

THE PATHWAY

JUNE 2018

Volume 9 Issue 2

WELCOME 1ST YEAR PATHOLOGY RESIDENTS 2018-2019



Jay Alden, DO



Luke Cypher, MD, PhD



Yanna Ding, MD, PhD



Hao Liu, MD, PhD



Daniel Ogden, MD



**Steven L. Carroll, M.D., Ph.D.,
FASCP, FCAP**

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This newsletter is made possible from the generous contributions of MUSC's Pathology and Laboratory Medicine Faculty and Staff. The success of this publication is dependent upon this support.

Thank you for your interest, time and information. For inquiries, suggestions or submission information please contact Linda McCarsen (mccarsli@musc.edu) or Lori Roten (roten@musc.edu).

WELCOME!

CYTOPATH FELLOWS

Ashley Cross, MD



Alex Elliott, MD



Charles Newman, MD



DERMATOPATH FELLOWS



David Perry, MD, PhD



Daniel Skipper, DO

HEMATOPATH FELLOW



Aite Lander, DO

MOLECULAR PATH FELLOW



Cynthia Schandl, MD, PhD

SURGICAL PATH FELLOW



David LeBel, MD

Welcome!

New Hires:

- ◆ **Thomas R. Beaver, MD** arrived 6/1/18 as a Clinical Associate Professor
- ◆ **Jessica Forcucci, MD** arrived 7/1/18 as an Assistant Professor
- ◆ **William D Hill II, Ph.D.** arrived 7/1/18 as a Professor
- ◆ **Aditi Peyush** arrived 6/4/18 as a student in Dr. Mehrotra's lab
- ◆ **Nicholas Larson** arrived 6/15/18 as a student in Dr. Mehrotra's lab
- ◆ **Jessica Welters** arrived 6/18/18 as a Research Specialist I in Dr. Schulte's lab

Departures:

- ◆ **Song Pan** (Visiting Scholar) 5/7/18
- ◆ **Uday Baliga** (Research Specialist I) Dr Mehrotra's lab 5/31/18
- ◆ **Dr. Hiu Wing Cheung** (Assistant Professor) 6/30/18
- ◆ **Dr. Dennis Watson** (Professor) 6/30/18
- ◆ **Dr. Derrick Green** (Fellow) 6/30/18
- ◆ **Dr. Virginia Miller** (Fellow) 6/30/18
- ◆ **Dr. Jessica Foreucci** (Fellow) 6/30/18
- ◆ **Dr. Brett Keeling** (Fellow) 6/30/18
- ◆ **Dr. Yekaterina Eichel** (Fellow) 6/30/18
- ◆ **Dr. Michael Stump** (Fellow) 6/30/18
- ◆ **Dr. Emily Curl** (Resident) 6/30/18
- ◆ **Dr. Katie Huenerberg** (Resident) 6/30/18

CONGRATULATIONS!!

MUSC Health recognizes house staff, annual departmental awards:

Pathology & Laboratory Medicine

- House Staff Award for Anatomic Pathology Faculty — **Laura Spruill, M.D., Ph.D.**
- House Staff Award for Clinical Pathology Faculty — **Angie Duong, M.D.**
- Chief Residents — **Emily Curl, M.D. and David LeBel, M.D.**
- College of American Pathologists Translational Diagnostics Advanced Training Award — **Jessica Snider, M.D.**
- Committees: Resident Representative Leadership Award, American Society for Clinical Pathology (ASCP) Apple Tree Steering Committee — **Tiffany Baker, M.D., PhD.**
- ASCP Resident Council — **Kendall Brewer, M.D.**
- CAP Resident Delegates — **Rachel Jester, M.D. and Paige Woodham**
- CAP Resident's Forum Executive Committee — **Iris Martin, M.D., MPH**
- Section Editor for the Archives of Pathology and Laboratory Medicine — **Daniel Skipper, D.O.**



Dena Blanding

CONGRATULATIONS!!

AS THE RECIPIENT OF THE 2017-2018

THOMAS W. HOLBROOK AWARD

This award is presented to a student who, in their second year, demonstrated excellence in their academic performance in Pathology and Laboratory Medicine, Microbiology and Immunology.

CONGRATULATIONS ON THIS LEVEL OF EXCELLENCE!

The university has as an institution-wide goal each year that at least 90% of its faculty involved in educating students is rated as effective by students (reflected by percentage of faculty involved in teaching that have an average score for the academic year of ≥ 4.0 on a 1-5 scale for key items about teaching effectiveness from the E-Value survey).

In addition to identifying the rate of effective teachers at MUSC, the scores are also used to determine which of our faculty are consistently high performing on this outcome. Based on the last five years of data, you consistently perform very high on this index of teaching effectiveness.

The following faculty have achieved an average of ≥ 4.5 each year for at least four of the past five years.



Julie Hirschhorn, PhD



Erin Presnell, MD



Jerry Squires, MD, PhD

CONGRATULATIONS!

To: Dr. Ashley Cross, her husband Mack and big brothers, Landon and Haywood

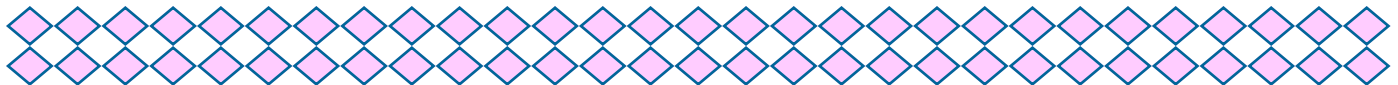
IT'S A GIRL!



Fielding Elaine Cross

July 13, 2018

5 lbs., 13 oz.



RAYMOND EDWARDS

Nomination: Because he deserves the recognition and has not yet won the award.

Other Nominees: Travis Chappie, Alison Garbarini, Jennifer German, Brent Grimbail, LaQuantes Mack, Margaret Romano, Nancy Smythe

END OF YEAR AWARD & RECOGNITION CELEBRATION



Emily Curl, M.D.
2017-2018
4th Year Resident



Alex Elliott, M.D.
2017-2018
4th Year Resident



Katie Huenerberg, M.D.
2017-2018
4th Year Resident



David LeBel, M.D.
2017-2018
4th Year Resident



Charles Newman, M.D.
2017-2018
4th Year Resident

END OF YEAR AWARD & RECOGNITION CELEBRATION cont'd...



Derrick Green, M.D.
2017-2018
Cytopath Fellow



Virginia Miller, D.O.
2017-2018
Cytopath Fellow



Daniel Skipper, D.O.
2017-2018
Cytopath Fellow



Brett Keeling, M.D.
2017-2018
Dermatopath Fellow



Michael Stump, M.D.
2017-2018
Hematopath Fellow



Kate Eichel, M.D.
2017-2018
Surgpath Fellow

RESEARCH DIVISION UPDATE

Statistics for the Division of Research from **April through June**. **Eighteen grant proposals** were submitted requesting **\$3,641,165** in total first year costs.

Also, during this period **ten grants were awarded** totaling **\$957,911**.

Congratulations and many thanks to everyone involved in obtaining these awards.



Bradley Schulte, Ph.D., Vice Chair of Research

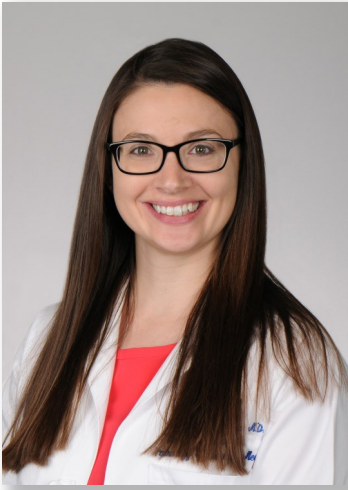
Principal Investigator	Proposed Start Date	Title	Total 1st YR Dollars
Fan, Hongkuan	5/31/2018	Supplement: The Beneficial Effects of Endothelial Progenitor Cells in the Vascular Dysfunction of Sepsis	\$58,511
Fan, Hongkuan	6/1/2018	SCTR Discovery Grant Microbiome Retreat: Targeting Gut Microbiota to Treat Sepsis	\$25,000
Hamlett, Eric	5/11/2018	A novel PPAR-gamma agonist approach to neuroinflammation and Alzheimer's disease	\$168,000
Hamlett, Eric	5/23/2018	A novel PPAR-gamma agonist approach to neuroinflammation and Alzheimer's disease	\$30,000
Krisanits, Bradley	4/8/2018	The Effects of lifestyle change on race specific accumulation of advanced glycation end-products in prostate cancer survivor	\$46,994
Lazarchick, John	4/3/2018	Safety & Efficacy of turoctocog alfa pegol (N8-GP) in Prophylaxis and Treatment of Bleeds in Previously N8-GP Treated Patients with Severe Haemophilia A	\$98,733
Noble, Kenyaria	4/5/2018	Alternations of Sphingolipid signaling and Macrophage function in age-related hearing loss	\$44,044
Sha, Suhua	4/6/2018	Shaping Next Generation Aminoglycoside Antibiotics for Treatment of Multidrug Resistant Disease	\$14,950
Sha, Suhua	4/17/2018	Attenuating age-related hearing impairment and AD in a plaque and tangle-bearing mouse model by Rapamycin a lysosomal activator	\$724,226
Sha, Suhua	6/15/2018	Shaping Next Generation Aminoglycoside Antibiotics for Treatment of Multidrug Resistant Disease	\$35,002
Sha, Suhua	6/22/2018	Aminoglycosides with reduced ototoxicity via miRNA targeting(Phase I)	\$74,750
Smits, Bart	5/30/2018	Biomarker discovery by MALDI-imaging in genetic rat models for breast cancer susceptibility Award mechanism	\$184,279
Spyropoulos, Demetri	6/25/2018	Investigation of Maternal Exposures and Childhood Obesity	\$495,184
Turner, David	5/30/2018	Defining the Mechanistic Implications of Lifestyle associated metabolites to Breast Cancer Therapy	\$186,875
Wang, Gavin	6/5/2018	Role of Senescence-Associated Secretory Phenotype in Lung Cancer Radiotherapy	\$373,750
Wang, Qi	5/30/2018	Defining the Mechanisms Governing Metastatic Dormancy and Reactivation in Breast Cancer	\$186,875
Wang, Qi	6/5/2018	Targeting transcriptional mechanisms of therapeutic resistance in HER2-positive breast cancer	\$371,230
Won, Je-Seong	6/5/2018	Nitric Oxide Based Pathology and Therapy in Vascular Cognitive Impairment and Dementia	\$522,762
Total Proposals	18		\$3,641,165

GRANTS AWARDED - 4/1/2018 - 6/30/2018

Principal Investigator	Proposed Start Date	Title	Total 1st YR Dollars
Fan, Hongkuan	6/1/2018	SCTR Discovery Grant Microbiome Retreat: Targeting Gut Microbiota to Treat Sepsis	\$25,000
Fan, Hongkuan	7/1/2018	The Role of Pericytes in Vascular Dysfunction of Sepsis	\$373,750
Lang, Hainan	7/1/2018	Auditory Nerve Degeneration and Repair	\$200,000
Lazarchick, John	4/3/2018	Safety & Efficacy of turoctocog alfa pegol (N8-GP) in Prophylaxis and Treatment of Bleeds in Previously N8-GP Treated Patients with Severe Haemophilia A	\$98,733
Lazarchick, John	5/1/2018	A Global Epidemiologic Study to Determine the Prevalence of Neutralizing Antibodies and related adaptive Immune Responses to Adeno-Associated Virus (AAV) in Adults with Hemophilia	\$4,038
Sha, Suhua	4/6/2018	Shaping Next Generation Aminoglycoside Antibiotics for Treatment of Multidrug Resistant Disease	\$14,950
Sha, Suhua	6/22/2018	Aminoglycosides with reduced ototoxicity via miRNA targeting(Phase I)	\$74,750
Sha, Suhua	6/15/2018	Shaping Next Generation Aminoglycoside Antibiotics for Treatment of Multidrug Resistant Disease	\$35,002
Sha, Suhua	7/1/2018	Novel aminoglycosides with reduced Ototoxicity	\$59,800
Singh, Avtar	4/24/2018	SA:Mechanisms of Neuroprotective Therapy in TBI	\$71,888
Totals Awarded	10		\$957,911

FACULTY FOCUS

Jessica A. Forcucci, M.D.



I was born in upstate New York, where both of my parents grew up, but lived there for only a few years until we moved to New Hampshire. My younger brother, two sisters, and I participated in various musical and sports activities, many of which were cold weather related, like skiing and skating. My family moved to Fort Mill, South Carolina when I was 12, and I spent my adolescence there attending middle and high school. My grandfather was a music professor, and I shared his interest in music, and played the piano, flute, oboe, and vibraphone.

After graduating from Fort Mill High School, I moved to Columbia to attend the University of South Carolina, where I had received a music and academic merit scholarship. Over the next four years, I split my academic time between the School of Music, College of Arts and Sciences, and Honors College. While my primary focus at the School of Music was music performance on my primary instrument, flute, I was also interested in music theory and history. Despite my interest in music, I had already decided that I wanted to pursue a career in medicine, so I was also working towards a second major in biology. Outside of class, I worked for the Department of Athletics, where I tutored student athletes in a wide variety of subjects. I graduated from USC with a Bachelor of Arts in Music with a performance certificate, and a Bachelor of Science in Biology.

Following graduation, I moved to Charleston to start medical school at MUSC. I was accepted into the summer gross anatomy class, which allowed 20-30 students to complete gross anatomy early during the summer, with several of those students being chosen to serve as teaching assistants for their classmates in the fall. Over that first summer, I learned a lot, made many new and lasting friends, and also met Aaron, my future husband. I started medical school with the idea that pathology was likely where I would end up, but I was open to other options. Dr. Batalis, my faculty mentor, helped to arrange for me to spend my 1st year summer in autopsy. While I enjoyed the majority of my clinical rotations during medical school, what I continued to like most was the diagnostic aspect of medicine, and I took as many pathology selectives as possible. My relationship with my now husband continued, and during our 4th year, Aaron and I participated in the couples match and interviewed widely across the southeast. We were unable to find a residency that could compare with both of our experiences at MUSC and were hopeful to remain in Charleston. On Match Day, we were elated to match at MUSC, and were married a month later in Charleston.

Residency at MUSC was a fantastic experience; I learned a tremendous amount from the faculty, fellows, and my co-residents. I really appreciated the open-door policy of our faculty, and how consistently engaged everyone was with both our education and well-being. As I rotated on various services during residency, I knew it was going to be a struggle for me to pick a specialty for fellowship. I considered forensics, surgical pathology, surgical pathology subspecialties, and dermatopathology. With both the help of my experiences and the assistance of my faculty mentor, Dr. Smith, I finally settled on general surgical pathology and dermatopathology.

Following residency, I moved to Baltimore, where I served as a Surgical Pathology Assistant at Johns Hopkins. My responsibilities included general surgical pathology cases sign-out, frozen sections, and call coverage. I truly enjoyed my time at Hopkins working with the residents, PA's, faculty, and my co-fellows. I gained a substantial amount of experience and confirmed my desire to continue a career in both academic medicine and surgical pathology; however, it was a challenge living apart from my husband and dogs, who had stayed back in Charleston. At the end of the year, I was happy to return to Charleston for my dermatopathology fellowship, where my husband and home were, the weather was warmer, and the people were generally more easy-going and friendly.

My Dermatopathology fellowship was a unique experience, as pathology-trained fellows spend half of each day in clinic with patients for most of the year, which was something I hadn't done on a regular basis since medical school, five years prior. I also had the opportunity to work with the dermatology residents and rotate with our adjunct private practice faculty, Drs. Strong, Maize Jr. and McEvoy. During the year, I began searching for an academic position where I would be able to practice both surgical pathology and dermatopathology. I was incredibly happy to have the opportunity to interview and accept a position at MUSC.

On July 1st, I joined the faculty and will be dividing my time between dermatopathology and surgical pathology, as well as participating in dermatology resident, pathology resident, and medical student education.

My husband, Aaron Hyson, is a family physician with Roper St. Francis, in Summerville. He sees patients of all ages, and currently hosts 3rd and 4th year MUSC medical students on family medicine rotations. In addition to our careers, we both enjoy spending time with our dogs, Hashimoto, a Japanese Chin, and Incus, a black Labrador Retriever, renovating our 1950's era house, and cooking. I also personally enjoy gardening, sewing, baking, and crafting fermented beverages (kombucha and tepache), and bitters/tinctures for our homemade seltzer water.



A Day in the Life of a Young(ish) Surgical Pathologist

by Laura Spruill, M.D., Ph.D.

A couple of words regarding the title: First, I love a good fashion magazine and will occasionally allow myself a Vogue to catch up on the season's latest creations. One of the regular features is "A day in the Life" of usually an influential fashion designer or author or other creative type. I have always loved this feature because it combines the mundane with the important and paints a broad picture of someone's focus and priorities. Second, young, in this context refers less to age and more to rank. Being relatively low on the totem pole affords slightly different responsibilities than more senior surgical pathologists, such as (generally) fewer meetings. What follows is an average Tuesday in the life of Assistant Professor of Surgical Pathology, Dr. Spruill.

7:00 am Urology Grand Rounds – Usually presented by residents, these grand rounds are usually geared toward a clinical question or problem and occasionally highlight new surgical techniques or treatment methods (equipment/drugs). I love the momentary peek this allows me into the patient care concerns for a clinical service I care about. And 13 year-old me would have marveled at the ease with which some of the very personal male topics are discussed.

7:30 Urology Tumor Board – This is one of my favorite tumor boards on campus. It is fully multi-disciplinary with representation from surgeons, radiation-oncology, hematology-oncology, radiology, pathology and various nurse navigators and support staff. Only patients for which there is a question are presented, and discussion is usually helpful, often entertaining and always geared toward the highest level of patient care, resulting in tumor board consensus and a plan for the individual's care.

7:55 Faculty Senate -- On this particular morning, I must leave tumor board early (in capable hands) to attend Faculty Senate as a member/representative of the COM Clinical Sciences. Faculty senate is an elected position within the University and representatives maintain a voice with administration and help to represent the interests of faculty.

9:00 ART Breast Sign-Out – Usually I would be required to be at ART for early intraoperative consultation (Frozens), but surgery starts late on Tuesdays and I can arrive after my administrative burdens are complete. Today's work will be to look at resection specimens following the resident's review of cases and biopsies from yesterday. This is the work which I have been trained to do and I love working with the breast service. The Breast team at Hollings Cancer Center is a highly functional multidisciplinary team of people working at the height of patient care and one which I am proud to be a part of. I sincerely like the challenge that this area of surgical pathology presents, both in diagnosis and in specimen management. These are complex cases with complex reports, requiring multiple steps to ultimately provide the needed information to the clinicians for treatment. Tuesdays are particularly busy days and review of slides, ordering of biomarkers, acquiring appropriate pathologist agreement on new diagnoses (seconds) and calling clinicians finishes out the morning.

Continued . . .

12:00 pm Immunohistochemical and Special Stain Lab Check in – I like to quality control the immunohistochemical stains as early in the morning as possible, but on early ART days, it sometimes has to wait until I finish and can get to the lab. I love working with the highly qualified technicians in the immuno lab to make sure that patient tissue is stained appropriately. Today all of the stains worked well with all controls behaving appropriately. We are working on validating INI-1 on the Leica Bond immunostainer, so I review the slides for the validation to assure that historic positive cases are positive and negative cases are negative. The stain appears strong and predictable and I am able to validate the move from one platform to the other. I also approve some new CMV control tissue and pick some appropriate titers for CD117 in tissue and in bone marrow and CD34 in surgical tissue. I check in with the daytime technicians and ask about the overnight crew. All is well, so I bid them good day.

1:00 Lunch – just a quick one, because a girl has to eat before getting hangry.

1:30 Meet with a Sales Rep from Mayo Oncology – I find myself meeting with multiple sales reps from various companies we use for send-out tests, probably through my role in the immuno lab. We send out a high volume of HPV typing and MMR/MSI testing to Mayo, in addition to several other lower volume tests. This guy is new in his position and mostly wants to introduce himself. We spend a few minutes chatting regarding possible tests we might want to order from them and I direct him to various others who have better answers to some of his questions.

2:00 Back to my office to accomplish the following goals: work on a collaborative research project with one of the breast surgeons; Review my lecture on Grossing Breast for the first years; Update my biosketch and send it to another collaborator for a pending grant application; Update my CV for possible promotion and send it to the Departmental Appointment, Promotion and Tenure (APT) committee.

What actually gets done:

2:00 Mini-Date with my husband, Radiologist Extraordinaire, for a quick Starbucks.

2:10 Answer an email regarding a patient care question from one of the breast oncologists regarding Her2 testing and the new guidelines for multiple equivocal results. This requires review of the new guidelines and copy of the summary page so that I can educate my colleague (good for her and me).

2:30 Sit with the surgical pathology fellow going through consult cases. This is fun because I get to look at the most interesting cases and teach at the same time.

3:00 Work on the biosketch because it is due very soon and the collaborator has emailed me twice regarding the grant application. I modify my already existing biosketch to fit her proposal and write her an email to discuss my role in the project and where some of the histologic studies can be completed.

3:40 Answer a page from one of my GU colleagues regarding a question he has on one of the diagnostic reports I issued on one of his patients. The question is in regard to the true margin status on a renal cell carcinoma, which determines whether this particular patient can be enrolled in a clinical trial for his potentially non-surgically resected disease. Unfortunately my answer excludes the patient from the clinical trial.

4:00 Attempt to work on my CV for promotion; Get interrupted by a mentee to discuss fellowship plans and personal statements. I'd actually far rather mentor residents than work on a CV, so the disruption is welcome.

4:30 Pull up my CV again, persevere over a perceived gap in requirements, search for a possible solution to said gap and put off sending it until tomorrow.

5:00 Arrange my desk so that the high priority things are at the top for work tomorrow.

5:05 Leave to pick up my son from summer Camp.

American Society for Clinical Pathology

Baltimore, MD
October 3-5, 2018

Holiday Celebration

SC Aquarium
December 14, 2018

Southeast Association for Pathology Chairs

(SEAPC)
Jacksonville, FL
February 2019

Pathology Spring Symposium

East Beach Conference Center
Kiawah Island
April 1-8, 2018

**UPCOMING
MEETINGS**

MUSC Department of Pathology & Laboratory Medicine Mission Statement:

To serve patients, health care providers, research scientists, scholars, and society by providing excellence and innovation in diagnostic services and educational resources in a respectful, professional and culturally diverse atmosphere.

Vision:

To become a preeminent leader in academic anatomic and clinical pathology while translating basic science discovery to improved clinical care.

www.musc.edu/pathology