

LSU Health Sciences Center Department of Pathology • Summer 2025

Chair's Report: University Medical Center Lab Grows Mushrooms

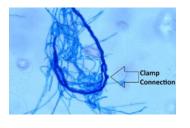
The basidiomycetes are club mushrooms containing a huge diversity of fungi but are only rarely encountered in the clinical mycology laboratory. These rarely cause human disease - but we have just identified a case of human infection by Schizo-



phyllum sp. in a patient with chronic, cavitary lung disease with long-standing non-tuberculous mycobacterial infection.

The finding of sterile hyphae, lacking structures of asexual conidia production, usually is a dead end in the mycology laboratory. The advent of Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry for mold identification at UMC has improved our game. Lactophenol aniline blue staining

of mycelium from a mold growing from a respiratory specimen produced evidence of clamp connections between hyphae segments (see photograph below). Clamp



connections are specialized structures found in the Basidiomycota fungi that help maintain the dikaryotic

state (two nuclei per cell) during hyphal growth. These hook-like projections form at the septa of hyphae, facilitating the coordinated division and distribution of nuclei during cell division. Not all Basidiomycetes have clamp connections, but their presence can be a helpful characteristic for identification.

We are now growing the mushroom using a banana peel culture as this mushroom enjoys bananas above all else. We should be able to replicate the fan-shaped structure of Schizophyllum found in nature.



- Schizophyllum species fan-shaped structure is instantly recognizable. This mushroom is found worldwide and is found commonly on rotting wood.
- Schizophyllum sp. is an uncommon human pathogen. Sinusitis and allergic bronchopulmonary mycosis are the two major diseases caused by Schizophyllum sp.
- Schizophyllum sp., also known as the split gill mushroom, is generally considered edible and is consumed in various parts of the world, particularly in Asia and Africa. It's known by different names in different regions and has a long history of use as both a food source and a medicinal mushroom.

Give Your Support

To make a monetary donation to the LSUHSC Pathology Residency Program, click here and select your designation as Pathology Residency Support Fund.

Thank you for your support!

Pathology Department Administrative Staff

Gordon L. Love, MD Department Head glove2@lsuhsc.edu

Tammy Waltz

Business Manager Twaltz@lsuhsc.edu

Elizabeth "Liz" Monnin

Residency Program Coordinator Esoroe@lsuhsc.edu

Follow us



LSU New Orleans Pathology Residency Program



LSUHSC-NO-Pathology



Isunopath

Dr. Gordon Love Publishes Fungal Pathology: A Diagnostic Atlas

FUNGAL

PATHOLOGY

A DIAGNOSTIC ATLAS

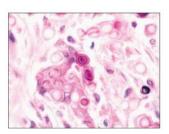
Dr. Gordon Love, Chair of the Department of Pathology, recently published the newly released <u>Fungal Pathology</u>: A <u>Diagnostic Atlas</u>, together with authors Drs. Mary K. Klassen-Fischer, Ronald C. Neafie, and Randall T. Hayden.

Dr. Love said that his friend and co-author, Randal

Hayden, MD, brought the authors together about four years ago to update the outdated atlas, *The Pathologic Diagnosis of Fungal Infections*, published in 1987 by the American Society of Clinical Pathology. The teams began by using the Armed Forces Institute of Pathology (AFIP) slide files.

Each author provided a unique perspective to the effort. Dr. Hayden is a microbiology pathologist at Saint Jude Medical Center in Memphis,

Tennessee. Dr. Mary Klassen-Fischer, was a specialist in infectious disease pathology at the AFIP prior to its closure in 2011. In addition to providing her collection of fungal photographs and materials, Dr. Klassen-Fischer and her colleague, Dr. Ronald Neafie, had ac-



f10.23 Lobomycosis. Prominent narrow isthmus between 2 budding fungal cells. (PAS,X1000)

cess to the exceptional consultation material in the warehoused AFIP files which are otherwise not readily available for study.

"As a pathologist who is board certified in medical microbiology and mycology, I made sure that our discussions reflected the many

fungal reclassifications made over the past decade and I contributed many additional photographs to provide a balanced mycology presentation," Dr. Love said.

Dr. Love described their work as an "evolution" that ultimately became the new textbook, filled with photographs and discussion.

"I believe that the many photographs of rare mycology pathogens will set new standards for fungal diagnosis as much of this material is unavailable from other sources or is extremely dated using obsolete classifications," he said. According to the ASCP website, since the publication of <u>Pathologic Diagnosis of Fungal Infections</u> by ASCP Press over a quarter century ago, the field of medical mycology has undergone numerous changes in taxonomy, with many pathogens redefined, reclas-

sified, or initially described. This textbook combines the changes in diagnostic methods in the last 25 years all in one easy-to-navigate book.

This comprehensive atlas includes not only prototypical examples of each pathogen, but also:

- Demonstrations across the range of morphologies typically encountered in patient samples.
- A vast collection of material from the Armed Forces Institute of Pathol-
- ogy repository dating back over a century and including tens of millions of slides, blocks and preserved wet tissue specimens, serving as an unparalleled resource for creating an unabridged view of human pathology.
- Textual introductory segments for each pathogen include information on taxonomy, epidemiology, clinical disease correlates, treatment, morphology, culture characteristics, susceptibility testing, and molecular detection and characterization.

Fungal Pathology: A Diagnostic Atlas is available for purchase at https://store.ascp.org/productlisting/productd=164956836.

Faculty Promotion

Sharon Fox, MD, PhD Clinical Associate Professor July 1, 2025



LSU Faculty Present At The 2025 Tri-State Pathology Conference

Join us at the 2025 Tri-State Pathology Conference on October 4th and 5th at the New Orleans Marriott, and gain the most up-to-date pathology information from Drs. Ritu Bhalla, Gordon Love and Fred Rodriguez.

Dr. Bhalla is an AP/CP Pathologist who specializes in genito-urinary pathology, cytopathology and surgical pathology. She will give a presentation on invasive cribriform carcinoma and intraductal carcinoma (IDC) of the prostate that are the aggressive histologic subtypes of prostate carcinoma, affecting clinical management. She will discuss the differential diagnosis of cribriform prostate lesions, along with a highlight of her study, to demonstrate the utilization of ancillary studies in distinguishing these almost similar entities.

Dr. Gordon Love is an AP/CP Pathologist who specializes in microbiology and infection diseases as well as laboratory administration and management. Dr. Love will give a presentation on taxonomic classification and nomenclature of fungi, both of which have been extensively revised genetic information becomes available. The goal of this presentation is to enable Pathologists to become familiar with newer fungal classifications as well as gain experience in distinguishing varying appearances of fungi in tissue.

Dr. Fred Rodriguez is an AP/CP Pathologist who also has experience in laboratory administration and management. In his session, using dynamic and interactive educational techniques, faculty and participants will draw from their own experiences to analyze and discuss various types of disasters (e.g. natural, infrastructure failures, terrorist, etc.), and will explore how to develop execute disaster and plans to appropriately respond to and survive different types of events.



2025 TRI-STATE PATHOLOGY CONFERENCE

OCTOBER 4-5, 2025

NEW ORLEANS MARRIOTT 555 CANAL STREET, NEW ORLEANS

Saturday, 10/4/2025

7:30am Breakfast and Registration 8:00am Welcome Matt Mastrodomenico, M.D.

LPS President

8:05am CAP Update

Qihui "Jim" Zhai, M.D., CAP President-Elect 8:35am Traditional Breast Cancer Biomarkers: Old Story New

Shi Wei, M.D.

9:35am Cribriform Lesions of Prostate Ritu Bhalla, M.D.

10:05am Break/Exhibitors

10:30am Update on New Fungal Classification with Appearances in Tissue

Gordon Love, M.D.

11:30am Poster Viewing

1:45am Lunch Sponsored by AstraZena

2:30pm Adjourn

Sunday, 10/5/2025

00am Breakfas

Molecular Biomarker Testing in Advanced Breast Cancer:

Current Landscape and Future Directions

Mei Krystei-Whittemore, M.D.

8:45am Resident Leadership Efforts in Hospitals to Improve

Death Certificate Reporting John Wakh, M.D.

9:45am Thyroid Update From the WHO 5th ed

Varsha Manucha, M.D.

10:15am Break

10:45am Lab Administration

1:15am Winning Abstract Presentation

11:30am Abstract Awards and Closing Remarks

l1:45am Adjourn





SPEAKER

Ritu Bhalla, M.D.

Louisiana State University Health Sciences Center



SPEAKER

Gordon Love, M.D.

Louisiana State University Health Sciences Center



SPEAKER

Varsha Manucha, M.D.

University of Mississipp



SPEAKER

Fred Rodriguez, M.D.

Louisiana State University Health Sciences Center



SPEAKER

John Walsh, M.D.

Uniformed Services University



SPEAKER

Shi Wei, M.D.

University of Alabami





Residents and Faculty Attend Professional Conferences

Our residents have been busy preparing and presenting posters, learning the latest developments in Pathology and networking with Pathology specialists at professional conferences.

Residents, Ayesha Younus, MD, Julia Rivera, MD, and Angelle Jolly, MD, along with Gynecologic Pathologist, Ridin Balakrishnan, MD, attended the American Society for Clinical Pathology 2024 Conference in September in Chicago, Illinois. They each present-

> ed posters at the conference. Dr. Jolly was selected as a Blue Ribbon Finalist



for her poster to Embolic Renal Ribbon Poster

titled, "Death Due Dr. Ayesha Younus with her Blue

Cell Carcinoma," and Dr. Younus was selected as a Blue Ribbon Finalist for her poster titled, "Diagnostic And Post-Therapeutic Histopathology Of Hansen's Disease in a Man With Rheumatoid Arthritis."

Dr. Angelle Jolly then attended the 2024 International Clinical Cytometry Society Meeting in Seattle, Washington in October and presented a poster titled, "Classic Hodgkin Lymphoma with an Abnormal Surface CD3-/CD4+ T-cell Population Detected by Flow Cytometry Immunophenotyping of Involved Lymph Nodes-Report

of a Case." Later in October, residents, Liz Yang, MD, Yu Liu, MD, and Angelle Jolly, MD, along with our GU Pathologist and Resi-Program dency Director,



Bhalla, MD, attended the CAP 2024 Conference in Las Vegas, Nevada. They all presented posters at the conference and were able to catch up with resident alumni, Gloria Sura, MD who is currently an Anatomic and Clinical Pathologist and Assistant Professor at The University of Texas MD Anderson Cancer Center.

Resident, Yu Liu, MD, and GI/ Breast Pathologist, Zhiyan Fu, MD, attended the 2025 USCAP Conference in March in Boston, Massachusetts. In addition to presenting posters and attending lectures, they were able to visit with resident alumni, Wenjing Qiu, MD, Anatomic and Clinical Pathologist and Assistant Professor at Vanderbilt University.



Drs. Zhiyan Fu and Yu Liu enjoy the **USCAP Conference.**

Welcome To Our 2025-2026 **Pathology Residents**



Andria Chada, MD Universidade do Estado do Pará Faculdade de Medicina Belém



Anastasia Karakachoff MD **Universidad Nacional** de Rosario Facultad



Vishva Mistry, DO **Burrell College of** Osteopathic Medicine at New Mexico State University

PGY3 Residents Accept Fellowships

Congratulations to our residents who accepted fellowships in 2026! Asra Feroze, MBBS, has accepted a gynecologic pathology fellowship at Cleveland Clinic Foundation. Haibo Wang, MD has accepted a breast pathology fellowhsip at Yale University, and Julia Rivera, MD, has accepted a Hematopathology fellowship at University of Rochester.

2025 Graduates Recognized

We are proud to announce our 2025 LSUHSC Pathology Residency Program graduates! They are: Jihuan Chen, MD, Michael Webber, DO, and Liz Yang, MD. We are proud to announce that all of the graduates have appeared for the ABPath examination and success-

fully passed their AP/CP boards!

A recognition dinner was held in New Orleans at Ralph's On The Park to recognize and congratulate our graduates. Each graduate was presented with a framed graduation certificate.

Dr. Chen has accepted a fellowship in Gastrointestinal Pathology at UC Irvine. Dr. Webber has accepted







Drs. Ritu Bhalla and Gordon Love pose for pictures with the 2025 graduates, Jihuan Chen, MD, Michael Webber, DO, and Liz Yang, MD.

a fellowship in Forensic Pathology at the renowned University of Alabama at Birmingham, and Dr. Yang has accepted a fellowship in Gastrointestinal Pathology at University of Rochester, New York.

We look forward to following their career paths and learning about their new endeavors.

Best Faculty and Support Staff Awarded

Each year the Pathology residents select a faculty member and support staff member who they feel demonstrates exemplary commitment, teaching and support for our residents.

This year's Education and Commitment Award was presented to Dr. Ridin Balakrishnan, an Assistant Professor of Clinical Pathology and GYN Pathologist at UMCNO. Dr. Balakrishnan is described as having remarkable talent for engaging lectures and educational sign outs, and has championed the best teacher award for this year. His mentorship and guidance are indispensable, not only in

resident training but also in navigating and supporting them while making important decisions about their careers – fellowship choices. The residents thanked him for his commitment and dedication towards towards their education.

The Best Support Staff Award was presented to Justin Lofton, an Autopsy Assistant at UMCNO. The



Pictured, from left, are Dr. Yu Liu, Dr. Haibo Wang, Justin Lofton, Dr. Ridin Balakrishnan, Dr. Ritu Bhalla, Dr. Julia Rivera, Dr. Asra Feroze, Dr. Yoamin Chen, Dr. Michelle de Jesus Ortiz, and Dr. Ellen Connor.

residents thanked him for his tremendous support in the organization of the morgue and contribution towards autopsy training. They said Justin's assistance is greatly valued, not only in day to day morgue work, but also in guiding and training our residents in an important aspect of pathology residency – the autopsies.



2025-2026 Chief Residents Announced

Congratulations to our new Chief Residents: Dr. Haibo Wang, Dr. Asra Feroze, and Dr. Julia Rivera! A huge thank you to our outgoing Chiefs, Dr. Jihuan Chen and Dr. Michael Webber, for their commitment to the residents and the residency program!

Pathology Website Gets A Face Lift

Take a few minutes and check out the Pathology website at https://www.medschool.lsuhsc.edu/pathology/default.aspx. We've updated several pages and added new pages in an effort to give the website a fresh, new look.

We've added an introductory video on the homepage to give an in depth view of the services we have to offer. We are currently working on a new video to highlight our residency program which should be completed in the next few months. The residency program video will give an overview of the program and highlight our different areas of



A clip from the pathology introductory video

expertise. We've also added a banner image to each page to make it more inviting, and we've added an about pathology page so perspective residents can see the many different subspecialty areas in pathology.

Our updates are still ongoing. We invite any feedback and suggestions you may have. Send an email to twaltz@lsuhsc.edu.

Gault Townsend, MD, Selected 2024 Emma Moss Guest Speaker/ Receives Library Dedication

Dr. Gault Townsend, a retired Pathologist at The Pathology Laboratory in Lake Charles, Louisiana, was selected as the 2024 Emma Sadler Moss Guest Lecturer. In his lecture, Dr. Townsend shared his career history both before and after becoming a Pathologist.

Before Dr. Townsend attended medical school, he worked for several years as a laboratory technician. His interest in the pathology field grew, and he made the decision to apply to medical school. He graduated from



Dr. Gordon Love, Department Head of Pathology, presents the plaque to Dr. Townsend.

Louisiana State University School of Medicine in New Orleans, and completed an internship in internal medicine and a residency in pathology at LSU School of Medicine, Charity Hospital in New Orleans. He explained how different pathology was at

that time and shared several photos of his years spent at Charity Hospital.

Dr. Townsend eventually decided to enter into private practice at The Pathology Laboratory where he worked for over 35 years. There he specialized in cytopathology and served as a certified Medical Review Officer. He talked to the residents about the benefits and challenges of opening a private practice.

In conclusion, Dr. Townsend implored the residents to continue learning. The field of pathology has evolved tremendously over the past 35 years and will continue to evolve.

Dr. Gordon Love, Pathology Chair and Department Head, then presented Dr. Townsend with a plaque naming the residents' library in his honor. The Gault Townsend, MD, Pathology Department Resident Library is named in recognition of his generous contributions, dedication and support for the LSU Health Sciences Center—New Orleans Pathology Resident Program.

Dr. Townsend continuously donates books for the residency program and often calls the department to see if any residents have requested specific books. We are grateful for these additional resources in helping to promote our residents' success.

Where Are They Now?



Congratulations to our 2024 residency graduates Wenjing Qiu, MD, PhD, Zaid Khreefa, MD, and Maryam Sadough!

Dr. Qiu is an Assistant Professor at Vanderbilt University in Tennessee. Dr. Khreefa is a Pathologist at Ameripath in Ohio, and Dr. Sadough is completing a Surgical Pathology Fellowship at The George Washington University in Washington, DC.

Faculty and Residents' Publications

American Society for Clinical Pathology

Pathology Outlines

<u>Fungal Pathology: A Diagnostic Atlas</u>, Drs. Mary K. Klassen-Fischer, MD, Ronald C. Neafie, MS, Gordon L. Love, MD and Randall T. Hayden, MD. https://www.store.asco.org/productlisting/productdetail?

Ayesha Younus, MBBS and Ritu Bhalla, MD. "Eosinophilic vacuolated tumor." Pathology Outlines. February 2025.

Pathology Outlines - Eosinophilic vacuolated tumor (EVT)

Angelle Jolly, MD, Ritu Bhalla, MD. "Balanitis/phimosis." Pathology Outlines. October 2024.

Pathology Outlines - Balanitis / phimosis

WIREs Forensic Science

Michael L. Webber, DO and Ellen E. Connor, MD, PhD. "Time of Death Estimation in Forensic Pathology: A Brief Assessment of Methods and Reliability." Wiley Interdisciplinary Reviews Forensic Science. April 2025.

https://www.researchgate.net/publication/390424464 Time of Death_ Estimation in Forensic Pathology A Brief Assessment of Methods and Reliability

Diagnostics

Yu Liu, Yoamin Chen, Asra Feroze and Zhiyan Fu. "An Incidental Finding of Appendiceal Gastrointestinal Stromal Tumor with Abundant Skeinoid Fibers: A Rare Case Report with Insights from a Comprehensive Literature Review." April 2025 https://www.mdpi.com/2075-4418/15/7/924

Yu Liu, MD, PhD, Asra Feroze, MD, Liz Yang, MD, Ridin Balakrishnan, MD. "Morphological and Immunohistochemical Support for the Origin of the Carcinoid Component in Strumal Carcinoids: A Case Report and Literature Review."14 May 2025 https://www.mdpi.com/2075-4418/15/10/1249

Annals of Diagnostic Pathology

Fu, Zhiyan; Park, Eundong; Aydin, Hasan Basri; Shrestha, Neharika; Yang, Liz M; Dabaghian, Antranik; Lee, Hwajeong. "Acellular mucin in non-neoplastic inflammatory conditions of lower gastrointestinal tract." Ann Diagn Pathol. 2025 Feb 7;76:152449. doi: 10.1016/j.anndiagpath.2025.152449. Epub 2025 Feb 7. [PMID: 39951910]

https://digitalscholar.lsuhsc.edu/som_facpubs/3496/

Pathology International Perez, Dana; Wu, Tong; Bhalla, Ritu; Fu, Zhiyan; Centeno, Barbara A; Ghayouri, Masoumeh; Jiang, Kun; Lauwers, Gregory; Nakanishi, Yukihiro. Clinicopathologic study of squamoid morules in seventeen conventional colorectal adenomas. Pathol Int. 2025 Mar;75(3):145-150. doi: 10.1111/pin.13516. Epub 2025 Feb 3. [PMID: 39898603]

https://pubmed.ncbi.nlm.nih.gov/39898603,

Science Direct

Jihuan Chen, Liz M. Yang, Jonathan Somma, Yujun Gan, Zengying Wu, Zhiyan Fu. "Diagnostic considerations for gastrointestinal stromal tumors with altered immunophenotype following Imatinib treatment: A case report and literature review." Human Pathology Reports. 15 May 2025

https://www.sciencedirect.com/science/article/pii/S2772736X25000088

World Journal of Clinical Cases

Younus A, Liu Y, Connor EE, Wu ZY, Lee H, Fu ZY. "Segmental atrophy of the liver: Review of a rare pseudotumor." World J Clin Cases. August 26 2025; 13 (24): 107825 https://www.wjgnet.com/2307-8960/full/v13/i24/107825.htm

Journal of Neurosurgery

Khanna, A., Darlow, M., Jetly Shridhar, R., & Cable, M. G. (2025). Periclavicular multifocal, infiltrative extraneural soft tissue perineuriomas: illustrative case. *Journal of Neurosurgery: Case Lessons*, *9*(12), CASE24388. https://doi.org/10.3171/CASE24388

"Exploring TFE3-Rearranged Renal Cell Carcinoma: A Case Study Showing Minimal Expression of PAX-8", Julia Rivera, MD, Ritu Bhalla, MD. ASCP 2024

"Hemophagocytic Lymphohistiocytosis as an Unusual Presentation in a Patient with Human Immunodeficiency Virus-associated Bone Marrow Classic Hodgkin Lymphoma: A Case Report with Literature Review", Julia Rivera, MD, Rachna Jetly, MD. ASCP 2024

"Death Due to Embolic Renal Cell Carcinoma", Angelle Jolly, MD, Gordon Love, MD. Blue Ribbon Finalist, ASCP 2024

"Solid-basaloid Variant of Mammary Adenoid Cystic Carcinoma – Report of an Unusual Case with Literature Review", Liz Yang, MD, Haibo Wang, BMBS, PhD, Angelle Jolly, MD, Zhiyan Fu, MD. ASCP 2024

"Diagnostic And Post-Therapeutic Histopathology Of Hansen's Disease in a Man With Rheumatoid Arthritis", Ayesha Younus, MBBS, Sharon Fox, MD, PhD. Blue Ribbon Finalist, ASCP 2024

"Conclusive Evidence for the Origin of the Carcinoid Component in Strumal Carcinoids and a New Morphological Pattern" Yu Liu, MD, PhD, Asra Feroze, MBBS, Liz Yang, MD, Ridin Balakrishnan, MD. ASCP 2024

"Classic Hodgkin Lymphoma with an Abnormal Surface CD3-/CD4+ T-cell Population Detected by Flow Cytometry Immunophenotyping of Involved Lymph Nodes-Report of a Case", Angelle Jolly, MD, Rachna Jetly, MD, MPH. ICCS 2024

"Primary Renal Ewing Sarcoma: Case Report of a Rare Entity", Liz Yang, MD, Tracy Dewenter, MD, Ritu Bhalla, MD. CAP 2024

"Primary Adenomatoid Tumor of the Adrenal Gland: Case Report of a Rare Entity", Ayesha Younus, MBBS, Asra Feroze, MBBS, Ritu Bhalla, MD. CAP 2024

"Novel Immunophenotype of Biphasic Squamoid Alveolar Renal Cell Carcinoma: A Study of Two Cases." Angelle Jolly, MD, Haibo Wang, MD, PhD, Michael Webber, MD, Ritu Bhalla, MD. CAP 2024

"Examining the Necessity of Axillary Lymph Node Dissection with Lumpectomy in Biopsy-Proven High-Grade DCIS." Hebert, Carson; Jolly, Angelle Leger; Fu, Zhiyan; Ferral. Medical Student Research Poster Symposium, LSUHSC School of Medicine - New Orleans, LA, November 2024

"Comparison of Automated Needle Systems for Transjugular Liver Biopsy: A Prospective Randomized Controlled Trial." Gill, Katelyn; Hopkins, Peyton; Fu, Zhiyan; Ferral, Hector." Medical Student Research Poster Symposium, LSUHSC School of Medicine - New Orleans, LA, November 2024

ASCP 2024

ICCS 2024

CAP 2024

LSUHSC School of Medicine 2024

Events and Celebrations

























