Medicine? *Laboratory Medicine*. September 1, 2021. https://doi.org/10.1093/labmed/lmab017. PMID: 34125194.
- **Lilley CM**, Mirza KM. Critical role of pathology and laboratory medicine in the conversation surrounding access to healthcare. *Journal of Medical Ethics*. April 16, 2021. http://dx.doi.org/10.1136/medethics-2021-107251. PMID: 33863832.
- Lilley CM, Arnold CA, Arnold M, Booth AL, Gardner JM, Jiang X, Loghavi S, and Mirza KM. The Implementation and Effectiveness of PathElective.com. *Academic Pathology*. January 2021. https://doi.org/10.1177/23742895211006829. PMID: 33884295; PMCID: PMC8040569. (open access fee awardee)

INVITED NATIONAL/INTERNATIONAL LECTURES

- Lilley CM and Rohde RE. Microbial Journeys: Navigating Career Pathways from Lab Bench to Leadership. American Society for Microbiology: Microbe 2025. June 19-23, 2025. (Profession of Microbiology, Invited Session)
- Miller L, Lilley CM, Teeter B. Stronger Together: Reimagining the Practice of Pathology and Laboratory Medicine in the Evolving Healthcare Landscape. American Society for Clinical Pathology: KnowledgeLab. April 7-8, 2025. (General Session, Invited Lecture)
- **Lilley CM** and Mirza KM. Bringing the Gap Between UME and GME: Developing PathElective to Address a Need. Association of Pathology Chairs. July 22, 2024. (Invited Lecture)
- Lilley CM and Mirza KM. Bioethics in the Lab: A Primer to Bioethical Inquiry in Pathology and Laboratory Medicine. American Society for Clinical Pathology. October 20, 2023. (Invited Lecture)

- Mirza KM and Lilley CM. Bioethics in the Laboratory: The Intersection of the Medical Laboratory and Society. American Society for Clinical Pathology: KnowledgeLab. March 1, 2023. (Management and Leadership, General Session, Invited Lecture)
- Lilley CM and Kanakis CE. Social Media 103: Ethics, Law, and Professionalism. American Society for Clinical Pathology: Road to Chicago. August 24, 2022. (Pre-meeting Session, Invited Lecture)

MAJOR RESEARCH PRESENTATIONS

- Lilley CM, Quintanilla-Arteaga A, Mirza KM, Ware AD, White MJ. Tackling Diversity, Equity, and Inclusion in Pathology Education with Web-Based Platforms: PathElective's Growing Role in Battling Socioeconomic Inequities in Pathology. United States and Canada Academy of Pathology. March 13, 2023. (Platform)

 https://www.laboratoryinvestigation.org/article/S0023-6837(23)00029-6/pdf
- Lilley CM, Arnold M, Arnold CA, Booth AL, Gardner JM, Jiang X, Loghavi S, and Mirza KM. Web-Based Pathology Education Is an Effective Curricular Adjunct: The PathElective.com Experience as a Model for Novel Pathology Pedagogy. United States and Canada Academy of Pathology. March 23, 2022. (Platform) https://www.nature.com/articles/s41374-022-00751-5.pdf
- Lilley CM and Mirza KM. Toward a More Just System of Care in Molecular Pathology.

 American Society for Bioethics and Humanities Annual Conference. October 13-16, 2021.

 (Paper Presentation)
- Lilley CM and Mirza KM. An Innovative Approach to Global Pathology Education: PathElective.com Experience. Group on Educational Affairs (GEA) Regional Spring Meeting. April 20-22, 2021. (Oral Presentation)

POSTER PRESENTATIONS

- Yasuda M, Regmi A, Lilley C, Mehta M, Thorpe E, Mehrotra S, Ziegler A, Ananthanarayanan V. Cutaneous Squamous Cell Carcinoma with Metastasis to the Parotid: A Single-Center Retrospective Histopathological Observational Study. American Academy of Otolaryngology. October 11-14, 2025. (Scientific Oral Presentation)
- Mo J, Lilley CM, Gates GA. The Spectrum of Round Cell Sarcomas Involving the Skin. American Society for Dermatopathology. November 4-6, 2024. (Short Oral Presentation)
- Lilley CM, Mo J, Sarantopolous G. Primary Cutaneous CD8+ Aggressive Epidermotropic Cytotoxic T-cell Lymphoma (PCAETL) and its Indolent Mimics. American Society for Dermatopathology. November 4-6, 2024. (Poster)
- **Lilley CM** and Zuckerman JE. Microscopic Tubulovenous Fistulae in Nonneoplastic Kidneys: A Single-Center Case Series. College of American Pathologists. October 19-22, 2024. (Poster, Top 5 Junior Member Abstract Program Award)

- **Lilley CM** and Goldstein JD. Systemic Sweet Syndrome Recurrence in Lung Allograft: Autopsy Findings from First Reported Case. American Society for Clinical Pathology. September 3-6, 2024. (Poster, Blue Ribbon Finalist)
- Plummer MM, Mirza KM, Lilley CM, and Eng N. Implementing PathElective as An Organized Means of Supplementing Pathology Education in An Osteopathic Medical School The New York Institute of Technology College of Osteopathic Medicine Experience. Association of Pathology Chairs. July 21-24, 2024. (Short Presentation)
- Arnason T, Lilley CM, Adams, and Mirza KM. Assessing the Impact of Race, Sexual Orientation, and Gender Identity on USMLE Style Questions: Preliminary Results of a Randomized Controlled Trial. American Society for Clinical Pathology. October 18-20, 2023. (Blue Metal Finalist, Oral Presentation Winner, Poster)
- Hagen ES, Quintanilla-Arteaga AS, Lilley CM, Mirza KM. The Informative & Virtuous Role of Autopsy Observation Experiences in Medical Student Education. American Society for Clinical Pathology. October 18-20, 2023. (Blue Metal Finalist, Poster)
- Regmi A, Lilley CM, Yashuda M, Thorpe E, Ziegler A, Mehrotra S, Ananthanarayanan V. Cutaneous Squamous Cell Carcinoma with Metastasis to the Parotid: A Single-Center Retrospective Histologic Observational Study. College of American Pathologists. October 7-10, 2023. (Poster)
- Lilley CM, Rodriguez ED, Lor MR, Levins PC, and Sarantopoulos GP. Suspected Protracted Calciphylaxis in a Patient with Progressive Lower Extremity Pain. American Society for Dermatopathology. October 2-4, 2023. (Poster)
- **Lilley CM** and Picken MM. Case Series of Adenovirus-Associated Acute Interstitial Nephritis with Graft Survival. United States and Canada Academy of Pathology. March 15, 2023. (Poster)
- **Lilley CM** and Picken MM. Case Series of Donor-Recipient Renal Transplant Mismatch: Looking Beyond the Size? American Society for Nephrology. November 15, 2022. (Poster)
- Lilley CM, Quintanilla-Arteaga A, Mirza KM, Ware AD, White MJ. The Role of Web-Based Platforms as a Novel Approach to Tackling Diversity, Equity, and Inclusion in Pathology Education The PathElective.com Experience. American Society for Clinical Pathology. September 7, 2022. (Poster)
- Nam J, Lilley CM, Patel P. Formal Implementation of Mentorship Families in Undergraduate Medical Education. Association for Surgical Education. May 3, 2022. (Poster)
- **Lilley CM** and Mirza KM. Virtual Pathology Elective, Real Education The PathElective Experience as a Model for Novel Pathology Pedagogy. Central Group on Educational Affairs Annual Meeting. March 30, 2022. (Poster)

- Nam J, Codispoti N, Lilley CM, Patel P. Effect of Longitudinal Mentorship Program in Students' Interest in Surgery. Central Group on Educational Affairs Annual Meeting. March 30, 2022. (Poster)
- Lilley CM and Mirza KM. Providing Molecular Diagnostic Training via PathElective.com. *Journal of Molecular Pathology*. November 18, 2021. (AMP US Trainee Travel Award Winner, Poster) https://www.jmdjournal.org/article/S1525-1578(21)00315-9/pdf
- Lilley CM, Marin MJ, Demas C, Wiencek J, Kanakis CE, Fu L, Wolniak K, Hermelin D, Scordino T, Thomas C, Mirza K. The Utility of PathElective.com as a Curricular Adjunct in Laboratory Medicine Education. *American Journal of Clinical Pathology*. October 28, 2021. (ASCP Travel Award Winner, Poster)

 https://academic.oup.com/ajcp/article/156/Supplement_1/S36/6413090
- **Lilley CM** and Mirza KM. The Critical Role of Pathology and Laboratory Medicine in the Conversation Surrounding Access to Healthcare. American Society for Bioethics and Humanities Annual Conference. October 13-16, 2021. (Flash Presentation)
- Lilley CM and Mirza KM. Using the #micromeded Initiative to Share Microbiology Infographics and Improve Your Professional Presence on Social Media. World Microbe Forum. June 23, 2021. (Poster)
- Lilley CM, Velazquez IG, Mirza KM, Harrington AT. Delivering Clinical Microbiology Education Online via Pathelective.com. World Microbe Forum. June 23, 2021. (Poster, ASM Student and Postdoctoral Travel Awardee)
- **Lilley C** and Mirza K. The Utility of PathElective.com in Pathology and Laboratory Education. Clinical Laboratory Educators Conference. American Clinical Laboratory Educators. February 26, 2021. (Poster)
- Lilley CM, Hamnvag HM, McHenry A, Ahmed A, Arnold C, Mirza KM. The Utility of Social Media in Supplementing Traditional Pathology Education during Medical Student Elective. College of American Pathologists. October 12, 2020. (Medical Student Travel Award Winner, Poster)
- **Lilley C**, Bauer M, Grajales P, Parada JP, and Harrington A. Prevalence of *Candida auris* from Nares of Select Inpatient Populations in a Large Tertiary Care Medical System. American Society for Microbiology: Public Health Microbiology. June 21, 2020. (Poster) https://virtualmeeting.ctimeetingtech.com/asm2020/attendee/eposter/poster/2555
- McIntosh T, Kucerova Z, Lilley C, and Tarr C. Genetic Diversity of *Listeria innocua*: A Genotypic Characterization of Human Isolates. American Society for Microbiology: Public Health Microbiology. June 20, 2020. (Poster)

Lilley C, Kucerova Z, McIntosh T, Conrad A, Hughes M, Diebold k, Watkins LF. *Listeria monocytogenes* from non-sterile sites – subtyping data. FEMS Microbiology. International Symposium on Problems of *Listeria* and Listeriosis. September 25, 2019. (Poster)

Kucerova Z, McIntosh T, Derado G, Lilley C, Stroika S, Conrad A, Tarr C. Genetic diversity of human clinical isolates of *Listeria monocytogenes* in the United States as assessed by MLST. FEMS Microbiology. International Symposium on Problems of *Listeria* and Listeriosis. September 25, 2019. (Poster)

Araujo J, Lilley C, Mix K. Nuclear Receptor 4A2 is Selectively Upregulated in the Human TNF-alpha Transgenic Model of Rheumatoid Arthritis. American College of Rheumatology. (Poster) http://acrabstracts.org/abstract/nuclear-receptor-4a2-is-selectively-upregulated-in-the-human-tnf-alpha-transgenic-model-of-rheumatoid-arthritis/

LEADERSHIP

CAP Resident Forum Executive Committee

2024 - Present

Member-at-Large

- Assists in recruitment of Junior Members, communicating the activities of the Residents Forum to the Delegates, facilitates communication between the CAP and its Junior Members

ASCP Commission on Continuing Professional Development

2024 - Present

Resident Commission Member

- Serve as the resident member on the commission aiming to determine overall strategy for the programing ASCP offers to meet the needs of pathologist and laboratory professional members.

UCLA Pathology Residency Program

2023 - Present

Social Media Co-Coordinator

- Create, posted, and moderated social media content across multiple platforms to promote residency program goals.

ASCP Social Media Committee

2021 - Present

Resident Member

- Serve as a member of the committee responsible for furthering ASCP's mission and engaging with members through the use of social media.

ASCP Patient Champions

2021 - Present

Steering Committee Member

- Serve as a member of the governance committee and work closely with the education and advocacy working group to advance advocacy efforts through the use of patient stories.

CAP RFEC Virtual Programing Action Group

2023 - 2024

- Generate a virtual programing schedule for CAP junior members, including medical student, resident, and fellow members

- Develop strategies for marketing and disseminating information about CAP's virtual programing seminars and panels to ensure its members
- Engage with CAP members to help them share their knowledge and experience with the CAP junior members

UCLA Health Ronald Raegan Medical Center Ethics Committee

2023 - 2024

Resident Member

- Participate in ethics committee meetings involving the Ronald Reagan UCLA Medical Center, including challenging ethics consultations, hospital policy review, and professionalism issues.
- Vote in pertinent ethics committee decisions.

UCLA Graduate Medical Education Committee

2023 - 2024

Pathology Resident Representative

- Attend monthly GMEC meetings, provide a resident perspective, and bring any issues that might need attention from the committee.

CAP RFEC Medical Student Working Group

2022 - 2023

Medical Student Working Group Member

- Serve as a medical student member of the working group to attempt to help improve the medical student experience with CAP and at the CAP annual meeting.

APC Research Committee

2021 - 2023

Kinney Scholar Member

- Serve as a trainee member of the committee to bring a student perspective to the challenges/opportunities in attracting/retaining research trainees in pathology

USCAP Social Media Subcommittee

2022 - 2022

Trainee Member

- Serve as a member of the committee to help develop social media connectivity amongst its members and the pathology community to create an academic buzz.

International Pathology Collaborative

2020 - 2021

Founding medical student councilman

- Developed a website for the collaborative, worked with medical students from Australia, Philippines, India, and UK to develop resources for medical students and ways for students to connect with and learn from the pathology community.

SCOPE Pathology Interest Group

VP of Outreach
President
2022 – 2023
2020 – 2022

- Initiated a department-wide autopsy shadowing initiative including implementation of an IRB-approved student survey to assess educational value and student satisfaction.
- Organized numerous education and social events including three molecular pathology talks, an art-in-pathology art gallery, a tour of the morgue for medical students, and a pathology education picnic.

 Work closely with the Loyola Chicago undergrad campus, the Stritch School of Medicine, and local high schools to improve pathology's reach among students and trainees.

Virtual PathSIG 2020 – 2021

Vice president of academic engagement

- Developed and maintained the PathSIG website, founded the PathSIG travel fund which awards one medical student per year with the funds to attend a pathology meeting.

NON-PEER REVIEWED WORK

The Pathologist: Visual Aids in Medical Education: How to Captivate the Modern Medical Student with Unique and Concise Illustrations. 7/14/22. https://thepathologist.com/outside-the-lab/visual-aids-in-medical-education

MedPage Today: Reimagining the Step 1 Exam Dedicated Study Period. 1/8/22. https://www.medpagetoday.com/opinion/second-opinions/96562

Journal of Medical Ethics Blog: How the Laboratory and the Pathologists Affect Access to Care. 4/23/21. https://blogs.bmj.com/medical-ethics/2021/04/23/how-the-laboratory-and-the-pathologist-affect-access-to-care/

KevinMD: How Do We Address the Heterogeneity in Vaccine Hesitancy? 02/25/2021. https://www.kevinmd.com/blog/2021/02/how-do-we-address-the-heterogeneity-in-vaccine-hesitancy.html

KevinMD: COVID-19 Testing: Here's How We Gain the Public's Trust. 07/25/2020. https://www.kevinmd.com/blog/2020/07/covid-19-heres-how-to-gain-the-publics-trust.html

Doximity Op-Med: The Ethical Quandary of Communication During COVID-19. 07/16/2020. https://opmed.doximity.com/articles/establishing-communication-and-truth-in-the-age-of-the-internet? csrf attempted=yes

EDITORIAL DUTIES

PathElective: Editorial Board Member

ASCP Patient Champions: Scientific Review Panelist

Ad Hoc Peer Review:

2021 - Present
2022 - Present

- BMC Medical Informatics and Decision Making (2024)
- Cureus Journal of Medical Science (2023-2025)
- American Society for Bioethics and Humanities (2022)
- Clinical Chemistry and Laboratory Medicine (2021)

PROFESSIONAL AFFILIATIONS

College of American Pathologists

California Society of Pathologists

Association for Academic Pathology

United States and Canada Academy of Pathology

American Society for Clinical Pathology

Renal Pathology Society

CERTIFICATIONS/LICENSURE

Medical License - Medical Board of California

United States Medical Licensing Examination - National Board of Medical Examiners

- Step 1/2CK/3: PASS

Technologist in Molecular Biology - American Society Clinical Pathology - MB(ASCP)

Basic Life Saving - American Heart Association - BLS(AHA)

Basic Certification in Quality & Safety - Institute for Healthcare Improvement - BCQS(IHI)

LOCAL/VIRTUAL TEACHING/OUTREACH

LC	CAL/VIRTUAL TEACHING/OUTREACH			
UC	CLA David Geffen School of Medicine			
1.	Renal Histology/Pathology Lab	January 28-30, 2025		
2.	"Intro to Pathology"	January 28, 2025		
3.	"Fall 2024 Resident Roundtable"	September 10, 2024		
4.	Pulmonary Pathology Lab	April 23-24, 2024		
5.	"Applying to Pathology Residency"	March 28, 2024		
6.	"Fall 2023 Resident Roundtable"	October 30, 2023		
7.	"Pathology Resident Panel"	September 29, 2023		
UC	CLA Department of Pathology and Laboratory Medicine			
1.	"Pathology Residency Open House" (presenter)	September 10, 2024		
2.	"Pathology Meet and Greet - Session 2" (presenter)	September 14, 2023		
3.	"Pathology Meet and Greet - Session 1" (panelist)	August 24, 2023		
Ma	atchToPath			
1.	Residency Application Bootcamp	August 26, 2024		
Tr	ueLearn			
1.	"2025 Match Summit - Bonus Specialty Panel"	August 8, 2024		
Co	llege of American Pathologists – Resident Forum			
1.	"Finding Your Best Fit for Residency" (Spring Resident Forum)	March 24, 2024		
2.	"Maximizing Medical School for a Successful Pathology Match"	February 27, 2024		
3.	"The Path to Match"	August 9, 2023		
Vii	rtual Pathology Student Interest Group			
1.	"Fall 2023 Pathology Resident Panel"	November 11, 2023		
Lo	yola University New Orleans, Department of Biological Sciences			
1. "Delivery of Virtual Pathology Education with PathElective.com: Authority, Efficacy, and				
	Equitability"	March 14, 2023		

Loyola University Chicago Stritch School of Medicine, Pathology Student Interest Group

March 14, 2023

"Careers in Pathology and Laboratory Medicine"

1.	"What is Pathology?"	August 20, 2021
2.	"Ethical Considerations in the Application of AI in Diagnostics"	January 4, 2021
3.	"Molecular Pathology: The Future of Medical Diagnosis"	September 16, 2019

Loyola University Chicago Stritch School of Medicine, Division of Pediatrics Grand Rounds

1. "MicroMedEd: Foundations and Beyond" January 26, 2021

Loyola University Chicago Stritch School of Medicine, Medical Student Grand Rounds

1.	"Ethical Foundations for Physicians Participation in Health Policy"	November 30, 2020
2.	"Microbiology in Medical Education: Opportunities and Frontiers"	November 24, 2020

Walton High School, Biomedical Sciences STEM Program

1.	"Careers in Medicine and Biomedical Sciences"	March 25, 2021
2.	"Tying in Your Basic Science Knowledge with SARS-CoV-2 Biology"	March 19, 2021
3.	"Going Viral: Virology for High School Educators"	January 2019

CIVIC ACTIVITIES

Free, Open-Access Medical Educator—PathElective, MicroMedEd (05/2020-Present)

- Create educational content for students, available on social media and online.
- Manage course content for an online course with over 300 students

Scholarship Application Reviewer-ASCP

(7/2024)

- Serve as the academic reviewer for the Foundation Ring Scholarships

Big Sib-UCLA DGSOM Big Sib Program

(10/2023-06/2024)

- Provide one-on-one mentorship to assigned first year medical students with similar interests and/or background.

Pro Bono Web Developer—PathElective, Pathology Ethics, ICPath, PathRounds, Loyola Pathology, Pathology Central

(2020-2022)

- Support not-for-profit pathology organizations get a website up and running that looks beautiful and functions easily.

Curricular Innovations and Technology in Education (CITE)—Loyola Stritch School of Medicine—Maywood, IL

(2021-2023)

- Review curricular initiatives, propose changes to technologic components of the curriculum, and elicit sentiments from the student body

Interview Committee—Loyola Stritch School of Medicine—Maywood, IL (2020-2021)

- Serve as an interviewer for medical school applicants

- Formulate insightful questions and give written feedback to aid in final admissions decisions

Interim Researcher: COVID-19 Response—Loyola Medicine—Maywood, IL (03/2020-06/2020)

- Serve as a remote researcher combing through data in publications surrounding the diagnostic efficacy of the molecular test used in the microbiology laboratory at Loyola University Medical Center to diagnose COVID-19 and provide reports on findings.

Medical Student Mentor—New Life Volunteer Society—Chicago, IL (2020-2022)

- Provide one-on-one mentorship to a pre-medical student in the Chicago area through CV editing, mock interviewing, pre-med guidance, and counseling.

Volunteer Phlebotomist—Community Health Clinic—Chicago, IL (08/2019-12/2020)

- Serve as a phlebotomist for a free health clinic for an underserved neighborhood in West Chicago and help the laboratory/medical staff and process specimens

Admissions Tour Guide—Loyola University Chicago Stritch School of Medicine (2019-2023)

- Serve as an admissions representative to Stritch School of Medicine, give tours to perspective students and interviewees, and provide information to candidates

Healing Notes—Loyola University Chicago Stritch School of Medicine (2019-2020)

- Sing with a group for children in the Loyola Pediatric Hospitals on a weekly basis

Research Mentor, Guest Lecturer—Walton High School (2017-2019)

- Serve as a mentor for students that are interested in pursuing biomedical research in college and offer lectures in advanced science topics for STEM students

GRANTS

York Educational Research Grant

Leischner Department of Medical Education, Loyola University Chicago, 2022

 Project title: Testing Bias: The Hidden Influence of Race, Gender, and Identity in Medical Assessment

Society of '67 Pathology Trainee Project Grant in Health Services Research and Education, Association of Pathology Chairs, 2021

- Competitive grant awarded to projects aimed at researching pathology education initiatives led by trainees pursuing a career in pathology.
- Project Title: "PathElective as Curricular Adjunct"

NIH NIAID T35 Grant Recipient*

Loyola University Medical Center, 2020

- Competitive research grant for medical student summer research in infectious disease *canceled due to COVID-19 pandemic

AWARDS

CAP 2024 Top 5 Junior Member Abstract 2024

- Abstract title: Microscopic Tubulovenous Fistulae in Nonneoplastic Kidneys: A Single-Center Case Series.

The Pathologist Power List 2024 - Destined for Excellence, The Pathologist, 2024

- An annual celebration of the inspirational minds that underpin the medical laboratory. The "Destined for Excellence" category is devoted to rising stars in the field.

ASCP Blue Ribbon Finalist 2024

 Abstract title: Systemic Sweet Syndrome Recurrence in Lung Allograft: Autopsy Findings from First Reported Case

ASCP Oral Presentation Winner 2023

 Abstract title: Assessing the Impact of Race, Sexual Orientation, and Gender Identity on USMLE Style Questions: Preliminary Results of a Randomized Controlled Trial.

ASCP Blue Ribbon Finalist 2023

- Abstract title: The Informative & Virtuous Role of Autopsy Observation Experiences in Medical Student Education. American Society for Clinical Pathology.

St. Ignatius Award for Outstanding Contribution to Peer Teaching, Loyola Chicago, 2023

- An award given to one student annually who exemplifies positive and consistent contributions to the teaching/learning environment of their peers in the classroom, small group, laboratory, and/or clinical setting.

Alpha Omega Alpha Inductee, AΩA Honor Medical Society, 2023

- Students academically in the top 25% of their medical school class are selected based on performance in years 1-3, USMLE Step 1, strong clerkship performance, demonstrated leadership, professionalism, ethics, commitment to service, and outstanding achievements in clinical or basic science research.

The Pathologist Power List 2022 - First Contact, The Pathologist, 2022

- An annual celebration of the inspirational minds that underpin the medical laboratory. The "First Contact" category is devoted to celebrates outreach and advocacy in the field.

2022 CAP Distinguished Medical Student Award, College of American Pathologists and Loyola University Health Systems, 2022

 An award that recognizes distinguished medical students in their quests for pathology knowledge and engagement

30 Under 30, Pi Kappa Phi Fraternity, 2022

An award seeking to recognize young alumni for their accomplishments in life after college.

Medical Student Research Excellence Award, Pakistani-American Pathologists' Society

- An award that recognizes research excellence from a medical student in the field of pathology and laboratory medicine, conferred at the annual USCAP meeting.

ASCP 2021 Medical Student Gold Award, American Society for Clinical Pathology, 2021

- ASCP Medical Student Award honors medical students who have achieved academic excellence, demonstrated leadership ability, and shown a strong interest in the pathology profession. One student is chosen to receive the Gold Award.

CAP Pathology Advancement Award, College of American Pathologists, 2021

 An award that recognizes a person or team who demonstrates components of foresight, resolve, and untiring commitment to both evolutionary and revolutionary undertakings that advance the positioning of the pathologist in the house of medicine.

The Pathologist Power List 2021 - In the Spotlight, The Pathologist, 2021

- An annual celebration of the inspirational minds that underpin the medical laboratory. The In the Spotlight" category celebrates people who lead the way in outreach and advocacy.

AAB David Birenbaum Scholar, American Association of Bioanalysts, 2021

- A competitive scholarship awarded to current AAB regular members based on scholastic achievement, community service/involvement and financial need.

The Special Commendation of Outstanding Pathology Endeavors (SCOPE) Award, Loyola Medicine Department of Pathology, 2021

 The SCOPE award is a special recognition awarded to one Loyola medical student each year who has shown excellence in pathology-related extramural activities

Society of '67 Thomas D. Kinney Scholar, Association of Pathology Chairs, 2021

- Competitive travel award that provides an opportunity for medical students and pathology residents to familiarize themselves with career opportunities in pathology and the critical role of pathology in healthcare delivery, research, and education.

Article Processing Fee Award, Association of Pathology Chairs, 2020

- Competitive award given to articles with high ratings written by pathology trainees to pay for the fees associated with publishing in *Academic Pathology* as an open access article.
- Article title: "The Implementation and Effectiveness of PathElective.com"

Phi Kappa Phi Honor Society, University of Florida, 2019

- Academic honor society that recognizes the top 10% of graduate students

Rev. Percy A. Roy Award, Loyola University New Orleans, 2017

- Awarded to the student with the highest GPA in the College of Arts and Sciences

Rev. John H. Mullahy, S.J. Award, Loyola University New Orleans, 2017

Awarded to a graduating student with outstanding achievement in the sciences

Ruth and Lee Faust Award, Loyola University New Orleans, 2017

Awarded to a student with outstanding achievement in the biological sciences

Alpha Sigma Nu Jesuit Honor Society, Loyola University New Orleans, 2016

- Top 5% of each class is inducted based on scholarship and service

Phi Eta Sigma Honor Society, Loyola University New Orleans, 2016

- Top 20% of each class is inducted based on academic achievement

TRAVEL AWARDS

- AMP 2021 US-based Trainee Travel Award, Association for Molecular Pathology, 2021
- ASCP 2021 Travel Grant, American Society for Clinical Pathology, 2021
- **ASM Student and Postdoctoral Travel Award**, American Society of Microbiology and the Federation for European Microbiological Societies, 2021
- Registration Support Award, Association for Molecular Pathology, 2020
- Medical Student Travel Award Recipient, College of American Pathologists, 2020