

Vermont's Academic Medical Center

Pathology & Laboratory Medicine Newsletter

Editorial Committee: Interim Chair: Ronald J. Bryant Editor-in-Chief: Nicholas Hardin, M.D. Edwin Bovill, M.D. Pamela Gibson, M.D. Russell Tracy, Ph.D.



Welcome to the Spring 2012 edition of the Pathology & Laboratory Medicine Newsletter!

FEATURED ARTICLE

Dr. Thomas Trainer, Speaker at Laboratory Professionals Week.

Written by: Dr. Nicholas Hardin



Dr. Thomas D. Trainer gave Pathology Grand Rounds in conjunction with Laboratory Professionals Week on Wednesday April 25, 2012 in Davis Auditorium. The room was packed.

Dr. Trainer began with a history of Fletcher Allen Health Care, beginning with a movie from the Fletcher Allen website on the history of

Vermont and the Mary Fletcher family. The following timeline gives an idea:

- 1791 Vermont became a state and the University of Vermont was established
- 1792 Dr. John Pomeroy moved to Burlington
- ca 1800 Dr. Pomeroy began instruction of students in medicine
- 1822 formal lectures began at the medical department
- 1836 the medical department ceased operations (!)

1854 – It was revived under the Samuel White Thayer. Dr. Walter Carpenter served on the medical faculty for 28 years and played a pivotal role in the formation of the Mary Fletcher

1866 – The state Assembly licensed the practitioners of medicine, and a non-profit hospital was established in Burlington.



Mary Fletcher's parents came up with the idea, and arranged for the funding, but they passed, and the daughter Mary Martin Fletcher (1830 – 1885) continued the effort on behalf of her parents, and named the hospital in honor of her mother. She died of tuberculosis and when dying, asked to be brought to the hospital she and her family had caused to be built. Her doctor advised against making the trip,

but she went anyway, and died peacefully, shortly after arriving at her room. The Fletcher family also funded the Fletcher Free Public Library in the center of Burlington.



INSIDE THIS ISSUE:

Page 1 – 3

• Featured Article

Page 4

 Promotions, Appointments & Reappointments

Page 5-6

- Professional Endeavors
- New Grants (or current)

Page 7

- Honors
- Abstracts
- Fellowships

Page 8-11

• Publications

Page 12

• Presentations & Workshops

Page 13

- New Initiatives/Curricula
 Development
- Community Service

Page 14

- Welcome New Faculty
- Welcome New Student
 Fellows
- New Chief Residents
- New Pathology Residents Arriving in July 2012

Page 15

 Pathology & Laboratory Staff Recognition and Notes of Interest

Of the hospital, Walter Carpenter said that the aim is not to make money but to "relieve suffering."

The talk featured numerous photos (available on the Internet) of the MFH in 1879, the Fanny Allen Hospital in 1894, the Bishop Degoesbriand Hospital in 1924, the MCHV in 1967, and the FAHC in 1995, and again when it was redone in 2006.



Sister Fanny Allen (1784 – 1819) went to a Catholic convent in Montreal (there were none in Vermont at the time). The convent was run by nuns whose mission was health care. She was the daughter of Ethan Allen, and also died, rather young, of tuberculosis.

When showing a photo of the Bishop DeGoesbriand Hospital, Dr. Trainer recalled a story about the day the ER at the DH called saying that their floor was covered with frogs. Apparently, the frogs used in the early pregnancy tests had escaped from their enclosures in the lab, and had migrated downstairs to the ER. He also recalled Arthur, the diener at the morgue. Allegedly, this gentleman was often "several sheets to the wind." On one particular day, the surgical pathologists, Drs. Ernest Stark and Thomas Trainer, found that all their slides were cloudy, and upon investigation, it turned out that Arthur had discovered the location of the 95% ethanol used in the preparation of the slides, taken it, and replaced it with water.



A little known fact about Vermont was that it has had three medical schools. One was at Castleton, where Dr. Selcik Gridley (1818 -1862) established the Castleton Medical Academy. There is still a medical museum at Castleton, and one of its documents relates the problem of grave-robbing from a cemetery in Putney, allegedly for the purpose of dissection by medical students. [Editor's note: In addition, a bust showing a woman with a large goiter and entitled "Our Lady of the Goiter" now resides in the gross specimen museum of the UVM College of Medicine.]

Another school was the Clinical School of Medicine in Woodstock, located at 11 Church Street in Woodstock, and run by a Dr. Gallop. There is no building remaining from that school.

And of course, the third school was the University of Vermont Medical Department established by Dr. Pomeroy. The Pomeroy House, built in 1798, still sits at 166 Battery Street. Dr. Trainer recalled that it was a bait shop at the time he was in training, and that he had bought bait there. This school later moved to the Medical Building in 1828, a red brick building [that sits at the top of Main Street opposite the end of the green and just west of the city reservoir.] Later it was moved to Morrill Hall. Mr. Justin Morrill, for whom the hall is named, was the Vermonter most involved in the establishment of the Land Grant Colleges in the U.S. It was as a result of that that UVM became a state University. The medical school was eventually moved to the location of Dewey Hall in 1884. At that time it was known as the Underwood Place, and it burned down in December of 1903. The newly built replacement, Dewey Hall, opened in 1905, to a class of 48 students. The first woman was admitted in 1912. The new Medical College buildings were started in 1960, and the Dewey Hall building was turned over to the Dept. of Psychology in 1969.

The Vermont medical school and the state of Vermont are also remembered for several other firsts, including:

Spec

Dr. Trainer reminisced about his time in training and after. The lab was on the second floor of Patrick in the Mary Fletcher Hospital. Dr. Trainer showed photos of the land owned by Dr. Fred Fiske (about where the Sheraton is now) and from whom he rented an apartment, and several aerial photos showing cows grazing just southeast of the hospital. He recalled the building the Cupola owned by Mr. Ralph DesLauriers, who started the Bolton Ski facility.

And then he remembered a particular day August 16, 1963, when he and his friend John Fuller had decided they were going to go down to Ripton to fish. He poked his head in the door and announced to his wife, "Honey, John and I are going fishing, I'll be back around ten o'clock."

She said, "Well, happy anniversary to you!"

As Dr. Trainer relates it, he knew it was <u>decision</u> time! After all, they had had four children together. As I recall," he said, "I caught 27 trout that day, and it cost me about a thousand dollars a pound!"

He related that the Old Mill was originally three buildings, the North, South, and Middle Colleges, and that they hired an architect to join them together. But there was no hallway joining the three buildings, so the students and faculty had to go outside to get from one to the next.

Slides of the Burlington waterfront came next, showing Burlington as a huge lumber port, the third largest in the country at that time. Lumber was a burgeoning industry, and so in 1831 Burlington had about 831 people, but by 1870, three to five thousand. The waterfront in 1951 showed a number of large oil tanks. Tanker ships came up through the locks in New York, and off loaded at the piers in Burlington. He recalled getting a job one summer cleaning out the sludge from the tanks, while his supervisor sat outside smoking. He says that was when he decided to get a good job and go to medical school. He recalled how the Barge Canal became the contaminated site that appeared on the U.S. list of worst contaminated areas, and that the "circ" highway was started, but never finished because of the Barge Canal. The site still has not been cleaned up.

Dr. Trainer ended with many photos of workers in the laboratory, including Lucien Cote as a young man in Microbiology, Ed Merrill in Chemistry, Allie Russell and Florence Czernawsky, administrators, Sarah Dopp, Janet Scanlon, Wylene Jackson, and faculty members such as Drs. John Craighead and Ted Bovill (former chairmen). He spent a little more time fondly remembering Dr. Robert Coon, former chair of the Department of Pathology, who came from the Rochester School of Medicine, and whom he credits with being instrumental in getting the Medical Alumni Building being built, and having all the lab work done in a central laboratory, rather than having multiple small splinter labs. Of the current parking garage, Dr. Trainer said that the winding road down through the garage is "four floors of the worst road in Vermont."

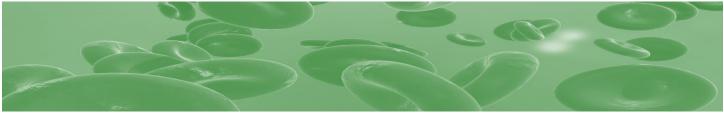
He closed with saying that through all those years, as far as he could remember, "one thing had not changed one iota: the quality of the people. We have always had great people working here." He also recalled that the clinical pathology training program has always been one of the best in the country. So lots of residents who did Anatomic Pathology training elsewhere, came up to Vermont for two years to get their Clinical Pathology training.

He closed with a story. He usually goes to North Carolina to visit family, but one time, he could not go, so the family all came up -- three granddaughters and a grandson, and their parents -- to visit. He confided to the audience that it was probably a "prewake trial run," to find out how much liquor I had, how many beds were available, was there any good food left, and "where I stored the money." They found out that I had a life insurance policy that only paid until I stopped working at the hospital. So my daughter said, "Daddy, could you do us a favor? Please keep working 'til you die."

[For the record, Dr. Trainer still comes to the hospital nearly every day, and is still working.]

A link to Dr, Trainer's Lecture can be found here: (Link to Video)

A link to the photos in his talk can be found here: (Link to Dr. Trainer's Power Point)



Promotions, Appointments & Reappointments



Kumarasen Cooper, M.D. VCC CROC, March 2012.



Michael Lewis, M.D. LCME Self-Study Subcommittee on Institutional Setting.



Mark Evans, Ph.D. Vermont Cancer Center Protocol Review Committee.



Arti Shukla, Ph.D. UVM Extension Dean evaluation committee-appointed by the President, Faculty Senate.



Russell Tracy, Ph.D.

College of Medicine: 2012: Member, Task Force on LCME Reaccreditation, College of Medicine, University of Vermont 2012: Chair, Subcommittee on Institutional Standards, LCME Reaccreditation, College of Medicine, University of Vermont 2011-2012: Member, Search Committee for Hemotology/Oncology Faculty member, Department of Medicine, College of Medicine, University of Vermont 2011-2012: Member, Search Committee for Hemotology/Oncology Faculty member, Department of Medicine, College of Medicine, University of Vermont 2011-2012: Member, Search Committee for Chair of the Pathology Department, College of Medicine, University of Vermont 2010-2011: Member, Search Committee for Chair of Biochemistry Department, College of Medicine UVM: 2011-2012: Member, Search Committee for the President, University of Vermont.



Professional Endeavors



Kelly Butnor, M.D. was appointed to the Independent Review Panel for the College of American Pathologists/ International Association for the Study of Lung Cancer/Association for Molecular Pathology Lung Cancer Biomarkers Guideline.



Russell Tracy, Ph.D. 2011-present: Member, NIH Office of AIDS Research (OAR) Working Group on HIV and Aging 2010 - present: Organizing Committee, 1st, 2nd and 3rd International Workshops on HIV & Aging, Baltimore, MD 2011- present: NHLBI Cardiovascular Inflammation Reduction Trial (CIRT) – Protocol Review Committee and Data and Safety Monitoring Board 2009-present: NHLBI Clarification of Optimal Anticoagulation through Genetics (COAG) Trial – Protocol Review Committee and Data and Safety Monitoring Board.



Rebecca Wilcox, M.D. Gastrointestinal and Liver (Pancreatobiliary) Content: 2012 Pathologist Recertification Individualized Self-Assessment Examination (PRISE); American Society for Clinical Pathology (ASCP).—Provide questions, answer explanations and photographs for ASCP question bank designed to support pathologists in preparation for the Maintenance of Certification (MOC) Part III Cognitive Expertise examination administered by the American Board of Pathology (ABP).

New Grants (or current)

Arti Shukla, Ph.D.

- Awarded NIH-R01 for five year 1R01ES021110-01, inflammasomes in pathogensis of mesothelioma.
- VCC/LCCRO Massive Parallel Sequencing Pilot grant for one year.

Russell Tracy, Ph.D.

I am currently supported by a number of awards (see below), many of which have been renewed in the past year or so:

- NO1 HC95166 (Tracy) 02/15/08 08/14/15 1.20 Calendar Months NIH/NHLBI \$418,789 Special Laboratory Center Multi Ethnic Study of Atherosclerosis II The major goal of this project is to provide laboratory-support for non-standard tests in areas such as hemostasis, lipoprotein metabolism, inflammation, genetic markers in a multicenter, longitudinal epidemiological study of the incidence and progression of subclinical CVD.
- R01 HL093081 (Barr) 07/01/08 06/30/13 0.12 Calendar Months NIH/NHLBI \$9,498 Pulmonary Vascular Changes in Early Chronic Obstructive Pulmonary Disease (COPD). This Proposal explores the pathogenesis and progression of subclinical chronic obstructive pulmonary disease (COPD) in part through measurements of systemic inflammation at the Laboratory for Clinical Biochemistry Research.
- RO1 HL095140 (Kaplan) 09/25/08 06/30/13 0.60 Calendar Months NIH \$14,099 Inflammatory and Immune Mechanisms of Atherosclerosis in HIV-Infected Women. This project will identify the specific inflammation-related and immunologic determinants of atherosclerosis among HIV-infected women in the WIHS Study which includes genotyping and cellular and serum lab measurements using the biospecimen archive.
- P50 ES015915 (Kaufman) 06/01/08 05/31/13 0.12 Calendar Months NIH/NIEHS \$9,083 Discovery Center: Myocardial Infarction in Traffic-related Air Pollution. This study proposes to determine whether specific genetic polymorphisms suspected to play a role in one or more of these mechanisms influence susceptibility to the cardiovascular effects of exposure to outdoor particulate matter.



New Grants (or current)

Russell Tracy, Ph.D. (continued)

- RD-8316970 (Kaufman) 08/01/05 07/31/12 0.24 Calendar Months EPA \$64,658 Prospective Study of Atherosclerosis, Clinical Cardiovascular Disease, and Long-term Exposure to Ambient Particulate Matter and Other Air Pollutants in a Multi-ethnic Cohort. This study will perform and interpret assays of inflammatory and hemostatic variables in relation to air pollution in MESA.
- RO1 HL071862 (Reiner) 12/01/08 03/31/13 0.3 Calendar Months NIH/NHLBI \$248,016 Molecular Epidemiology of MI and Stroke in Older Adults This continuation proposes to expand the pathway of ~100 thrombosis genes which will be integrated with several new plasma intermediate phenotypes that are planned to measure in CHS, in order to assess thoroughly the relationships between a network of thrombosis-related candidate genes, intermediate phenotypes, and CVD outcome.
- U01 HL084904 (Lee) 07/01/09 06/30/12 0.6 Calendar Months NIH/NHLBI \$184,005 Heart Failure Network In this project we are acting as the core biomarker laboratory and biosample repository for the NHLBI-funded multicenter Heart Failure clinical trial network.
- UO1 Al068641(Neaton) 09/22/09 08/31/12 1.20 Calendar Months NIH/NIADI \$738,596 International Network for Strategic Initiatives in Global HIV Trials (INSIGHT) The INSIGHT Network has focused on large clinical trials with morbidity and mortality outcomes. The purpose of this proposal is to use stored specimens in SMART and ESPRIT to study the relationship of biomarkers and genetic traits with serious non-AIDS events, and, in SMART, to study the effects of antiretroviral treatment (ART) on biomarkers taking advantage of the randomized design.
- R01 HL094555 (Mukamal) 07/01/09 06/30/13 0.6 Calendar Months NIH \$129,939 Determinants and Cardiovascular Consequences of Diabetes in Older Adults CHS Diabetes Working Group proposal for a multi-institutional, multi-faceted approach to evaluate determinants and consequences of abnormal glucose regulation using a well-defined, large, and carefully followed cohort of 5,888 older men and women.
- (Psaty/Rich) 10/01/09 06/30/12 0.6 Calendar Months NIH \$12,686 Human Exome Sequencing in Six Well-Phenotyped NHLBI Cohorts This is a multi-cohort post-GWAS study to perform genomic exome sequencing on selected members of these cohorts to explore functional (i.e., causal) variances.
- N01-AG62106 (Cummings) 08/15/08 03/31/12 0.05 Calendar Months NIH/NIA \$10,936 Road to Success: Indicators and Agents of Exceptionally Healthy Aging in the Ninth Decade. This study is designed to characterize the aging-related changes that occur in body composition in older men and women, and identify these changes with ability and disability as well as diseases of old age such as Cardiovascular Disease.
- (Barr) 05/01/10-04/30/14 0.86 Calendar Months NIH \$,002 Cardiopulmonary structure and function in Multi-Ethnic Study of Atherosclerosis (Mesa Lung II) The MESA-Lung II Study would test hypotheses related to possible mechanistic pathways underlying linked cardiopulmonary function, in addition to testing if measures of endothelial dysfunction predict longitudinal decline in lung function, longitudinal increase in CT percent emphysema and incident COPD.
- U01-AI068641 (Neaton) 10/01/10-02/15/12 0.24 Calendar Months NIH \$81,558 Biomarker Studies on the Pathogenesis of Non-AIDs Conditions Associated with HIV and Viral Hepatitis This proposal expands on ongoing biomarker work in SMART and ESPRIT to explore the effect of HIV on novel markers related to platelet activation.



Honors

Many Pathologists were honored with nominations for teaching awards for the Foundations portion of the Medical School curriculum. They are: Foundations Teaching Award: Sharon Mount, M.D., Pamela Gibson, M.D., Nicholas Hardin, M.D. The Dean Warshaw Integration Award: Pamela Gibson, M.D., Sharon Mount, M.D., Abdelmonem Elhosseiny, M.D., Michael Lewis, M.D. The Silver Stethoscope Award: Sharon Mount, M.D., John Lunde, M.D., Pamela Gibson, M.D., Abdelmonem Elhosseiny, M.D., Kelly Butnor, M.D., Nicholas Hardin, M.D. Above and Beyond Award: Nicholas Hardin, M.D., Pamela Gibson, M.D., Rebecca Wilcox, M.D., Sharon Mount, M.D. Best Support Staff: Sharon Mount, M.D. The American Medical Women's Association Gender Equity Award, Foundations Level: Rebecca Wilcox, M.D., Sharon Mount, M.D., Kelly Butnor, M.D.

Congratulations Nominees!



Edwin Bovill, M.D. Professor and Chair—Invited Keynote Speaker at University of Pittsburg annual, national hemostasis conference "Blood in Motion". Title of talk: "Venous Thrombophilia from Genotype to Phenotype: The Role of the Vessel Wall", April 27, 2012.



Cherie Paquette, M.D., Pathology Clinical Instructor—Resident

Vincent Hyams Award for best platform presentation by a physician-in-training at USCAP 2012 Head and Neck Pathology Section, given by the North American Society for Head and Neck Pathology.



Rebecca Wilcox, M.D., Assistant Professor Dept. of Pathology - Invited to present a workshop on "the H&E (History and Evolution) of Gastric Cancer" at the 38th Annual National Society for Histotechnologists (Vancouver, BC)

Abstracts (Published and Submitted)

Jessica Bekker, M.D. The prevalence of HPV in Clinically Benign Tonsillectomy Specimens; abstract accepted at USCAP (March 2012)

Kelly Butnor, M.D.

Abstract to CAP '12 Meeting: Co-existence of Sarcina Organisms and Severe Helicobacter Pylori Gastritis/Duodenitis in Pediatric Siblings. **Sauter JL, Butnor KJ, Wilcox R.** Paper to archives of Pathology and Laboratory Medicine: Guidelines For Pathologic Diagnosis Of Malignant Mesothelioma: 2012 Update in Consensus Statement From The International Mesothelioma Interest Group. (with 23 other co-authors).

Kumarasen Cooper, M.D.

Submitted five abstracts to USCAP March 202, Vancouver.

Rebecca Wilcox, M.D.

R.Wilcox, AD Bhave, P Gibson. Real-Time Histologic Assessment of CT-Guided Percutaneous Needle Core Biopsies of the Transplant Pancreas. Modern Pathology. 2012 USCAP: Jan 2012, 25 (s).

Fellowships

Chelsea Tooke, M.D.

Accepted a fellowship position: Transfusion Medicine/Blood Banking at the University of Michigan in Ann Arbor (2013-2014).

Publications

Ted Bovill, M.D.

- Meltzer ME, Hasstedt SJ, Vossen CY, Callas PW, de Groot PG, Rosendaal FR, Lisman T, Bovill EG. Genome scan of clot lysis time and its association with thrombosis in protein C deficient kindred. J Thromb Haemost 9:1383-1390, 2011. PMCID: PMC3138551.
- Smith NL, Huffman JE, Strachan DP, Huang J, Dehghan A, Trompet S, Lopez LM, Shin SY, Baumert J, Vitart V, Bis JC, Wild SH, Rumley A, Yang Q, Uitterlinden AG, Stott DJ, Davies G, Carter AM, Thorand B, Polasek O, McKnight B, Campbell H, Rudnicka AR, Chen MH, Buckley BM, Harris SE, Peters A, Pulanic D, Lumley T, de Craen AJ, Liewald DC, Gieger C, Campbell S, Ford I, Gow AJ, Luciano M, Porteous DJ, Guo X, Sattar N, Tenesa A, Cushman M, Slagboom PE, Visscher PM, Spector TD, Illig T, Rudan I, Bovill EG, et al: Genetic predictors of fibrin D-dimer levels in healthy adults. Circulation 123:1864-72, 2011.
- 171. Hemmeryckx B, Emmerechts J, Bovill EG, Hoylaerts MF, Lijnen HR. Effect of ageing on the murine venous circulation. Histochem and Cell Bio 137(4):537-46 2012.
- Fonseca C, Cindy Fonseca, Douglas J, Taatjes, Peter Callas, and Edwin G. Bovill. The effects of aging on the intimal region of the human saphenous vein: Insights from multimodal microscopy and quantitative stereology. In press Histochemistry and Cell Biology 2012.
- Brummel-Ziedins KE, Orfeo T, Callas P, Gissel M, Mann KG, Bovill EG. Evaluating thrombin generation in a family with protein C deficiency. in press J Thromb Haemost 2012.

Mark Evans, M.D.

- Brooks EG, Evans MF*, Adamson CS, Peng Z, Rajendran V, Laucirica R, Cooper K. In situ hybridization signal patterns in recurrent laryngeal squamous papillomas indicate that HPV integration occurs at an early stage. Head Neck Pathol. 2012;6:32-7. (*joint first author).
- Ekalaksananan T, Pientong C, Kongyingyoes B, Chaiwongkot A, Yuenyao P, Kleebkaow P, Kritpetcharat O, Evans MF. Combined p16INK4a and Human Papillomavirus Testing Improves the Prediction of Cervical Intraepithelial Neoplasia (CIN II-III) in Thai Patients with Low-Grade Cytological Abnormalities. Asian Pac J Cancer Prev. 2011;12:1777-8.
- Abstracts/posters presented at the 2012 Annual Meeting of the United States and Canadian Academy of Patology (USCAP), March 17-23, Vancouver, BC, Canada 1. Does increasing Fuhrman nuclear grade reflect evolving epithelial-mesenchymal transition in clear cell renal cell carcinoma? Conant JL, Peng Z, Evans MF, Naud S, Cooper K. Mod Pathol. 2012;25(S2):824. 2. Clark KM, Evans MF, Ma X-J, Wu X, Luo Y, Peng Z, Cooper K. Does HPV RNA chromogenic in situ hybridization (CISH) discriminate between low and high-grade cervical squamous intraepithelial lesions (SIL)? Mod Pathol. 2012;25(S2):1107.
- Duong T, Adamson CS, Rajendran V, Waters B, Evans MF. HPV infectivity of products of conception: an age-specific prevalence study. Mod Pathol. 2012;25(S2):1121.
- Bekker JB, Evans MF, Threlkeld KJ, Rajendran V, Adamson CS, Cooper K. Screening for HPV in clinically benign tonsillectomy specimens. Mod Pathol. 2012;25(S2):1280.
- Paquette C, Evans MF, Meer S, Rajendran V, Adamson CS, Cooper K. HPV-31 is the most common HPV subtype isolated from oropharyngeal squamous cell carcinomas in South Africa. Mod Pathol. 2012;25(S2):1318.
- Evans MF, Munjal K, Rajendran V, Adamson CS, Peng Z, Cooper K. HPV viral load and in situ hybridization signal patterns indicate diverse patterns of dysregulation in cervical carcinoma pathogenesis. Mod Pathol. 2012;25(S2):1924. 7. Brownschidle S, Evans MF, Ashikaga T, Iyer A. A comparative study of tissue microarray (TMA) versus conventional Immunohistochemistry (IHC) for Evaluation of Mismatch Repair (MMR) Systems in colorectal cancers (CRCs). Mod Pathol. 2012;25(S2):2069.

Issue 2 - Spring 2012

Publications

Michael Lewis, M.D.

- Book chapters submitted for publication Winn WC Jr, Westenfeld F, Lewis MR. Human Resources at the Local Level: An Important Component of Financial Management. Submitted for inclusion in: Garcia LS, ed. Clinical Laboratory Management, 2nd ed. Washington, DC: ASM Press, expected publication in 2013.
- Bryant RJ, Lewis MR. Financial Decision-Making: Putting the Pieces Together. Submitted for inclusion in: Garcia LS, ed. Clinical Laboratory Management, 2nd ed. Washington, DC: ASM Press, expected publicaton in 2013.
- Bryant RJ, Lewis MR. Benchmarking and Perofrmance Monitoring: What's Appropriate for Your Laboratory? Submitted for inclusion in: Garcia LS, ed. Clinical Laboratory Management, 2nd ed. Washington, DC: ASM Press, expected publication in 2013.

Cherie Paquette, M.D.

- Paquette C Brownschidle S Michelow P Leiman G. Multinucleated histiocytes in pulmonary hematomas: a new finding? [preliminarily accepted by Diagnostic Cytopathology].
- Paquette C Waters BW Trainer TD. Lack of Müllerian marker (PAX-2) expression on the ovarian surface in the fetus and infant. [submitted to the International Assocation of Pathology Conference 2012].
- Lundy K Paquette C. Special coagulation laboratory study on reagent response to dabigatran, a direct thrombin inhibitor. [accepted by Thrombosis and Hemostasis Summit of North America 2012].

Arti Shukla, Ph.D.

- Perkins TN, Shukla A, Peeters PM, Steinbacher JL, Landry CC, Lathrop SA, Steele C, Reynaert NL, Wouters EFM, and Mossman BT: Differences in gene expression and cytokine production by crystalline vs. amorphous silica in human lung epithelial cells. http://www.particleandfibretoxicology.com/content/9/1/6 Part Fibre Toxicol 9:6, 2012 PMCID: PMC Journal – In Process.
- Arti Shukla, Jill Miller, Jedd Hillegass, Maximilian MacPherson, Stacie Beuschel, Harvey Pass and Brooke Mossman. Role of NLRP3 inflammasome in the development and drug resistance of malignant mesothelioma. Presented at AACR annual meeting in Chicago, March 31-April 4, 2012. (Abstract published in the proceedings of AACR).

Douglas Taatjes, Ph.D.

- Lee, J-S., Agrawal, S., von Turkovich, M., Taatjes, D.J., Walz, D.A., and Jena, B.P. (2012) Water channels in platelet volume regulation. J. Cell. Molec. Med. 16, 945-949.
- Wang, S., Lee, J-S., Bishop, N., Jeremic, A., Cho, W.J., Chen, X., Mao, G., Taatjes, D.J., and Jena, B.P. (2012) 3D organization and function of the cell: Golgi budding and vesicle biogenesis to docking at the porosome complex. Histochem. Cell Biol., In press.
- Quinn. A.S., Wu, X-X., Rand, J.H., and Taatjes, D.J. (2012) Insights into the pathophysiology of the antiphospholipid syndrome provided by atomic force microscopy. Micron 43, 851-862.
- Wang, S., Lee, J-S., Bishop, N., Cho, W.J., Chen, X., Mao, G., Taatjes, D.J., and Jena, B.P. (2012) ER-mediated mitochondrial division: studies using AFM and EM. Submitted to Histochem. Cell Biol.
- Fonseca, C., Taatjes, D.J., Callas, P., Ittleman, F., and Bovill, E.G. (2012) The effects of aging on the intimal region of the human saphenous vein: Insights from multimodal microscopy and quantitative image analysis. Submitted to Histochem. Cell Biol.
- Lathrop Macura, S., Hillegass, J.M., Steinbacher, J.L., MacPherson, M.B., Shukla, A., Beuschel, S.L., Perkins, T.N., Butnor, K.J., Lathrop, M.J., Taatjes, D.J., Kauppinen, R.A., Landry, C.C., and Mossman, B.T. (2012) A Multifunctional Mesothelin Antibody-Tagged Microparticle (APMS) Targets Human Mesotheliomas. Submitted to J. Histochem. Cytochem.



Issue 2 - Spring 2012

Publications

Russell Tracy, Ph.D.

- Kizer JR*, Arnold AM, Benkeser D, Ix JH, Djousse L, Zieman SJ, Barzilay JI, Tracy RP, Mantzoros CS, Siscovick DS, Mukamal KJ. Total and high-molecular-weight adiponectin and risk of incident diabetes in older people. Diabetes Care. In press, 2012. (PubMed – in process).
- Greco CM, Li T, Sattar A, Kao AH, Danchenko N, Edmundowicz D, Sutton-Tyrrell K, Tracy RP, Kuller LH, Manzi S*. Association between depression and vascular disease in systemic lupus erythematosus. J Rheumatol. In press, 2012. (PubMed in process).
- Olson NC, Callas PW, Hanley AJ, Festa A, Haffner SM, Wagenknecht LE, Tracy RP*. Circulating levels of tnf-alpha are associated with impaired glucose tolerance, increased insulin resistance, and ethnicity: The insulin resistance atherosclerosis study. J Clin Endocrinol Metab. In press, 2012. (PubMed in process).
- Steffen BT, Steffen LM, Tracy R, Siscovick D, Jacobs D, Liu K, He K, Hanson NQ, Nettleton JA, Tsai MY*. Ethnicity, plasma phospholipid fatty acid composition and inflammatory/endothelial activation biomarkers in the multi-ethnic study of atherosclerosis (MESA). Eur J Clin Nutr. In press, 2012. (PubMed – in process).
- Berry JD, Dyer A, Cai X, Garside DB, Ning H, Thomas A, Greenland P, Van Horn L, Tracy RP, Lloyd-Jones DM*. Lifetime Risks of Cardiovascular Disease. NEJM . 366:321-329, 2012.
- Djousse L*, Biggs ML, Ix JH, Kizer JR, Lemaitre RN, Sotoodehnia N, Zieman S, Mozaffarian D, Tracy RP, Mukamal KJ, Siscovick DS. Non-esterified fatty acids and risk of sudden cardiac death in older adults. Circ Arrhythm Electrophysiol. In press, 2012.
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Publications

Russell Tracy, Ph.D. (continued)

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Rebecca Wilcox, M.D.

- B Lavoie, B Nausch, EA Zane, MR Leonard, OB Balemba, AC Bartoo, R. Wilcox, MT Nelson, MC Carey and GM Mawe. Disruption of Gallbladder Smooth Muscle Function is an Early Feature in the Development of Cholesterol Gallstone Disease. Neurogastroenterology and Motility. 2012. Accepted; In press.
- Tucker S, K. Cooper, S. Brownschidle and R. Wilcox. Embryonal (undifferentiated) sarcoma of the liver with peripheral angiosarcoma differentiation arising in a mesenchymal hamartoma in an adult patient. Intern J of Surg Path. Nov 2011. Epub ahead of print; Print version in-press.
- Nankoe S., R. Wilcox, K.K. Roggin. Paraduodenal pancreatitis (groove pancreas) mimicking pancreatic adenocarcinoma. Clin Gastroenterol and Hepato. 2012: 10(1),31-32.
- Collins, D., R. Wilcox, M. Nathan, and R. Zubarik. Celiac disease and hypothyroidism. Am J of Med. 2012: 125, 278-282.



Presentations & Workshops

Jessica Bekker, M.D.

The Prevalence of HPV in Clinically Benign Tonsillectomy Specimens; poster at USCAP (March 2012).

Kelli Clark, M.D.

USCAP platform presentation: Does HPV RNA Chromogenic In Situ Hybridization Discriminate Between Low and High Grade Cervical Squamous Intraepithelial Lesions?

Deborah Cook, M.D.

Regional Presentation at the 24rd Annual Eastern Winter Dermatology Conference; University of Vermont College of Medicine; Stowe, VT—January 2012.

Kumarasen Cooper, M.D.

Pordenone (Italy) Surgical Pathology Update, February 2012 (Soft tissue tumor update) IAP, Indian Division, Patiala, India, December 2011 (Intra-abdominal tumors) Post-Graduate Institute (PGI) of India, December 2011 (Slide seminar, resident teaching).

Mark Evans, M.D.

Poster presentation at the 2012 Annual Meeting of the United States and Canadian Academy of Patology (USCAP), March 17-23, Vancouver, BC, Canada

Gladwyn Leiman, M.D.

Regional: North-Eastern Genito-Urinary Symposium, Burlington, VT. 04/14/2012 "Unusual Bladder Tumors".

Cherie Paquette, M.D.

- International Platform: Paquette C Evans M Meer S Rajendran V Adamson CS-C Cooper K. HPV-31 is the most common HPV subtype isolated from orpharyngeal squamous cell carcinomas in South Africa. United States and Canada Academy of Pathology Annual Meeting—Head and Neck Section Vancouver, BC Canada, March 2012
- International Poster: Paquette C Shapiro S Hardin NJ. Death certification at an academic medical center: A re-evaluation. United States and Canada Academy of Pathology Annual Meeting Vancouver, BC Canada, March 2012.
- Paragraph (3 pathology fellowships and 2 student fellowships) (ask Lisa Kapoor about Path fellowships).

Arti Shukla, Ph.D.

One national presentation at American Association of Cancer Research, in Chicago on April 4, 2012.

Russell Tracy, Ph.D.

Speaking engagements Jan-April 2012:

- AHA Council on Epidemiology and Disease Prevention 2012 National Scientific Sessions Invited Keynote Speaker in Session on Biomarker Opportunities and Challenges San Diego, CA 2012.
- LIFE Study Ancillary Study Symposium Invited Speaker and Discussant Washington, DC 2012.
- Merck MSD Latin America Free Standing Symposium Invited Speaker and Discussant Miami, FL 2012.
- NEI Studies of the Ocular Complications of AIDS (SOCA) Planning Retreat invited discussant Baltimore, MD 2012.
- NIAID INSIGHT Scientific Retreat on HIV, Inflammatory and Coagulation Biomarkers, and End Organ Disease Invited Session Chair and Speaker Bethesda, MD 2012.



New Initiatives- Curricula Development

Nicholas J. Hardin, M.D.

Greg Sharp and I, along with a few other faculty members, made 41 videos for the Pathology Labs in the Foundations Courses. These have been well received by the students, and have resulted in students coming to labs more prepared and with more of the terminology than before.

Community Service

Allison Ciolino, M.D.

Involved with the caring and adoption of rescue canines at Random Rescue in Williamstown, VT.

Mark Evans, M.D.

High school education outreach.

Nicholas J. Hardin, M.D.

I and a few friends (John Gaworecki, John Malcovsky, and Ed Bianchi) have been the Train doctors for the electric train that circles the Pediatrics Clinic waiting room on the 4th floor of the East Pavilion in the ACC at FAHC. We have gotten the trains running, and put Thomas the Tank Engine and his friend on the tracks. The children visiting the clinic can push a doorbell button to activate the train, which travels once around the room and then stops. It is common to see a child staring up at the ceiling, turning slowly as he/she watches the train proceed. The parents tell us that their children now come to the clinic "to see Thomas" rather than the doctor. This seems like a good thing to us. Several pediatricians have taken an active interest in the trains, and decorated the train set for Christmas.

Rebecca Wilcox, M.D.

4/2012 Health Career Exploration Shadow Day at Fletcher Allen Health Care sponsored by Champlain Valley Area Health Education Center: opportunity for high school students to explore the area of pathology through job shadowing. (Fourth year of participation).

5/2012 UVM College of Medicine Girl's Science Discovery Day: Will run seminar "lessons from the dead" for multiple small groups of junior high girls from the state of Vermont interested in a science career. (Third year participation).



Issue 2 - Spring 2012

Welcome New Faculty

- Allison Ciolino, M.D.— Pathologist Faculty Member as of March 1, 2012
- Susan Kehoe Executive Assistant to the Chair of Pathology as of March 5, 2012
- Maryam Zenali, M.D.—GI Pathologist—starting August 1, 2012
- Christina Wojewoda, M.D.—Pathologist/Microbiologist—starting August 1, 2012

Welcome New Student Fellows

- Lauren Gilligan
- Sara Higgins

New Chief Residents



• Sara Brownschidle, M.D.—PGY 3—AP/CP



• Cherie Paquette, M.D.—PGY 3—AP/CP



• Chelsea Tooke, M.D.—PGY 3—AP/CP

New Pathology Residents Arriving in July 2012

- Joanna Conant (UVM)
- Jessica Wood (UVM)
- Jamen Bartlett (University of South Dakota)
- Christine Jabcuga (The University of Texas-Houston Medical School)





Pathology & Laboratory Staff Recognition and Notes of Interest

Martha Severance, Financial Assistant and Billing Specialist of the Department of Pathology — Celebrated 31 years with UVM College of Medicine on February 23, 2012. Congratulations Martha!

Susan Kehoe, Executive Assistant to the Chair of the Pathology Department is a Notary Public and offers these services free of charge to the UVM/FAHC Pathology & Laboratory Medicine faculty and staff (requirement: proof of identity/photo ID).

Laboratory Professionals Week Was Celebrated April 22nd-28th

A very special thanks go out to all of our laboratory professionals for all that they do to keep the patients at FAHC safe and in keeping their physicians informed with the latest in medical technology.

Ted Bovill, M.D. Former Chair and Ron Bryant, M.D. Interim Chair

Our gratitude and thanks go out to all of our support staff members for your exceptional efforts in keeping the UVM/FAHC Pathology and Laboratory Medicine Department on track. Please know that your hard work is recognized and genuinely appreciated!

Special Request: The Newsletter is looking for digital medical images to include in future issues. If you have any colorful pathology and/or laboratory related images to share, please send your submission to: Susan.Kehoe@uvm.edu.

Thank you!

