

PATHWAYS TO EXCELLENCE

URMC DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

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TRAINING UNDER ONE ROOF

Launch of First URMC-Only Medical Technology Program Set for Fall 2017



Medical technologist Jennifer Nesbitt loads samples in the Hematology Lab at Strong Memorial Hospital.

They say the best way to learn is to teach, and for the first time ever, licensed laboratory technologists at the University of Rochester Medical Center will do just that through a new clinical laboratory technology advanced certificate program.

The program will provide full-time clinical lab education for prospective medical technologists, with lectures and hands-on clinical training leading to an advanced certificate. The University and the New York State Education Department have approved the program, and it will welcome its first class of students in fall 2017. Applicants must have a bachelor's degree in the biological, chemical or physical sciences and have completed the coursework required for state licensure.

The University had previously partnered with Rochester General Health System to provide clinical training to students who received the lecture and exam portion of their training at RGH, but will now provide both facets of training on its own.

Vicki Roberts, program director and Manager of Education for the Department of Pathology and Laboratory Medicine at URMC, says the region needs every training program working at full capacity to fill a growing number of vacancies in the field.

“This is a benefit to the University and the region because it gives people who are unable to find a practical application for their degree entry into a licensed professional position,” said Roberts.

In 2006, New York State changed its licensing requirements for medical technologists so that staff who previously needed a B.S. degree in an applicable major would need an additional 1-2 years' worth of clinical training and pass a certification exam in order to be state-licensed.

“UR Medicine’s need for additional licensed medical technologists could not be more urgent.”

While many MTs were “grandfathered” in when the law changed, others have balked at the new, more demanding, educational requirements. This has made it more challenging than ever for employers to fill vacancies in the lab.

Leadership hopes this new training program will allow UR Medicine Labs to have a steady pipeline of certified technologists fill these vacancies as it absorbs more affiliates in the region – from Strong West to medical campuses at Highland Hospital, FF Thompson in Canandaigua, Dansville, Wellsville, and Hornell.

“UR Medicine’s need for additional licensed medical technologists could not be more urgent,” said Kathy Parrinello, COO of SMH. “This training program allows us to bring in current and prospective medical technologists to train in our excellent labs at SMH, graduate, and get their licenses so we can hire them into positions,” she added. “We are grateful to Vicki and the entire team for their diligence and perseverance in bringing this program to fruition.”

Geoffrey Harris has spent the last four years as Education Coordinator in the Hematology Lab. He will be one of many MTs that will serve as instructors in the new program. *(continued on pg. 3)*

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CHAIR'S COLUMN



Dr. Bruce Smoller

The Department of Pathology and Laboratory Medicine is undergoing significant change in concert with the rapidly evolving character of the entire University of Rochester School of Medicine and Dentistry campus. The department is planning for a major relocation to Bailey Road that will support our rapid growth in volume and enable centralization of services across the UR Medicine enterprise.

Our scope of practice is transforming from that of a university hospital-based practice to one that has an enormous reference laboratory component, oversees pathology practice in outlying community-based hospitals and continues to expand its operations within Strong Memorial Hospital. Our surgical pathology volume is growing at unprecedented rates. Our platforms across the clinical laboratories continue to expand and to dramatically change. And, finally, the emergence of molecular diagnostics is pushing all pathologists to rethink traditional divisions.

In order to most effectively navigate these rapid changes and the evolution of the department, I have re-organized the department's administrative structure. The concept of Anatomic and Clinical Pathology as distinct entities has lost its functional utility as we move into the world of molecular diagnostics and genomics, and having an administrative structure that is organized around these two concepts no longer reflects the new reality in which we practice. We now need a structure with one overarching point of coordination that will oversee and coordinate the administrative needs and operations of all of our various divisions. Our current administrative structure also doesn't reflect the department's greatly expanded role in the Medical Center's development of a regional hospital system.

In light of these realities, I have eliminated the administrative positions of Vice Chair for Anatomic and Clinical Pathology and

combined them into a single position, the Vice Chair for Clinical Operations at Strong Memorial Hospital. All clinical divisions will now function as equal, autonomous units reporting to Dr. Richard Burack, who assumed this title effective November 1, 2016. His training as a hematopathologist makes him well suited to address issues across the field of diagnostic pathology.



Dr. W. Richard Burack

I would like to express my sincere gratitude on behalf of the department and the institution to Drs. Neil Blumberg and Brendan Boyce for the much appreciated contributions and their efforts on behalf of the department for many years. I look forward to working with them as they continue with their clinical and research efforts into the future.

While our clinical responsibilities are rapidly changing and expanding, our commitment to our other missions, Education and Research, remains strong and cannot be diminished. Thanks largely to the work of Vicki Roberts, the University of Rochester and New York State have recently approved a medical technologist training program for our department. We will accept our first class of students for the next academic year. We are actively involved in our resident recruiting season and are excited about developing a molecular pathology fellowship program. On the research end, Dr. Boyce was just awarded a NIH R21 grant (adding onto his two current R01 grants) and Dr. Burack was awarded a Wilmot Cancer Center pilot award to support his research activities.

It is an exciting period of rapid growth and change for our department. I am optimistic about our developing role within the medical center and the medical community throughout western New York.

-Bruce Smoller, M.D.

PLEASE JOIN US IN SAN ANTONIO!

2017 ANNUAL MEETING
MOVING INFORMATION
March 4-10 | San Antonio, Texas
SAVE THE DATE
TO PREPARE YOU FOR
TOMORROW

Will you be attending USCAP 2017? Our department is hosting a special reception for alumni of URM Pathology. The event is planned for Monday, March 6, 2017 from 5:30-7:30 at the USCAP Conference headquarters. RSVP to Leslie_Antinarella@urmc.rochester.edu.

TRAINING UNDER ONE ROOF (CONT. FROM FRONT)



Geoffrey Harris, MT

“When everyone in a lab is an instructor and everyone teaches, it keeps people on their game,” said Harris. “You realize this is a good thing for the whole lab and I think it makes everyone stronger.”

The new class will have between 8-12 trainees who must complete 35 credits of non-clinical work and 720 hours of clinical experience before taking their certification exam.

People like Caroline Brown, who works in Clinical Microbiology, know what it’s like to have a long path to licensure.

When she started as a med tech at UR, she simply had a B.S. degree. She took time off for family reasons and soon found that returning to work was not as easy as she’d hoped.

“In that timeframe, the licensing all came into being and I

fell through the cracks,” Brown said. “I had to do something in order to get back into the lab.”

She was accepted into the RGH training program, which she completed and later returned to UR as a licensed MT. Today she teaches trainees like herself who are hoping to make a career for themselves.

Teaching means MTs have new responsibilities on top of their regular workload. For Brown, that means strategically preparing live cultures days in advance so that students are able to simulate the work that licensed techs perform on a daily basis.

Brown says playing a part in this instruction is the best way to give back so others can have the same opportunity she did.

“I feel for the future of the career in the lab,” she said. “We need people who want to learn and want to be here.”



Caroline Brown, MT

NEW DIVISION AIDS AFFILIATE HOSPITALS

This year marked the start of a new Regional Pathology division led by Dr. Tamera Paczos that provides professional support to affiliate hospitals within the UR Medicine Labs network.

Paczos splits her time working at Wyoming and St. James Hospitals, providing support in gynecologic pathology at Highland Hospital and covering pathology cases from URMC and other regional affiliates.

She and Dr. Yawen Tiegerman are the initial members of the new division. Tiegerman divides her time between FF Thompson, URMC, and HH.

“Our ultimate purpose is to improve quality for these hospitals and help them with staffing and efficiency issues,” said Paczos.

She notes that some affiliates have only one histotechnologist and an aging population of medical technologists who are on the verge of retirement. The same holds true in smaller communities as more pathologists retire while the next generation chooses to focus on sub-specialization services.

The new division seeks to assist affiliates with administrative direction and access to subspecialists. Additionally, Paczos hopes it will establish standardized testing platforms across the network to allow for direct transfer of care within the health system.

“The regional division strives to assist the community hospital labs not only to survive, but to thrive in this ever changing healthcare environment by providing them with much needed resources and access to all the specialized state of the art services that the URMC can offer,” she said.

NOTEWORTHY AWARDS

Jennifer Findeis-Hosey, M.D.

Herbert W. Mapstone Prize for Excellence in Second Year Teaching, University of Rochester School of Medicine and Dentistry

Findeis-Hosey, director of Pathology curriculum, was nominated by second-year medical students, who voted for a faculty member who made a significant impact in teaching.

Tia Labarge

2016 Rising Star Award, American Society for Histocompatibility and Immunogenetics (ASHI)

The award is given to an outstanding human leukocyte antigen (HLA) technologist who has worked in the field for less than three years and wants to pursue a career in HLA.

Loralee McMahon

Diamond Cover Award, Journal of Histotechnology

McMahon, supervisor of Immunohistochemistry, was first author on the study, “HER2 FISH analysis on a skeletal metastasis: a case report and technical review,” which the review board described as an innovative approach.

NEW PATENT FOR CHANG'S PROSTATE CANCER TREATMENT METHOD

Chawshang Chang, Ph.D. has received a U.S. patent for a new way to treat and prevent the recurrence of prostate cancer. The method uses anti-androgen agents that prevent cancer cells from multiplying rapidly – most notably, during a resurgence of the disease after androgen deprivation therapy (ADT). This second wave of prostate cancer has no known cure and there are few treatment options available. One of the most significant findings in this patent is that the cancer-fighting chemotherapy drug cisplatin is able to re-sensitize cancer that is resistant to the anti-androgen drug, enzalutamide. This is the third patent for Chang, who is the George Hoyt Whipple Distinguished Professor of Pathology, Urology, and Radiation Oncology at URM and Wilmot Cancer Institute.

LIBBY NEW CO-DIRECTOR OF PH.D. PROGRAM



Dr. Robert Mooney



Dr. Richard Libby

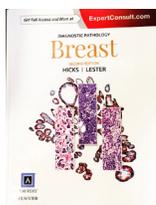
Richard (Rick) Libby, Ph.D. is the new co-director of the Pathology Ph.D. program with Lianping Xing, B.Med., Ph.D. He takes the place of former co-chair, Robert Mooney, Ph.D.

Libby joined the University in 2006. His laboratory focuses on understanding cell death pathways in neurodegenerative disease. He praised Mooney for building a very strong program. "Importantly, Bob focused the program on understanding the pathophysiology of human disease, aligning the program perfectly with the University's and NIH's interest in understanding human disease," said Libby. Mooney will transition to working part-time on Jan. 1, 2017.

BURACK, MOSMANN RECEIVE \$50K WILMOT PILOT GRANT

Richard Burack, M.D., Ph.D. director of Hematopathology, and Dr. Tim Mosmann of the Center for Vaccine Biology and Immunology, have received a \$50,000 pilot grant from Wilmot Cancer Institute to collaboratively investigate the role of immune-senescence in lymphomagenesis, the role of immune microenvironment in determining therapy response, and the role of immune function in the symptoms of lymphoma via analysis of rare immune cell populations by advanced flow cytometry. The proposal was one of two winners in the latest round of Wilmot Pilot Awards for cancer research. According to research director Huck Land, Ph.D., the awards went to the projects reviewers thought had the most potential to develop into Program Project Grants (PO1) from the NIH.

FACULTY-AUTHORED BOOKS



Diagnostic Pathology: Breast, Second Edition

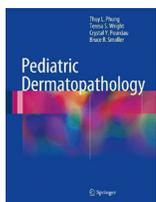
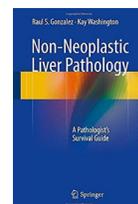
David Hicks, Susan Lester

This textbook is a follow up to the first edition (2012); to provide real-time diagnostic support for pathologists in diagnosing and developing treatment for breast cancer patients.

Non-Neoplastic Liver Pathology: A Pathologist's Survival Guide

Raul Gonzalez, Kay Washington

This provides a useful reference guide for diagnosing liver biopsies. Most of its illustrations and images were taken from Surgical Pathology cases at URM.



Pediatric Dermatopathology

Bruce Smoller, Phung, T.L., Wright, T.S., Pourciau, C.Y.

A reference textbook that reviews the clinical and histopathologic features of skin disorders that affect children, along with a discussion of the molecular pathogenesis for each disease as it is currently known.

PATHPrimer

David Hicks, Bruce Smoller, Linda Schiffhauer, Victoria Zhang, Sapna Patel, Gabrielle Yeaney, Rochelle Simon, et al.

PATHPrimer is a web-based pathology curriculum that contains learning modules and assessments in anatomic and clinical pathology.



HOSPITAL THANKS PATHOLOGY STAFF AT FOOD TRUCK RODEO



Hundreds of employees attended a staff appreciation event presented by Strong Memorial Hospital leadership on Tuesday, Sept. 20.

“This is just a small way for us at the hospital to say thank you for everything that you do each and every day,” said Kathy Parrinello, COO of Strong Memorial Hospital. “You are part of the important work we do at the Medical Center. As you all know, it is laboratory testing and pathology that help our clinicians diagnose patients and develop appropriate treatment plans. For all of the kudos that Strong and the Medical Center gets for treating patients, you are the behind-the-scenes folks that do the work.”

Approximately 530 staff dined on fare from local food trucks including Bento Box, Marty’s Meats, Le Petit Poutine, and Lugia’s Ice Cream. There was also a poster display of testimonials from healthcare providers in Saunders Research Building Atrium.



FOCUS ON FACULTY (CONT. FROM BACK)

While she enjoyed her work, Coppage started taking classes at the University of Houston “for fun” and eventually earned her master’s degree in Study of the Future. This unique field combined forecasting and projection of multiple kinds of outcomes, or “futures,” in hypothetical scenarios. Incidentally, it also applied to her chosen field. Her final paper, for example, was about what happens during the rejection of a transplant. “It fit perfectly and put those two things together in my mind,” she says.

In 1991, Coppage was hired to be the lab supervisor in the HLA/Tissue Typing Lab at URMC, which at the time existed within the Department of Surgery.

She and a former colleague worked to build the lab nearly from the ground up while she began pursuing her graduate work in the sciences followed by entrance to the Ph.D. in Pathology at the UR School of Medicine in 1998.

“It took a long time but it was worth it,” she said, of completing the degree in 2005 after nearly a decade of working as the supervisor and being promoted to director of the lab.

In recent years, Coppage has become heavily involved in the American Society of Histocompatibility and Immunogenetics, which named her program director for laboratory accreditation in 2015. She previously served as a lab commissioner and co-chair of the program, which includes 200 labs in the U.S., Canada and all over the world. This year, she is still a past director and training coordinator but looks forward to having more time for research projects at URMC. She has worked alongside Jane Liesveld, M.D. of Wilmot Cancer Institute as an adjunct doing bone marrow research. In the future, Coppage is interested in experimenting with genes in the major histocompatibility complex genome whose effects are not well known.

On the clinical side, she hopes to delve into the emerging method of next generation sequencing – which holds the potential for new discoveries in HLA on a molecular level. The transplant field is fast paced. And while Coppage serves as faculty within Pathology, she has always considered herself a transplant immunologist.

“My customers are the heart transplant people, the kidney transplant people, the bone marrow transplant people, occasionally the liver transplanters,” she says.

Looking back, she is thankful to have succeeded in a dynamic field that impacts so many people and their quality of life. Her colleagues and mentors have played a part in this journey, she says.

“I have been very lucky that despite hurdles, I have had a lot of people who have been very supportive,” she said. “Many times, people have said, ‘Sure, let’s try it,’ and if they hadn’t, I never would’ve had the chance to do it.”

Coppage lives in Rochester. She has two dogs and, in her free time, enjoys hiking with friends near her vacation home in Springwater, N.Y.



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FOCUS ON FACULTY: MYRA COPPAGE



Dr. Myra Coppage

Throughout her career, Myra Coppage, Ph.D. says her “curious mind” has led her to experiment with a little bit of everything.

She came to the University in 1990 and now serves as the director of the HLA/Tissue Typing Laboratory, which provides compatibility testing for transplant donors and recipients.

It was a winding road that led Coppage to transplant immunology. She grew up in Dayton, OH, where her father helped found the mathematics program at Wright State University and her mother was a musician.

In the late 1970s she earned her undergraduate degree in biopsychology at Oberlin College before moving to Galveston, TX to live near her grandmother. Her first job was working in a basic immunology lab. She later moved to an allergy immunology research lab at a local hospital before being introduced to the transplant field. She got a

job in the hospital’s transplant laboratory in 1984, the same year that cyclosporine – the first really effective drug to prevent transplant rejection was approved for use. It was also the year that the United Network for Organ Sharing (UNOS) was founded.

Needless to say, the field exploded and she was in the midst of it at the very beginning as a technologist. Her lab managed 100 transplants a year, compared to the roughly 75 treated at URMC today.

The available technology was still somewhat primitive. She remembers stuffing drinking straws with nylon wool and flushing media through it to separate B cells and T cells. And before cyclosporine, the surgeon would use thoracic duct drainage in which a transplant patient would have a surgically implanted T tube in their lymph vessels attached to a carboy. Nurses would remove the tube, spin out the lymphocytes and return the fluid at the end of each day while lab techs checked to see if the patient’s lymphocyte counts were going down.

(continued inside on pg. 5)

THANK YOU FOR YOUR SUPPORT!

We have been fortunate to receive philanthropic support from many individuals, which allows the Department of Pathology to maintain and accelerate vital clinical, educational, and research initiatives. If you are interested in making a tax-deductible gift today, or as part of your estate plans, please visit www.pathology.urmc.edu and look for the “Make a Gift” button, or contact Jon Sussman, Associate Director of Advancement at 585-276-4976 or jon.sussman@rochester.edu. Thank you!