

# THE PATHWAY

DECEMBER 2016

Volume 7, Issue 4

## Archives Journal (January 2017):

### Pathology Informatics Essentials for Residents: A Flexible Informatics Curriculum Linked to Accreditation Council for Graduate Medical Education Milestones

(<http://www.archivesofpathology.org/doi/abs/10.5858/arpa.2016-0199-OA?code=coap-site>)

#### RESULTS

The PIER prototype (Release 0) was introduced at the July 2014 APC Annual Meeting. PIER Release 1 was made available to all residency programs on the APC Web site in September 2014 and was concurrently alpha tested by 12 residency programs (Table 2) during that academic year. Preliminary alpha test findings indicate that PIER is effective. Release 2 is currently in development and scheduled for release in the summer of 2016. PIER's content relevance is intended to be maintained via new releases, updating the subject matter and instructional process tools for program directors and faculty to provide continuously improved informatics training to their residents while continuing to meet ACGME Informatics Milestone requirements.

#### Table 2. Pathology Informatics Essentials for Residents (PIER) Alpha Test Residency Programs

|  |
|--|
| Baystate Medical Center, Springfield, Massachusetts        |
| Cleveland Clinic, Cleveland, Ohio                          |
| The George Washington University, Washington, DC           |
| <b>Medical University of South Carolina, Charleston</b>    |
| University of Buffalo, Buffalo, New York                   |
| University of Kentucky, Lexington                          |
| University of Miami, Miami, Florida                        |
| University of New Mexico, Albuquerque                      |
| University of Pittsburgh, Pittsburgh, Pennsylvania         |
| University of Southern California, Los Angeles, California |
| University of Toledo, Toledo, Ohio                         |
| University of Vermont, Burlington                          |



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 Lori Roten (roten@muscedu).

# CONGRATULATIONS!



## GOLDEN APPLE AWARDS

### Year 1 nominees (from Pathology):

- ◆ Dr. Sally Self
- ◆ Dr. Jerry Squires
- ◆ Dr. Debra Hazen-Martin

### Year 2 nominees (from Pathology):

- ◆ Dr. Nick Batalis
- ◆ Dr. Erin Presnell
- ◆ Dr. Jerry Squires

**Year 2 WINNER: Dr. Nicholas Batalis**



- ◆ **Dr. Adriana Olar** passed her Molecular Pathology Certification Exam on 9/15/16
- ◆ **Dr. Angelina Indira Phillips** passed her Forensic Pathology Certification Exam on 9/19/16
- ◆ **Dr. James Madory** passed his Clinical Informatics Certification Exam on 10/14/16

**Dr. Nicholas Batalis**  
was the  
COM2 Block 9  
Faculty Excellence  
Award Winner!



**Dr. Erin Presnell**  
was the Clinical Teaching  
for Block 3  
Faculty Excellence  
Award Winner!



**Dr. Daniel Skipper**  
Resident, PGY-4  
received a 2nd place award  
for the  
Duel in Dermatopathology  
(an oral abstract competition)  
at the  
ASDP 2016 meeting

## HOSPITAL SERVICE AWARD RECIPIENTS - 2016

| Display Name              | Home Unit Name                      | Adj Svc Date | Yrs Hired State | Title                           |
|---------------------------|-------------------------------------|--------------|-----------------|---------------------------------|
| PEYTON, MELISSA ROXANNE   | CYTOPATHOLOGY                       | 8/21/2005    | 10              | CYTOTECHNOLOGIST                |
| GREENE, LATOSHIA DENISE   | VENIPUNCTURE                        | 6/13/2006    | 10              | PHLEBOTOMY TECHNICIAN II        |
| WILLIS, DEBORAH LYNN      | VENIPUNCTURE                        | 10/17/2005   | 10              | PHLEBOTOMY TECHNICIAN II        |
| ROBINSON, LINDA GAIL      | BUSINESS & ADMINISTRATIVE OPERATION | 1/8/2006     | 10              | SUPPLY SPECIALIST III           |
| ANDREWS, PAUL S           | FAST FLOW & SATELLITE LABS          | 5/28/2006    | 10              | MEDICAL TECHNOLOGIST            |
| DOSS, JOSEPH M            | FAST FLOW & SATELLITE LABS          | 4/2/2006     | 10              | MEDICAL TECHNOLOGIST            |
| FLUHARTY, CHAD THOMAS     | FAST FLOW & SATELLITE LABS          | 10/16/2005   | 10              | MEDICAL LAB TECHNICIAN ADVANCED |
| CARTER, STEPHANIE NICHOLE | CYTOGENETICS                        | 8/7/2005     | 10              | MEDICAL TECHNOLOGIST ADVANCED   |
| CLAYTON, MONICA ELIZABETH | TRANSFUSION MEDICINE                | 8/7/2005     | 10              | MEDICAL TECHNOLOGIST ADVANCED   |
| HUMPHREY, MARSHA L        | ART OR LAB                          | 7/24/2005    | 10              | MEDICAL TECHNOLOGIST            |
| WAHL, CYNTHIA             | REFERENCE & SPECIMEN REFERRAL       | 2/26/1996    | 20              | MEDICAL TECHNOLOGIST ADVANCED   |
| BROWN, VANESSA L.         | LAB OUTREACH AND COURIER SERVICE    | 10/17/1995   | 20              | MEDICAL TECHNOLOGIST            |
| DRAYTON, NANCY            | FAST FLOW & SATELLITE LABS          | 8/22/1985    | 30              | MEDICAL TECHNOLOGIST ADVANCED   |
| WIGGINS, CARYLEE          | SPECIAL HEMATOLOGY & FLOW CYTOMETRY | 5/30/1986    | 30              | MEDICAL TECHNOLOGIST            |
| ANDREWS, DORINDA M.       | SPECIAL CHEMISTRY AND IMMUNOLOGY    | 10/5/1985    | 30              | MEDICAL TECHNOLOGIST ADVANCED   |
| BONAPARTE, DENISE B.      | BUSINESS & ADMINISTRATIVE OPERATIO  | 10/3/1975    | 40              | FISCAL TECHNICIAN II            |
| SACK, NANCY L.            | LAB OUTREACH AND COURIER SERVICE    | 11/25/1975   | 40              | MEDICAL TECHNOLOGIST            |
| COUSIN, PATRICIA ANN      | DIAGNOSTIC MICROBIOLOGY             | 5/19/1976    | 40              | MEDICAL LAB TECHNICIAN ADVANCED |

## UNIVERSITY SERVICE AWARD RECIPIENTS - 2016

| Display Name   | Home Unit Name     |            | Yrs Hired State | Title  |
|----------------|--------------------|------------|-----------------|--|
| YUSHENG, ZHU   | CLINICAL PATHOLOGY |            | 10              | CLINICAL CHEMISTRY LAB DIRECTOR  |
| DONEGAN, SALLY | BUSINESS OFFICE    |            | 20              | GRANTS ADMINISTRATOR   |
| LEWIN, DAVID   | ANATOMIC PATHOLOGY | 10/17/2005 | 20              | VICE-CHAIR FOR MEDICAL AFFAIRS, PATHOLOGY RESIDENCY PROGRAM ASSOCIATE DIRECTOR |

# GRADUATE STUDIES UPDATE

## NOVEMBER, 2016

### Student Update

#### ◆ Student Research Day

Jamie Mills (Ethier's lab) – 2<sup>nd</sup> Place Poster

Ryan Kelly (LaRue's lab) – 2<sup>nd</sup> Place Oral VA

LaShardai Brown (Lang's lab) – 2<sup>nd</sup> Place Poster

Lourdes Nogueira (Findlay's lab) – 2<sup>nd</sup> Place Oral

#### ◆ Qualifying exam this past summer

3 students (2 pass; 1 fail)

#### ◆ MS students all proposed this semester

2 pass; 1 fail

#### ◆ New MS students currently rotating (3 of 5 total MS students)

Clare Burton (Findlay)

Jaime Randise (Turner)

Narges Anbardar (Turner)

#### ◆ PhD defense dates for the spring - TBA

### Council News

#### ◆ First year curriculum rolled out this semester

Feedback from students was mainly positive

#### ◆ PhD first year rotations end Nov 18<sup>th</sup>; 2<sup>nd</sup> rotation starts after Thanksgiving

First time each student from a rotation gives either (drawn from a hat)

15 min talk

3 min "no slides" FameLab presentation

Submits written paper

Presentations will be held this Friday from 13:30pm in CHP A 206

#### ◆ Faculty Exposure was 'ready, willing & able' faculty only in 4 mixed poster session for 1<sup>st</sup> rotation choice

Lunches are underway with 15 min talks spread between departments for 2<sup>nd</sup> and are scheduled for 3<sup>rd</sup> rotations

Pros/cons of having a PATH program exposure in the spring?

#### ◆ Proposal Format

6 page NIH format for students proposing after January 1<sup>st</sup> 2017. Includes a literature review of ~3000 words to be submitted to the committee prior to the meeting date

Timing is submission of written material by April 15<sup>th</sup>, defend by June of the year following the qualifying exam (Year 3)

#### ◆ Qualifying Exam

New date is by June of Year 2.

#### ◆ Student defense

Examination - student complaints

low attendance;

lack of faculty/student interest and

committee members not reading thesis beforehand or asking questions

Solutions

More robust; recorded?; external reviewer?; length >2-3hours

celebrations

Chair provides champagne; PI provides cake; department is invited

|                                |  |                       |
|--------------------------------|--|-----------------------|
| <b>Plastic, Glass, Metal</b>   |  |                       |
| <b>Paper</b>                   |  | All paper is shredded |
| <b>Cardboard / Paperboard</b>  | To recycle, place next to trash/landfill bin |                       |
| <b>E-Waste/Toner/Batteries</b> | Drop off locations (info on back)            |                       |
| <b>Trash/Landfill</b>          |  |                       |

recycle@musc.edu Printed on 100% Post-Consumer Content, FSC certified, processed chlorine free recycle@musc.edu

## SAVE THE DATE

MUSC Sustainability and Recycling is excited to announce Earth Day 2017 at MUSC

### Wednesday, April 12th

11-2 pm - Horseshoe Portico  
 Earth Friendly Vendors, Food Trucks,  
 Door Prizes, Farmers, Craftsmen, and More

[facebook.com/muscgogreen](http://facebook.com/muscgogreen) [musc.edu/gogreen](http://musc.edu/gogreen)

### Plastic, Glass, Metal

Only rigid plastics are recyclable · Recycling logo not required · Place caps back on containers · Unbroken glass containers · Steel, tin, and aluminum containers and empty, non-hazardous aerosol cans are accepted

Plastic bags cannot be recycled on campus but can be brought to most grocery stores

No Styrofoam, foods or liquids!

### Paper

Only dispose of confidential information in secure containers

(secure container)

Magazines, newspapers, and office paper - All paper on campus is shredded - For large amounts call 2-4119 for a cleanout bin

### E-Waste, Toner, Batteries

#### E-Waste

E-waste, or electronic waste, includes TV's, computers, and other electronic items · Please call 2-4119 for a special collection of any E-waste containing confidential information · State property should go to surplus · Accumulate E-waste in a box and call (843) 792-4119 for disposal or drop off your E-waste at a drop off location: Children's Research Institute Loading Dock, Colbert Library Lobby, Main Hospital by the cafe, and Harborview Lobby

#### Toner

Toner can be recycled at numerous locations around campus - Call 2-4066 to find a toner box near you or request your own - Visit our website to start your own program through Officemax: [musc.edu/gogreen](http://musc.edu/gogreen) and look under 'WasteManagement'

#### Batteries

Call 2-4119 to request a battery bin (pictured below)  
 Batteries can be recycled at drop off locations: Colbert Library Lobby and Main Hospital by the cafe

### Cardboard

Please flatten cardboard & paperboard and place next to your trash/landfill bin · Cardboard is baled and recycled separately by housekeeping · Empty glove boxes, paper towel rolls, corrugated and non-corrugated cardboard, clean food boxes (cereal boxes, microwave meal boxes)

### Trash / Landfill

The landfill bin is for items that cannot be recycled or composted · Examples are Styrofoam containers, gloves, to-go coffee cups (unless specified as compostable), and plastic bags

### Compost

To further reduce landfilled waste at MUSC, we are piloting our first public compost bin located in the Urban Farm at 29 1/2 Bee St.

The compost bin is for food scraps, compostable containers, and paper products

### Contact

Request recycling services through the helpdesk (843) 792-4119

For more information visit [musc.edu/gogreen](http://musc.edu/gogreen)





# RESEARCH DIVISION UPDATE

Statistics for the Division of Research from **July** through **December**. Twenty four grant proposals were submitted requesting \$5,818,686 in total first year costs. Also, during this period three grant was awarded totaling \$277,726. Congratulations and many thanks to everyone involved in obtaining these awards.

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

## GRANT APPLICATIONS SUBMITTED - 7/1/2016-12/31/2016

| Principal Investigator | Proposed Start Date | Title   | Total 1st YR Dollars |
|------------------------|---------------------|---|----------------------|
| Cheung, Hiu            | 7/1/2017            | Targeting GAB2 oncogene in high-grade serous ovarian cancer   | \$371,478            |
| Ethier, Stephen        | 9/1/2017            | Oncogenic Signaling in Basal Type Breast Cancer   | \$371,416            |
| Fan, Hongkuan          | 10/11/2016          | Studies of Mechanism of the beneficial effects of sNAG and sNAG-miRNA complexes in murine sepsis induced by Cecal Ligation Puncture | \$42,350             |
| Findlay, Victoria      | 7/1/2017            | The functional role of microRNA-204 in lactation outcomes   | \$368,879            |
| Guest, Stephen         | 9/1/2017            | Novel BH3 mimetic-based therapeutic strategies for the treatment of breast cancer   | \$369,570            |
| Lang, Hainan           | 7/1/2017            | Auditory Nerve Denegeration & Repair  | \$371,341            |
| LaRue, Amanda          | 8/1/2017            | Targeting Novel DDR2-Expressing Cellular Subsets in Pulmonary Fibrosis  | \$215,020            |
| Mehrotra, Meenal       | 7/1/2017            | Role of Hematopoietic Stem Cell-derived Osteoblasts in Osteosarcoma Progression   | \$74,750             |
| Puligilla, Chandrakala | 9/1/2017            | Molecular Regulation of Sensory Epithelial Cell Patterning in the Mouse inner ear   | \$371,416            |
| Sha, Suhua             | 9/1/2017            | Nucleobase Amino Sugars with Reduced Ototoxicity  | \$74,750             |
| Smits, Bart            | 7/1/2017            | Targeting of p27+ luminal progenitors for breast cancer prevention  | \$450,000            |
| Smits, Bart            | 7/1/2017            | Targeting of p27+ luminal progenitors for breast cancer prevention  | \$150,000            |
| Spyropoulos, Demetri   | 4/1/2017            | The Obesogenic Potential of DOSS: a Novel Approach to Managing Neonatal Obesity   | \$373,750            |
| Spyropoulos, Demetri   | 7/1/2017            | Impact of the Emerging Obesogen Colace on Breast Milk Composition and Infant Obesity  | \$373,750            |
| Turner, David          | 4/1/2017            | PC160245: The Molecular Implications of Lifestyle Associated Metabolites (AGEs) to Prostate Cancer Disparity                        | \$290,609            |
| Turner, David          | 6/1/2017            | Identifying A Novel And Modifiable Prognostic Biomaker in Breast Cancer   | \$23,189             |
| Turner, David          | 7/1/2017            | Establishing Health Eating at Diagnosis: A Dietary Intervention for Women Receiving Chemotherapy for Triple Negative Breast Cancer  | \$8,807              |
| Turner, David          | 6/1/2017            | AGE Metabolites as a unifying biological mechanism linking lifestyle, metabolism and cancer disparity                               | \$363,850            |
| Turner, David          | 6/1/2017            | Pharmacological inhibition of lifestyle-linked metabolites in breast cancer   | \$188,595            |
| Wang, Qi               | 1/1/2017            | In vivo tracking of dormancy and remerge of HER2 positive breast cancer cells   | \$35,000             |
| Wang, Qi               | 8/1/2017            | Targeting CDK7 in therapeutically recalcitrant HER2+ Breast Cancer  | \$150,000            |
| Wang, Gavin            | 4/1/2017            | Therapy-Induced Cancer Stem Cell Enrichment   | \$373,750            |
| Wang, Gavin            | 4/1/2017            | Targeting MYC for Breast Cancer Treatment   | \$371,416            |
| Xiong, Ying            | 1/1/2017            | Role of Pim Protein kinase in gastric cancer growth and metastasis  | \$35,000             |
| <b>Total Proposals</b> | <b>24</b>           |   | <b>\$5,818,686</b>   |

## GRANTS AWARDED - 7/1/2016-12/31/2016

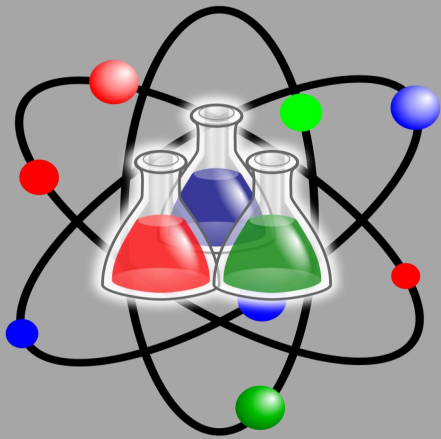
|                       |            |  |                  |
|-----------------------|------------|--|------------------|
| Carroll, Steven       | 6/1/2016   | Stereologic of the Cellular Composition of Neurofibromas   | \$96,507         |
| Fan, Hongkuan         | 10/11/2016 | Studies of the mechanism of the beneficial effects of sNAH and sNAGmiRNA complexes in murine sepsis induced by Cecal Ligation Puncture           | \$42,350         |
| Turner, David         | 7/1/2016   | The Generation of Clinically Annotated and Molecularly Characterized PDX Animal Nodes from Racially and Ethically Diverse Prostate Cancer Tissue | \$138,869        |
| <b>Totals Awarded</b> | <b>3</b>   |  | <b>\$277,726</b> |

# FAREWELL DROP-IN

OCTOBER 21, 2016



Yusheng Zhu, Ph.D., DABCC, FACB

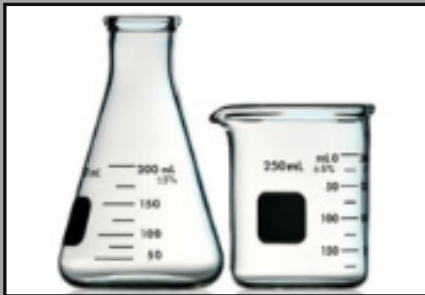


# FAREWELL DROP-IN

DECEMBER 15, 2016



Omar Moussa, Ph.D.





**NEW HIRES:**

- **Ruosha Lai**  
Visiting Postdoc  
Start Date: 10/3/16  
in Dr. Sha's Lab

**SEPARATED:**

- **Hui Li**  
Visiting Scholar  
Left Dr. Lang's Lab  
on 11/3/16
- **Aimin Yang**  
RG/RSI  
Left Dr. Gavin  
Wang's Lab on  
11/18/16
- **Danzell Smith**  
Graduate Assistant  
Left Dr. Turner's Lab  
on 12/1/16
- **Mauhamad Baarine**  
Postdoc  
Left Dr. Singh's Lab  
on 12/31/16
- **Theresa Cantu**  
Graduate Assistant  
Left Dr. Spyropoulos'  
Lab on 12/31/16
- **Alex Temkin**  
Graduate Assistant  
Left Dr. Spyropoulos'  
Lab on 12/31/16



**CONGRATULATIONS!**

*Dr. Julie Hirschhorn & her husband!*

*Henry Hirschhorn*

*Born on August 31, 2016*

*8 lbs. 5 oz. & 21 inches long*



# CONGRATULATIONS!

## Dr. Daynna Wolff

Article on Somatic Variant Interpretation Guidelines Published in  
The Journal of Molecular Diagnostics  
Vol., 19, No.1 January 2017

Click link to view: <https://www.clinicalkey.com#!/content/playContent/1-s2.0-S1525157816302239>

J Mol Diagn. 2017 Jan;19(1):4-23. doi: 10.1016/j.jmoldx.2016.10.002.

**Standards and Guidelines for the Interpretation and Reporting of Sequence Variants in Cancer: A Joint Consensus Recommendation of the Association for Molecular Pathology, American Society of Clinical Oncology, and College of American Pathologists.**

Li MM1, Datto M2, Duncavage EJ3, Kulkarni S4, Lindeman NI5, Roy S6, Tsimberidou AM7, Vnencak-Jones CL8, **Wolff DJ9**, Younes A10, Nikiforova MN6.

### Abstract

Widespread clinical laboratory implementation of next-generation sequencing-based cancer testing has highlighted the importance and potential benefits of standardizing the interpretation and reporting of molecular results among laboratories. A multidisciplinary working group tasked to assess the current status of next-generation sequencing-based cancer testing and establish standardized consensus classification, annotation, interpretation, and reporting conventions for somatic sequence variants was convened by the Association for Molecular Pathology with liaison representation from the American College of Medical Genetics and Genomics, American Society of Clinical Oncology, and College of American Pathologists. On the basis of the results of professional surveys, literature review, and the Working Group's subject matter expert consensus, a four-tiered system to categorize somatic sequence variations based on their clinical significances is proposed: tier I, variants with strong clinical significance; tier II, variants with potential clinical significance; tier III, variants of unknown clinical significance; and tier IV, variants deemed benign or likely benign. Cancer genomics is a rapidly evolving field; therefore, the clinical significance of any variant in therapy, diagnosis, or prognosis should be reevaluated on an ongoing basis. Reporting of genomic variants should follow standard nomenclature, with testing method and limitations clearly described. Clinical recommendations should be concise and correlate with histological and clinical findings.

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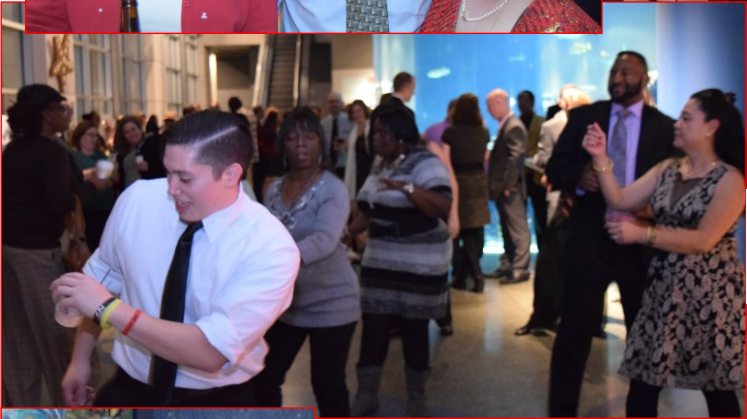
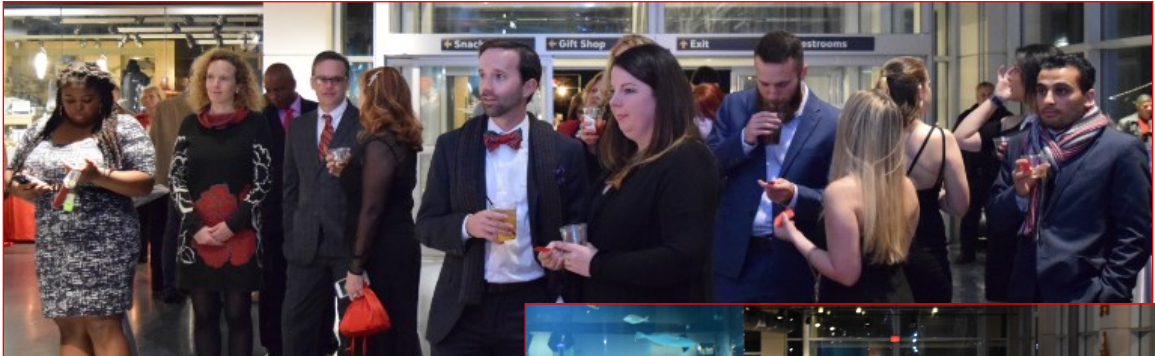
PMID: 27993330

DOI: 10.1016/j.jmoldx.2016.10.002

[PubMed - in process]



# HOLIDAY CELEBRATION 2016



♦ **USCAP 2017**

**March 4-10, 2017, San Antonio, Texas**

♦ **Next All Hands Meeting**

**March 15, 2017 in HCC Room 120**

♦ **Pathology Spring Symposia**

**April 4-8, 2017, Kiawah Island**

**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](http://www.musc.edu/pathology)**