

Vermont's Academic Medical Center Pathology & Laboratory Medicine Newsletter

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DNA Double Helix: The molecule that carries genetic information from one generation to the other.

Issue 3 - Fall 2012



In Honor of a Former Chair of Pathology, Dr. Robert W. Coon

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We Offer Words of Profound Gratitude to Dr. Robert W. Coon from all of us in the Department of Pathology, which you, Dr. Coon, guided and led from 1955, for 18 years! **Below is an open letter by Dr. Thomas D. Trainer,** on behalf of this department, both at UVM and FAHC, to which you dedicated so much of your effort and time.





Pathology & Laboratory Medicine Newsletter Issue 3 - Fall 2012

In Honor of a Former Chair of Pathology, Dr. Robert W. Coon

I would like to introduce (or re-introduce) our readers to an individual who has had more influence than anyone I know in shaping, nurturing, and developing the Department of Pathology, the hospital laboratory, and the medical technology programs of the University of Vermont and Fletcher Allen Health Care. His name is Robert W. Coon, known to those who knew him in earlier years as "Bob".

Bob was born in Billings, Montana, received his college education at North Dakota State University, and his medical degree at the University of Rochester. After interning at Strong Memorial Hospital, he did a residency at Grady Memorial Hospital, a stint in the U.S. Navy, and then a fellowship at the University of Rochester. From 1949 to 1955 he was a member of the faculty of Columbia University in New York.

In 1955, he became Chair of the Department of Pathology, here at UVM, where he remained for the next 18 years. I first met him in 1960, when I came to work with Dr. Ernest Stark at the DeGoesbriand Hospital. Bob had already established his reputation as a doer, with an incredible sense of what needed to be done now to enhance the future. He was known as a tough but fair negotiator. He was instrumental in pushing for the development of the physical facilities of the medical school that had previously been lodged in Dewey Hall, beginning with the Medical Alumni building. He fought hard and long, over the opposition of many, to develop a centralized clinical laboratory and a strong clinical pathology training program for pathology residents. At that time, it was well recognized nationally that we had one of the best, if not the best, training facilities for clinical pathology residents in the United States. Bob was also a major force in developing The Medical Technology and the Associate Dean of the Division of Health Sciences.

As if he didn't have enough to do, Bob was also President-elect and President of the American Society of Clinical Pathology (1962-1964), a trustee of the American Board of Pathology (1962-1972), and President of that organization in 1972. With his extra time, he served as an alternate delegate to the American Medical Association, Chairman of the National Careers in Medical Technology and on several State and Regional Committees.

In 1973, Bob moved to Maine with the intent to develop a medical school in that state. After three years of effort, the bill to authorize that proposal was vetoed by then Governor Longley. Undeterred, Bob then moved to Huntington, West Virginia, where he was one of the pioneers in developing the medical school at Marshall University. He was the Dean of that school from 1976 to 1985. The Robert W. Coon Medical Education Building, located at the Veterans Administration Hospital in Huntington, West Virginia, is named in his honor. Currently, Dr. Coon is retired, and lives with his daughter in Williston, Vermont.

It has been my privilege to spend 52 years working in this outstanding facility thanks to the vision of Bob and others who followed him in leadership roles. His foresight back in those early years has served this community well and we were fortunate to have had his wisdom and prescience to get us where we are today. **Thanks to you, Bob**.

-Thomas D. Trainer, M.D.





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New Physicians On Board



Maryam Zenali, M.D.—GI Pathologist and Assistant Professor of Anatomic Pathology—New Hire as of August 1, 2012

Dr. Zenali lived in Houston for 16 years before moving to Vermont. Originally from Iran, she moved to the United States after high school. She finished the undergraduate and medical school training in Houston, including Anatomic and Clinical Pathology residency at the University of Texas and fellowships in Surgical Pathology and then cancer biomarker fellowship, including 6 months Gastrointestinal Pathology in MD-Anderson Cancer Center. Maryam and her husband have a 12 year old son, Arya, who currently attends South Burlington middle school. They like biking and table tennis. Arya is a good swimmer and he loves to travel with the family.





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New Physicians On Board

I did my undergrad training in Medical Microbiology and Immunology at University of Wisconsin, medical school at University of Illinois at Chicago, and AP/CP residency at University Hospitals Case Medical Center. I just finished my microbiology fellowship at the Cleveland Clinic.

I grew up outside of Chicago in Crystal Lake, IL. My mom was a med tech until I was 17, when she went to work at CAP. I did 2 summer internships at CAP and when I was asking the staff there (most of which are former med techs) what I should major in, they all said that they liked their micro rotations the best. And that's how my love of bugs began!

My husband is also a former microbiologist who now likes to brew his own beer. We have a Weimaraner named Bosco, who likes to run, so we are on the move a lot. We both like outdoor activities and have loved living in Vermont so far.



Christina Wojewoda, M.D. -Pathologist/Microbiologist and Assistant Professor of Clinical Pathology - New Hire as of August 2012



Allison Ciolino, M.D.— Physician and Assistant Professor in the Division of Anatomic Pathology -New Hire as of March 1, 2012

Dr. Ciolino, a native of New Jersey, has lived in Vermont since her medical school training which was followed by Anatomic and Clinical Pathology residency at Fletcher Allen Health Care. She spent a year at the Medical University of South Carolina in Charleston, SC, where she completed a fellowship in Cytopathology. She loves the outdoors and spends a lot of her free time with her family which includes two 8 ½ year old golden retrievers whom she adores. She also enjoys volunteering at a local animal rescue in Williamstown, Vermont, where she helps exercise, train, and care for the canine rescues as well as local borders. She is a beginner bird-watcher but loves the challenge in identifying the various avian species present here in Vermont. Dr. Ciolino is currently an Assistant Professor in Pathology at the College of Medicine and also serves as the Laboratory Medical Director at the Northeastern Vermont Regional Hospital in St. Johnsbury.



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New Pathology & Laboratory Medicine Residents Have Arrived



Tricia Murdock M.D. PGY-1

Hometown: Sanborn, New York (20 Min from Niagara Falls, NY)

What did you do before starting residency? Before Residency #1 I went to Merida, Mexico.

Where can we find you outside the hospital: Outside of the hospital, you will most likely find me on Lake Champlain.

Hometown: Warren, VT

What did you do before starting residency? I spent as much time as possible enjoying the great outdoors – hiking, canoeing, camping, etc. The most exciting part of my spring, though, was traveling to Costa Rica with my hubby, Joel, for our "honeyversary" (honeymoon/fifth year wedding anniversary). We relaxed on the beach, hiked through the rainforest, and even spotted some sloths!

Where can we find you outside the hospital: In the winter, I spend just about all of my free time on the ski slopes, in search of powder. But since I enjoying skiing secret stashes in the woods... good luck spotting me! When there's no snow on the ground, you can find me somewhere outside– mainly hiking, camping, and canoeing. I also find solace in tending to my veggie gardens and conversing with my chickens. Anyone want some eggs?



Joanna Conant M.D. PGY-1





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New Pathology & Laboratory Medicine Residents Have Arrived



Christine Jabcuga M.D. PGY-3 (Photo with Ryan Rogers, FAHC Dermatology Resident)

Hometown: Houston, Texas



What did you do before starting residency? I visited Singapore.

Where can we find you outside the hospital: You are most likely to find me running with my dog or cooking a big meal.

Jamen Bartlett M.D. PGY-1

Hometown: I consider my home town to be Sioux Falls, SD. I had lived there for 18 years before moving to Burlington.

What did you do before starting residency? My girlfriend Ali and I went to Kauai, HI for 8 days, it was unreal.

Where can we find you outside the hospital: If I am outside the hospital you can most likely catch me at the golf course or doing something outdoors: hiking, swimming, or exploring all that Burlington and Vermont has to offer!





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New Pathology & Laboratory Medicine Residents Have Arrived



Jessica Wood M.D. PGY-1

Hometown: Woodstock, VT

What did you do before starting residency? I traveled in central and south America, studying Spanish and infectious disease before coming home to work in my garden for a couple of weeks.

Where can we find you outside the hospital: Outside the hospital you are most likely to find me in my garden, in my kitchen or in the woods.

New Student Fellows Have Arrived

Lauren Gilligan: Lauren grew up in Rutland, VT. She attended UVM as an undergrad and majored in Biology. She is interested in Pathology as a career. She likes to run, hike, bike, and do bikram yoga in her free time. She's getting married at the end of September and thereafter will be named Lauren Powlovich!

Sara Higgins: Sara grew up in the middle of the woods in Ripton, Vermont. She moved out west to Washington state for college where she studied biology and worked in a Drosophila genetics lab. She has a three-year old puppy named Basil and enjoys hiking, cooking, and crafting.



Lauren Gilligan (Left) and Sarah Higgins (Right)



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New Master Graduate Students Have Arrived

Hello, I am Zhouwei Zhang. You can call me Roger. I am from Chengdu, China, the same hometown of giant panda. I am so excited to come to UVM and I find it is a perfect place to deep into studying cause it is such a quiet place with beautiful, beautiful surroundings!

I really hope to contribute a bit to human health and thus I choose pathological research as my master major. I am looking forward to clarifying something! I love sports, especially soccer and table tennis, sometimes I can sing a little~

This is my first time to come to US and I hope to make more friends, wherever you from.



Zhouwei Zhang (will be located in HSRF 303)

Pathology, UVM and US, here I am !

Catherine M. Westbom (located in HSRF 215)



I am from Windsor, Vermont. Birthplace of Vermont 1777. :) Windsor is a beautiful area with a wonderfully smalltown Vermont feel to it. It was a great place to grow up. It was in Windsor that I learned some of my current hobbies. I am a skier and snowboarder in the winters. I could not choose one side of THAT argument, so I do both, and I love both. In the summer months I like to frequent the beaches in the Burlington area with my dog Mocha. We both love to swim, take the occasional run and BBQ as much as weather allows. I also enjoy rock-climbing, reading as much as time allows, traveling and finding new activities/adventures.

My goal now is to put my efforts into gaining my M.S. in Pathology under the wonderful guidance of Dr. Arti Shukla. After that I am rather unsure about where to go next. Right now my goal is to pursue either medical school or work toward a Doctor of Nursing Practice degree. I know I want to be involved in medicine, the 'what and where' is just not clear yet.





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New Master Graduate Students Have Arrived



Sonali Herath (will be located in HSRF 215)

My name is Sonali, I'm a first year graduate student in the Environmental Pathology program. Traveling has always been a very big part of my life; I'm a Sri Lankan-Belgian, grew up as New Zealander and a proud Jersey girl at heart! I really enjoy learning about other cultures, cooking, and hiking. My passions for cancer research began when my beloved grandfather was affected by this horrible disease, my interest then led me to working with a clinical research team dealing with breast and colon cancer for a short period time, following my undergraduate studies. The Masters Program, here at UVM, has been a perfect fit for me as it has given me the opportunity to apply my clinical knowledge while gaining a stronger understanding of this disease.





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WCAX TV News Featured Dr. Mary Cushman, July 19, 2012



Link To Video: http://www.wcax.com/story/19068312/avoiding-inflammation?autoStart=true&topVideoCatNo=default&clipId=7523234

AVOIDING INFLAMMATION

When you get a cut or a cold, your body fixes the problem by responding with inflammation. White blood cells move in to start the healing process. But researchers, including some at the University of Vermont College of Medicine, are discovering that that process can get out of control and lead to what's called chronic inflammation. And they say that it's linked to a list of chronic and sometimes deadly conditions like heart disease and cancer.

Kristin Kelly spoke with Dr. Mary Cushman at UVM.

Kristin Kelly: What are researchers finding in relationship to bad things like cancer and heart disease?

Dr. Mary Cushman/UVM College of Medicine & FAHC: It's really fascinating. We used to think that inflammation only occurred when you had a bad infection like pneumonia. We discovered over the last three decades that most diseases have an inflammatory reaction associated with them, like atherosclerosis that causes heart disease for example, and you can see that in the pathology of those diseases. Back in the 90s in studies at UVM... So it's really integral to most of the chronic diseases.

Kristin Kelly: What does the role of fat play in all of this?

Dr. Mary Cushman: When you look at factors that correlate with higher levels in the blood... But the strongest correlate with having higher levels of inflammation is having obesity. And the reason is the fat tissue is a very active tissue. It is not just a depot that makes you look different. It's actually an active organ and it secretes substances called cytokines that stimulate inflammation.





WCAX TV News Featured Dr. Mary Cushman, July 19, 2012

AVOIDING INFLAMMATION

Kristin Kelly: So, what can somebody do to protect themselves from inflammation?

Dr. Mary Cushman: Well, we know a lot of the things your grandmother told you are helpful in this regard... What we believe, also, is that if you can practice the healthy lifestyle habits of plenty of physical exercise, not smoking, getting the right exercise, a healthy diet; you can lower your risk of a whole range of diseases from diabetes to cancer.

Kristin Kelly: Dr. Mary Cushman, thank you.

Dr. Mary Cushman: You're welcome.

Kelly: Even if you are not overweight you can be at risk for chronic inflammation. There is a simple blood test that can check your risk level. It's called a CRP test. Most doctors can perform one.

Mary Cushman is Professor of Medicine and Pathology and Director of the Thrombosis and Hemostasis Program of the Division of Hematology-Oncology. She is a Principal Investigator at the Laboratory for Clinical Biochemistry Research on the Colchester campus where she studies etiologic factors in vascular disease using population based cohort studies.





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RESEARCH FOCUS



Albert van der Vliet, Ph.D.

What is your scientific background?

I received my Ph.D. in 1991 in Chemistry at the Vrije Universiteit in Amsterdam, the Netherlands, and I did postdoctoral training at the University of California at Davis, in the areas of Lung Cell Biology and Analytical Biochemistry. There, I also received my first academic appointment as Assistant Research Biochemist in 1996, and later as Assistant/ Associate Professor in Residence in the Department of Internal Medicine at UC Davis. My research training is primarily in Chemistry and Molecular Pharmacology, and in development of biochemical and analytical approaches to evaluate the importance of oxidative stress in biology. During my time at UC Davis, I applied these approaches to address oxidative stress in pulmonary cell biology and lung diseases such as cystic fibrosis. In 2002, I came to UVM to join the Environmental Pathology Program.

What are your main areas of research?

My research continues to focus on the importance of oxidative stress in the development of chronic lung disease in association with environmental pollution. One major research area deals with the importance of environmental tobacco smoke in development of allergic airways disease. We have highlighted the important contribution of reactive electrophiles (mostly acrolein) in tobacco smoke-induced oxidative stress and alterations in lung cell function and are using a combination of biochemical and molecular biology approaches to address the mechanisms by which acrolein exposure alters the integrity of the pulmonary epithelium and its involvement in innate or adaptive immune responses to inhaled allergens. Another major research area addresses the epithelial NADPH oxidase DUOX1 and its importance in epithelial oxidant production in response to environmental stimuli. Our studies have demonstrated an important role for DUOX1 in maintaining epithelial integrity and in innate allergic responses, and alterations in DUOX1 expression have been associated with chronic diseases such as asthma, COPD and lung cancer. We are using similar biochemical and molecular approaches to study specific epithelial signaling mechanisms that are regulated by DUOX1 to understand how alterations in DUOX expression or activity may contribute to lung disease.





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RESEARCH FOCUS

Albert van der Vliet, Ph.D.

What might be one possible translational result from your research?

We hope to develop suitable functional biomarkers that could indicate the contribution of acrolein in smokingrelated disease or may be useful in predicting disease risk in relation to e.g. tobacco smoke exposure. We are also actively pursuing the potential contribution of DUOX1 in allergic asthma, in collaborative studies with colleagues in the Vermont Lung Center, and hope that this could lead to development of specific inhibitors that may be useful in treatment or management of asthma.

On the personal side, what do you like to do to relax?

I much enjoy outdoor life, and like to go hiking in the VT mountains or canoeing/kayaking on Lake Champlain or in VT rivers. In the summer, I try and spend much of my free time hanging out at our lakeside cottage in North Hero. In the wintertime, I like to go snowboarding and snowshoeing. I also love to travel, and visit various interesting places around the world.



Please don't miss the article posted in Vermont Medicine - University of Vermont College of Medicine - Volume 49, Issue 2 * 2012 "the work (and play) of Russell Tracy, Ph.D. - located at website address: http://www.uvm.edu/medicine/vtmedicine/documents/VM22012final_spread.pdf



Idea Man - "Russell Tracy, Ph.D., followed his own special path to build a distinguished research and administrative career, and in the process has helped foster the work of many others." - by Sarah Zobel/photographs by Marlo Morgado



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Russ has helped revolutionize thinking about coronary disease. —Bruce Psaty, M.D., Ph.D., M.P.H., Professor of Medicine and Epidemiology University of Washington



"A lot of modern cardiovascular research...would not have evolved without Russ playing such a big role in stimulating investigators to work together." - Lew Kuller, M.D., Dr. R.H., Distinguished University Professor of Public Health Department of Epidemiology,University of Pittsburgh