Phyllodes Tumor Research (PHYTR) Laboratory

Happy Holidays from the PHYTR Lab!

We hope this note finds you well.

Thanks to your continued support, the PHYTR Lab remains active and growing, with new trainees and expanding national and international collaborations supporting our mission. Over the past several months, we've made meaningful progress across our research portfolio, including advancement of our multi-center U01 study, with genomic sequencing now completed on 50 malignant phyllodes tumor cases, and continued development of a validated phyllodes tumor cell line.

A major highlight was our Inaugural International Phyllodes Tumor Research Symposium, held in conjunction with the CTOS meeting, which brought together investigators and patient advocates from around the world and left our team energized by the shared vision for advancing rare tumor research. We have also contributed new scholarship focused on improving pathologic reporting, refining tumor classification through an ICD-10 submission to the CDC, and expanding the evidence base for systemic therapy in malignant phyllodes tumors.

We're excited to share recent publications, ongoing projects, and collaborations on the horizon. As always, thank you for your continued support, and please reach out if you'd like to connect.

Warmly,



Laura Rosenberger, MD
on behalf of the PHYTR Lab

In this newsletter:

- New Team Members
- Lab Updates
- Recent Publications
- Looking ahead
- Staying Connected

New Lab Members



Tim Rengers, MD
Tim is a Duke General Surgery intern interested in Breast Oncology who plans to spend his professional development time during residency in the PHYTR lab. He recently moved to Durham after finishing medical school at the Mayo Clinic.



Megan Zhao, BS
Megan is a second-year medical student at Duke who is interested in surgical oncology. She is excited to be spending her third year of medical school in Dr. Rosenberger's lab studying how to improve outcomes in patients with rare breast tumors.

PHYTR Lab Updates

First Annual International Phyllodes Tumor Research Symposium

We had a really fantastic Inaugural International Phyllodes Tumor Symposium, with 35 attendees! The symposium was held in conjunction with the CTOS (Connective Tissue Oncology Society) meeting in Boca Raton, FL. This meeting was co-organized by Drs. Mahbubl Ahmed (UK) and Frederieke van Duijnhoven (Netherlands) and sponsored by our 3 respective patient advocate groups. We left the meeting energized and inspired by the collaboration, shared insights, and momentum for future international work in phyllodes tumor research.



Photo of our Duke team at the symposium along with Rachel Boyle Lee-Ashley (right), who is a philanthropy champion for our phyllodes lab and helped sponsor the event.

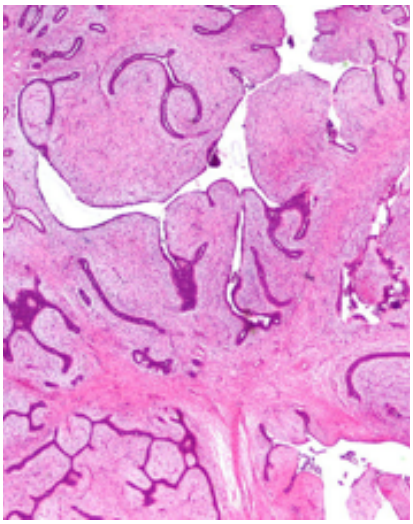


U-01 Progress: Defining Actionable Opportunities in Malignant Phyllodes via Genomic Profiling

Progress continues on the U01 award! To date, 50 malignant phyllodes tumor cases have been fully processed: all glass slides reviewed, archival tumor tissue retrieved and recut for DNA extraction, and genomic sequencing completed at Memorial Sloan Kettering Cancer Center under the direction of Fresia Pareja, MD. Case accrual is ongoing, with a goal of 150 cases by the end of 2027.

Letter to the Editor: Pathologic Reporting of Phyllodes Tumors

In 2021, Dr. Rosenberger and colleagues identified substantial inconsistencies in the documentation of microscopic features of phyllodes tumors by pathologists. This work informed the development of a dedicated synoptic reporting protocol for phyllodes tumors in 2021. Using our institutional registry, we evaluated adoption of this protocol in the past several years and identified opportunities for improvement. These findings were published as a Letter to the Editor in Annals of Surgical Oncology.



Microscopic image of the leaf-like histology of phyllodes tumors

Scoping Review: Systemic Therapy for Malignant Phyllodes Tumors

Given the limited data on the role of systemic therapy in malignant phyllodes tumors, our team has been working on a comprehensive scoping review of the published literature. In collaboration with experts from multiple academic centers, we are finalizing a synthesis of existing evidence, with the goal of providing a critical foundation for future clinical trial development.



Dr. Rosenberger Appointed to NCCN Soft Tissue Sarcoma Panel

We are proud to share that Dr. Laura Rosenberger has been appointed to the National Comprehensive Cancer Network (NCCN) Soft Tissue Sarcoma Panel, reflecting her national leadership and expertise in rare tumor care.

International Classification of Diseases (ICD)-10 Submission

To improve classification of phyllodes tumors—an issue with important downstream effects on clinical care and research case identification—we recently submitted a proposal to the Centers for Disease Control and Prevention (CDC) for revision of the ICD-10 coding framework. We anticipate feedback on the proposal in the coming months.



Lab Fun!

Our lab recently enjoyed some team bonding at Par-Tee Shack in Raleigh, NC, where we had a great time playing putt-putt and spending time together outside the lab.

Recent Publications

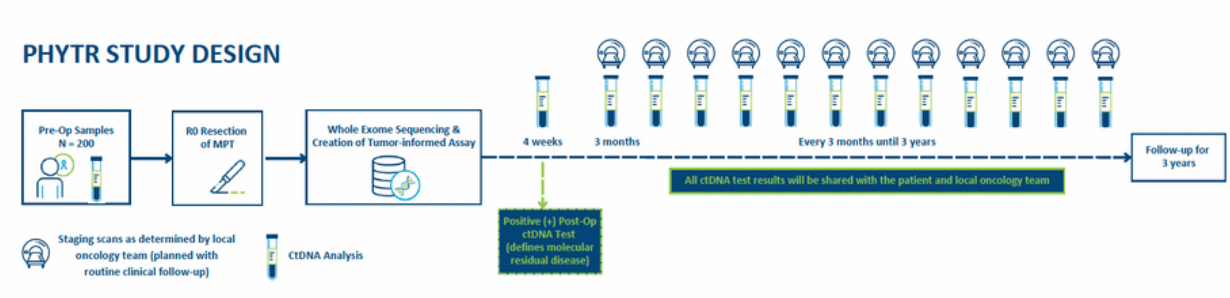
Utility of the Singapore recurrence nomogram in a US cohort with a higher proportion of borderline and malignant phyllodes tumours.
Reason EH, Thomas SM, Plichta JK, Botty van den Bruele AM, Hwang ES, Tong BC, Larrier NA, Factor RE, Grilley-Olson JE, Rosenberger LH. J Clin Pathol. 2025 Oct 17;78(11):740-747.

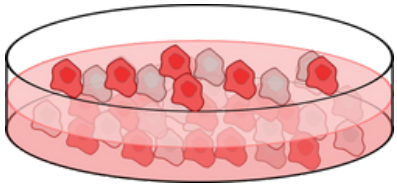
Standardized Pathologic Reporting for Phyllodes Tumors: Where are We after 3 Years?
Reason EH, Factor RE, Bentley RC, Rosenberger LH. Ann Surg Oncol. 2025 Dec 10. Online ahead of print.

Looking ahead....

PHYTR (Phyllodes Tumor Registry) TRIAL: A Prospective, Multi-Center Observational Study to Evaluate the Association of Molecular Residual Disease with Metastatic Progression

Based on the results from our prior study showing that ctDNA is a reliable marker of metastatic disease, we submitted an R-01 grant to the NIH in October titled “Malignant Phyllodes Tumors: ctDNA as a Novel Predictive Biomarker of Metastatic Progression.” This is a special grant opportunity for “Academic-Industrial Partnerships for Translation of Technologies for Diagnosis and Treatment.” Our hope is that this study will help us better identify those at highest risk for progression and guide future systemic therapy interventional trials.





Phyllodes Tumor Cell Line

We continue to advance the development of a preclinical model for phyllodes tumors. As part of this effort, we are performing whole exome sequencing (WES) on matched normal and tumor tissue to validate our phyllodes tumor cell line. Our ultimate goal is to leverage this model to test and identify potential therapeutic strategies for phyllodes tumors.

Stay Connected!

- Website: https://surgery.duke.edu/divisions/surgical-oncology/research/research-laboratories/phyllodes-tumor-research-phytr
- Twitter/X: @RosenbergerMD

Donations

Scan the QR code below to make a charitable gift to the PHYTR Lab. For more info using retirement accounts, charitable gift annuities or other giving vehicles, please contact Catherine Cross at catherine.cross@duke.edu or 919-385-1585.

Thank you for reading, and happy new year!

PHYTR LAB
PHYLLODES TUMOR RESEARCH