MUSC
DEPARTMENT of PATHOLOGY & LABORATORY MEDICINE

Volume 2, Issue 1

2011

Pathology and Laboratory Medicine Newsletter

Inside this issue:

Letter from the Chair

Dr. David Hurray is depicted above where he was serving a missionary hospital outside of Naoribi, Kenya

Recently, I learned of the dedication shown by one of our pathologists to his clinical practice. During the recent snow and ice storms in the upstate, **Dr. David Hurray**, an MUSC pathologist based in Toccoa, Georgia at Stephens County Hospital, spent three full days in the hospital!

It started when Dr. Hurray learned that a severe snow/ice/freezing rain storm was headed for upstate Georgia. It was supposed to strike during the evening hours of Sunday, January 9, 2011. Knowing the snow plow deficiencies in the generally warm South, Dr. Hurray drove to the hospital on Sunday afternoon to began his stay. It took three days before all the roads from the hospital to his home were cleared and passable! During this 72-hour plus extended stay, Dr. Hurray was delighted to be able to provide continued pathology services for the hospital patients. Dedication is being wholly committed to something. Clearly, Dr. Hurray's dedication to his patients, his physicians and his hospital should serve as an example for all.

On Wednesday, January 12, 2011, he sent the following message:

We should call the people at Guinness Book, as I think I've set some new record for consecutive hours in-house for a pathologist. Seeing the approaching nastiness in the weather, I came on into Stephens County Hospital, Sunday night around 8pm, & sure enough by about midnight it was piling up. Roads are finally de-iced enough in the smaller back roads where I can finally go home tonight. I bet I was the largest "kid" to ever sleep in that vacant room in the Peds ward the last few nights! :-)

News from Department Administration and Business Office...

Department "All Hands" Meetings

Save the Date: The next "All Hands" meeting will be March 23 at 9:30 a.m. in 2 West Amphitheater. Please mark your calendar and plan to attend.

You're in the Spotlight!

C*ongratulations* to **Clint Infinger**, selected and recognized as the Employee of the Quarter! A number of nominations were received for our third "All Hands" meeting.

Nomination cards can be found at each of the Department's MUSC Excellence Communication Board locations: 2nd floor Walton Research Building and 3rd Floor Children's Hospital.

Coming Soon

Press Ganey Employee Partnership Survey
February 28 through March 11, 2011.

Useful Link

Below is the hyperlink to the Institutional Review Board for Human Research. This website offers useful information and additional links.
http://research.musc.edu/ori/irb/eIRB.html

News From

The Department of Human Resources Management is offering staff development classes ranging from accounting, to preparing for retirement, to handling controversial issues. Please visit their website for more information:

http://academicdepartments.musc.edu/vpfa/hrm/training/trainingpage

New Federal Tax Tables 2011

Effective January 1, 2011, the MUSC Payroll department implemented the new federal tax tables, as well as the reduced Social Security rate issued by the IRS. All 2011 paychecks will reflect the changes. Below are a few highlights:

1. The Making Work Pay Tax Credit, which was implemented in February 2009, expired December 31, 2010. Employees will notice that the amount of federal tax withheld from their paychecks will increase slightly in January 2011 due to the expiration of this tax credit. See IRS Publication 15 for additional information. Employees may submit a revised W-4 at anytime throughout the year to the Human Resource Department (fax: 792-9533).

2. The employee Social Security rate has been decreased from 6.2% to 4.2%. Employees will notice that the amount of OASDI taxes withheld from their paychecks will decrease in January 2011. See IRS Notice 1036 for additional information. The payroll department is not authorized to advise employees on individual tax matters. Please reference IRS.gov for additional guidance or contact your personal tax advisor for additional information.

CONSTRUCTION PROJECT UPDATE
by Lawrence Moser

As the Department of Pathology and Laboratory Medicine continues to grow in complexity and service responsibilities, there is a corresponding need for additional faculty, fellows and residents. The limiting factor in this growth is, "Where do we find the needed office space?" Realizing that additional space is virtually impossible to find, the direction we have taken as a Department is to review our current space, then carve out additional offices through the process of renovation.

Beginning in April, 2010, we combined two small offices, CH305A and CH307A to create a new faculty office for Dr. Jon Ralston, who joined our Department on July 1, 2010. Additionally, we renovated the Dermatopathology reading room, creating a new office for the DermPath Fellow. This allowed the former DermPath Fellow's office to house up to two residents. In this case, we moved one resident from the 2nd floor, allowing us office space for Dr. Julie Woolworth, who is assisting Dr. Rick Nolte in developing new research projects and new clinical tests.

In late October, additional office needs were identified by the Chair, Dr. Janice Lage. After much discussion, it was decided that the suite of offices assigned to the Office of the Chair would be redesigned and renovated to make more efficient use of the space.

Dr. Lage moved her operations to the 8th floor of the Walton Research Building. Dr. Rick Nolte, Director of Clinical Laboratories, moved to Dr. Lage's former office, allowing his office to be made available to a future faculty recruit. The work room at the rear of CH304 was redesigned to house the mailroom, formally located in CH309. CH304 will provide office space for Ms. Molli Chmielorz, Dr. Nolte's administrative assistant, as well as serve as the main reception area for the Department.

The former mailroom, CH309, has been renovated to provide office space for Dr. Ana Maria Medina, recently hired on January 1, 2011. The former file room, CH304A, now opens into the main hallway and will provide office space for up to two residents or Fellows.

At this writing, furnishings have been ordered for all offices and final moves of personnel should be complete by late March or early April.

Finally, we made two adjustments in staff office locations on the 8th floor of the Walton Research Building to allow for an office for Dr. Mike Caplan, who rejoined the Department on January 1, 2011.

News from the UMA Compliance Office

The UMA Compliance Department in cooperation with the MUHA Health Information Management Department will be conducting a class on "HIPAA, HITECH and Release of Information." This educational session is designed to aid all UMA, MUSC and MUHA staff that work with protected health information.

2/2/2011 Wed 8:00 - 9:00am
Storm Eye Auditorium
2/8/2011 Tue 10:00 - 11:00am
2 West Auditorium
2/10/2011 Thur 2:00 - 3:00pm
Storm Eye Auditorium

Please contact the UMA Compliance Office for more information.

New Faculty Arrival

Julie Woolworth, Ph.D. joined the Clinical Pathology faculty in December, 2010. Dr. Woolworth received her BS in Biology from Albion College. She is was awarded her PhD in Cancer Biology at MUSC and served as a post-doctoral fellow with Dr. Omar Moussa. She serves as a Research Instructor, assisting Dr. Rick Nolte in the development of new research projects and new clinical tests. Welcome Julie!!

Global Initiative for Pathology Patient Safety Excellence

Patient Safety Highlight Corner

By: Cynthia A. Schandl, M.D., Ph.D., Chief, Global Initiative for Pathology Patient Safety Excellence

FOCUS: MEDICAL AUTOPSY SERVICE EXCELLENCE

For the past year, the Medical and Forensic Autopsy Section of the Department of Pathology and Laboratory Medicine has been investigating the potential for improvement of its Medical Autopsy Services to its clinical colleagues. One way to improve the service is to investigate methods to decrease the turn-around time. Guidelines from the College of American Pathologists (CAP) indicate that uncomplicated medical autopsies should be completed within 30 days, whereas complicated medical autopsies should be completed within 60 days.

An autopsy examination consists of a complete external examination and a complete internal examination with dissection of each organ and review of major organs and gross findings by microscopy. At times, a separate brain examination by a Neuropathologist is warranted; at times, subspecialty consultation is advisable. Immuno-histochemistry, special stains and other ancillary studies may be necessary for comprehensive care. Due to the complex nature of this medical procedure, turnaround time standards from the CAP have been useful guides.

In December, 2009, the Autopsy Section put into place a turnaround time policy that deviates drastically from CAP guidelines. The Medical and Forensic Autopsy pathologists, with the enthusiastic support of the Departmental Chair, Dr. Janice Lage, have determined that with additional technical and infrastructural support and by making the medical procedure of the autopsy a priority study, the vast majority of data necessary for a routine uncomplicated medical autopsy can be performed in less time than is traditionally granted. Indeed, the goal is now 5 days for such cases. In spite of a degree of resistance from several areas, we generally have been successful in meeting this new turnaround time goal. The average turnaround time for MUSC medical autopsies for the time period from July, 2009 to December, 2009 was 20.5 days. Notably, the average turnaround time for the first six months of the 2010 calendar year is 5.6 days. We anticipate continuing this successful trend.

In a minority of cases, results of additional studies may appear as an Addendum. This allows us to release the majority of the information in a timely manner. Quality is maintained by the pathologist's access to additional subspecialty consultations and ancillary studies. Currently ~20% of all medical autopsies are reviewed for Quality Assurance; clinicopathological correlations are completed on all MUSC autopsies.

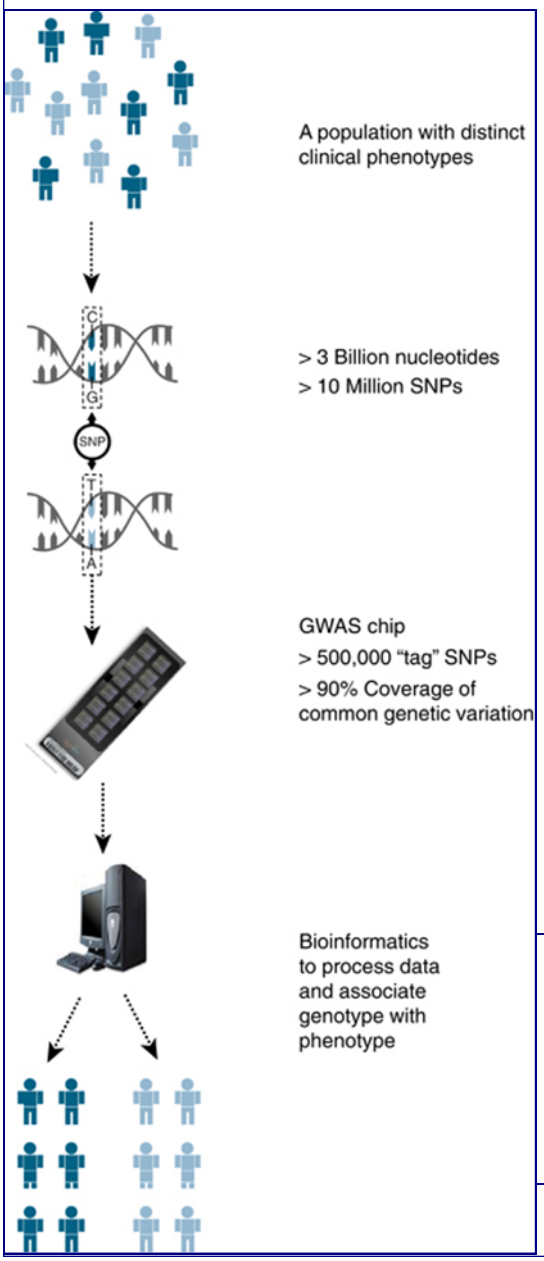
The importance of improving this metric is much greater than it might seem. In many cases, the diagnostic information gleaned during the autopsy examination can be made available to the hospital before the billing coding for the visit is complete. This increases the accuracy of coding. The clinician will have a much greater familiarity with the case closer to his or her involvement; and any residents or fellow involved in the care of the patient is much more likely to receive important feedback that they can communicate to the family, while s/he is on the same clinical rotation. Thus, continuity of care is preserved and such answers as may be made available by postmortem examination are disclosed earlier rather than later. In most instances, results can be available for Morbidity and Mortality conferences and pertinent histopathologic findings can be shared with the entire clinical team. We hope that this will facilitate our MUSC Team Approach to patient care, provide answers to the clinicians and the patient's family in a more timely manner, and potentially improve overall utilization of the Autopsy Section and its professional expertise.

IL28B Polymorphism in Treatment of Hepatitis C


By: Julie A. Woolworth, Ph.D., Clinical Instructor and Frederick S. Nolte, Ph.D., Director of Clinical Laboratory

It has been estimated that approximately 200 million people worldwide are infected with hepatitis C virus (HCV). Hepatitis C is a viral disease that leads to swelling and inflammation of the liver. Chronic inflammation of the liver caused by HCV can lead to slow progressive liver disease, resulting in fibrosis or cirrhosis. HCV was identified in 1989 [1] and the virus itself is a small, positive-sense single-strand RNA virus [2, 3]. HCV can be separated into six major genotypes, 1-6, and a number of different subtypes.

Genotype 1 is most commonly found in the United States and in much of the rest of the world. It is unfortunately one of the most difficult genotypes to treat with sustained virological response (SVR) occurring in only 50% of infected patients after 48 weeks of treatment [4-6]. The most common treatment regimen for HCV infection is a combination of pegylated interferon alpha (Peg-IFN-α) and ribavirin (RBV). The most recent therapeutic advance is the introduction of direct-acting antiviral compounds such as telaprevir. The direct acting antivirals will be used in combination with Peg -IFN-α and ribavirin. Therapy of hepatitis C is often complicated by the treatment limiting side-effects associated with the use of Peg-IFN -α. Decisions regarding the treatment of patients are complex and based on assessment of multiple host and viral determinants in an attempt to allow both patients and clinicians to make more informed choices about the risk-benefit of treatment and the likelihood of success in any given patient.



Several key patient and viral factors are important in determining response to therapy. Patient factors including age >40 years, advanced liver fibrosis, male gender, increased body mass index, insulin resistance, and hepatic steatosis negatively affect the chance of a SVR. In addition, African Americans are less likely to respond to treatment than other ethnic groups. Viral factors that predict a poor therapeutic response include genotype 1, lack of diversity in key genetic elements (core and NS5A genes), high pretreatment viral load (>600,000 IU/ml), and on-treatment kinetics of viral load. Absence of detectable HCV RNA in plasma after 4 weeks of therapy (rapid viral response) accurately predicts a SVR, whereas failure to achieve a ≥ 2 $\log_{10}$ reduction in plasma viral load by week 12 (early viral response) predicts treatment failure and is an indication to stop therapy early. The overall poor response rate and the influence of ethnicity on response both suggest a genetic contribution to HCV treatment outcomes (7).

Recently, a region 3 kilobases upstream of the human IFN-λ-3

Figure 1. The principle of genome-wide association studies (GWAS). A population with distinct clinical phenotypes is hypothesized to contain a genetic marker. The human genome contains > 3 billion nucleotides with over >10 million SNPs. Genetic polymorphism is assessed using microarray technology using chips or beads generating massive amounts of information. Each array contains hundreds of thousands of SNPs, which cover > 90% of common genetic variation. Powerful bioinformatics platforms are then applied to this information and correlated with the well-defined clinical phenotype (8)

(Continued on page 6)

IL28B Polymorphism in Treatment of Hepatitis C (cont.)

or *Interleukin-28B* (*IL28B)* gene on chromosome 19 has been identified to contain multiple single nucleotide polymorphisms (SNPs) that are associated with HCV clearance and treatment response [7]. The SNPs upstream of *IL28B* were discovered by performing a genome-wide association assay (GWAS) to identify the genetic differences between patients with a favorable response to treatment versus those with a poor response [7] (Figure 1). These study results were independently confirmed by two other GWAS studies [8, 9]. Two major SNPs, rs12979860 and rs8099917, have been associated with favorable treatment response to combined Peg-IFN-α and Ribavirin treatment. The risk genotype for SNP rs12979860, TT, is associated with nonresponse to therapy and is more common in African Americans compared to Caucasians and Hispanics. This finding may account for the observed ethnic variation observed in treatment response [7, 10].

Genotype Dependent Response to HCV Treatment:

IL28B rs12979860 SNP
CC genotype = most favorable response
TT genotype = poorest response

IL28B rs8099917 SNP
TT genotype = most favorable response
GG genotype = poorest response

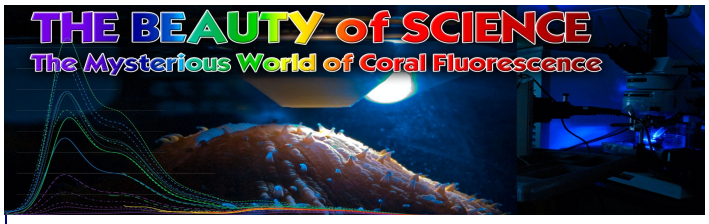
There are possible clinical implications for the identification of SNPs that should be considered carefully. First, the identification of the two SNPs mentioned above may be useful in determining which HCV genotype 1 patient would be most likely to respond to Peg-IFN/RBV treatment. It is important to note that the statistical significance of SVR from the Ge et al. study in Nature Genetics was in patients that maintained 80% or more of the Peg-INF/RVB dosage throughout the study [7]. This knowledge may be useful to motivate patients with mild liver disease to comply with treatment or undergo treatment. Also, patients with an unfavorable response genotype are most likely to benefit from improved SVRs with regimens at include the new direct-acting antiviral agents.

Second, there are ongoing research and clinical trials for new HCV treatments. For example, recently the results from a Phase 1b clinical trial for Peg-IFN-λ treatment for patients with hepatitis C demonstrated antiviral activity similar to that of Peg-IFN-α, but with low incidence of adverse side effects [11]. Currently underway is a Phase 2 clinical trial named EMERGE, initiated by ZymoGenetics, that will enroll 600 patients with HCV genotypes 1 and 4 to assess the safety and efficacy of Peg-IFN-λ compared to Peg-IFN-α. In the future, with the addition of new drugs for HCV treatment, the presence of these SNPs may play a role in predicting treatment response to various drug combinations.

Our Molecular Pathology Laboratory is developing allele-specific polymerase chain reaction assays to detect the two major SNPs associated with treatment response. Once the validations of these tests are completed, they will join HCV viral load and HCV genotyping as locally-offered molecular diagnostics that aid clinicians in the management and treatment of patients with hepatitis C.

References

1. Choo, Q.L., et al., Isolation of a cDNA clone derived from a blood-borne non-A, non-B viral hepatitis genome. Science, 1989. **244**(4902): p. 359-62.
2. Houghton, M., et.al., E.P. Appl., Editor. 1989. p. Publ. 318, 216.
3. Takamizawa, A., et al., Structure and organization of the hepatitis C virus genome isolated from human carriers. J Virol, 1991. **65**(3): p. 1105-13.
4. Nainan, O.V., et al., Hepatitis C virus genotypes and viral concentrations in participants of a general population survey in the United States. Gastroenterology, 2006. **131**(2): p. 478-84.
5. Teoh, N.C., Farrell, G.C. and Chan, H.L. Individualisation of antiviral therapy for chronic hepatitis C. J Gastroenterol Hepatol, 2010. **25**(7): p. 1206-16.
6. Alavian, S.M., Behnava, B., and Tabatabaei, S.V. Comparative efficacy and overall safety of different doses of consensus interferon for treatment of chronic HCV infection: a systematic review and meta-analysis. Eur J Clin Pharmacol, 2010. **66**(11): p. 1071-9.
7. Ge, D., et al., Genetic variation in IL28B predicts hepatitis C treatment-induced viral clearance. Nature, 2009. **461**(7262): p. 399-401.
8. Suppiah, V., et al., IL28B is associated with response to chronic hepatitis C interferon-alpha and ribavirin therapy. Nat Genet, 2009. **41**(10): p. 1100-4.
9. Tanaka, Y., et al., Genome-wide association of IL28B with response to pegylated interferon-alpha and ribavirin therapy for chronic hepatitis C. Nat Genet, 2009. **41**(10): p. 1105-9.
10. Hadziyannis, S.J., et al., Peginterferon-alpha2a and ribavirin combination therapy in chronic hepatitis C: a randomized study of treatment duration and ribavirin dose. Ann Intern Med, 2004. **140**(5): p. 346-55.
11. Muir, A.J., et al., Phase 1b study of pegylated interferon lambda 1 with or without ribavirin in patients with chronic genotype 1 hepatitis C virus infection. Hepatology, 2010. **52**(3): p. 822-32.

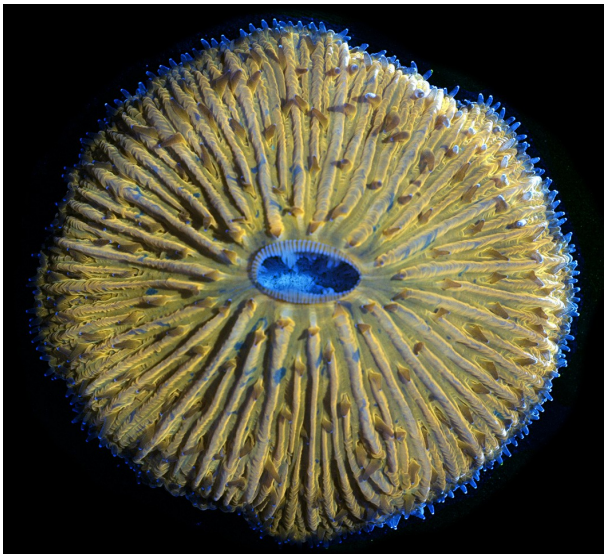


Back in 2005, the Department sponsored an International Coral Histopathology Workshop. **Mr. Jim Nicholson**, manager of our Image Analysis Laboratory, was asked to provide microscopy support for the meeting and thus was introduced to the beauty of coral fluorescence. Up to that time, Jim had thought of coral in terms of the huge rock-like reefs they produce. Under the microscope they are revealed to be little more that a thin layer of nearly transparent tissue.

What is remarkable is the way in which these creatures auto-fluoresce with natural florescent proteins. GFP and other fluorescent proteins that have become such important tools in medical research were originally extracted from marine organisms. Coral can fluoresce with an intensity that can sometimes be seen under bright lamps, and, some species have been reported to have as many as 16 different colors.

Why? Nobody knows. The fluorescence would never be visible in the natural environment, at least to human eyes. In daytime, it would be drowned out by sunlight, and at night, there is nothing to provide excitation, at least until some divers started using blue lights and filtered goggles at night.

It was love at first sight. Jim was entranced by the sheer beauty of the coral and fascinated by the scientific mystery they presented. As Jim retired and returned to part time status, a new coral research facility opened at the NOAA laboratory at Fort Johnson. This new facility was equipped with top quality imaging equipment, enticing Jim to volunteer his services one day a week. Jim works in close collaboration with Dr. Sylvia Galloway and Dr. Cheryl Woodley, both of whom have faculty appointments at MUSC, as well as with NOAA. Much of the time is devoted to research using hyperspectral scanning to better understand the function of the fluorescence and its use as an early marker for disease. The remainder of the time is spent in imaging.



Fungia, commonly called mushroom coral, are large solitary coral that don't form reefs. When excited with blue light, this specimen's tissue emits bright orange fluorescence. The tentacle tips and the mouth structure are white and reflect the blue illumination. The technique reveals areas of damaged tissue. This image won in the **Nikon Small World Competition.**

The 3rd prize winner in the **2010 Olympus Bioscapes** competition, this rare species of Fungia is visually orange, but excitation with blue light (480nm) reveals tissue disruption (tears) allowing the blue illumination light to be reflected back off the underlying skeleton. The tentacle tips are visibly enhanced by reflected illumination. This image is made from 18 high power images stitched with Photoshop. Also, it has been selected as a full page illustration in the December 2010 **Scientific American.**

Jim has discovered that he is far from alone in appreciating these unique animals. In the past, he had entered images from his medical research into biomedical imaging competitions with little success. Now, in every competition in which he has entered coral images, he has won recognition. Last year, 2010, was the best year yet.

Jim's images won 3rd place and an honorable mention in the **Olympus BioScapes International Digital Imaging Competition**, an international contest to find and honor the world's most astonishing microscopy images *www.olympusbioscapes.com/*. The prize includes $1500 in equipment, a poster distributed worldwide, and inclusion in a traveling exhibit.

Jim also placed 13th and won an honorable mention in the **Nikon Small World International Photomicrography Competition**, regarded as a leading forum for showcasing the beauty and complexity of life as seen through the light microscope *www.nikonsmallworld.com/*. This prize was $300 in equipment and inclusion in the calendar and traveling exhibit.

In addition, an image was selected as a full page illustration in the December issue of **Scientific American**. Also, **National Geographic** is actively considering publishing an image.

According to Jim, the response has been overwhelming. "I'm getting fan mail and requests for pictures from as far away as Norway and from some of the most distinguished names in marine research. A London-based scientific image agency inquired about representing my works, but everything I do is in the public domain and anyone is welcome to use the images. In fact, I want to share the beauty I've found with as many people as possible."

Residency Program Update

By: Nick Batalis, M.D.

Associate Residency Program Director

These past few months have been very exciting and productive for our residency program. In July, we welcomed six 1st year residents and our first post-sophomore fellowship recipient in several years. Everybody is off to a great start and we are once again in the midst of the recruiting season for the 2011 match. Similar to last year, we were fortunate to receive almost 380 applications (including 125 U.S. graduates and 252 international graduates) for the six positions that we plan to fill through the match. Interviews will continue through the end of January. Match Day should be a festive one this year, as it falls on St. Patrick's Day, March 17th.

All of our residents have been busy with their service work, but have still managed to make time to publish several papers and present research projects at various national meetings, including seven different residents who had presentations at the annual meetings of two of the largest pathology organizations, the United States and Canadian Academy of Pathology (USCAP) and the College of American Pathologists (CAP). Two of our residents, **Roger Stone, M.D.** and **Ford Rogers**, **M.D.** were awarded Donald West King fellowships which provided them the opportunity to study pulmonary pathology with our own **Russell Harley, M.D.** at the Armed Forces Institute of Pathology (AFIP) in Washington, DC. Also, **Lin Zhang, M.D., Ph.D.** was awarded a prestigious resident research grant from the College of American Pathologists. Finally, several residents are making the extra effort to serve on various committees within the Department, the University, and in national organizations. Among them was **Evelyn Bruner, M.D.,** who was recently named to the American Society for Clinical Pathology (ASCP) Resident Council. We are lucky to have a group of residents who do such a great job of representing our Department on campus and around the country.

In other news, our 4th year residents all have lined up choice fellowships for the coming year. In July 2011, **Angie Duong, M.D.** and **Lin Zhang, M.D., Ph.D.** will both be pursuing hematopathology fellowships, with Angie going to Yale and Lin headed to Emory. **Mohktar Desouki, M.D.** will be taking his talents to the University of Pittsburgh Medical Center, where he will receive additional training in breast and gynecologic pathology. While it will be nice to send those folks off to blossom and broaden our Department's reputation in other areas of the country, we will be fortunate to keep three of their classmates for at least one more year. **Anne Bartlett, M.D., Jason Hope, M.D.** and **Ford Rogers, M.D.** will be staying with us as Fellows in surgical pathology, cytopathology and dermatopathology, respectively.

Pathos

The MUSC Medical School Pathology Student Interest Group

Over the past 20 years, the medical school at MUSC has been one of the leading producers of students entering the field of pathology in the entire country; quite a feat considering MUSC is not one of the largest medical schools in the country in terms of enrollment. Yet, while MUSC had numerous student interest groups in various other fields, until recently no such group existed for the specialty of pathology. In the summer of 2009, several students came together to form the inaugural pathology interest group at MUSC and named it *Pathos.*

While still in its growing years, the students have given *Pathos* solid footing within the university. Last year, the group applied for and won a matching grant from the Intersociety Council for Pathology Information (ICPI) for funding the group's activities. *Pathos*, which currently has 25 dues paying members, has used these funds, along with generous support from the Department of Pathology and Laboratory Medicine, to host monthly lunch meetings for students, helping to expose them to various areas of pathology. Meetings this semester included an introduction to pathology residencies by Dr. David Lewin, a talk about private practice pathology by MUSC graduate Dr. Rick McEvoy, and subspecialty presentations about surgical pathology and dermatopathology by Drs. Paul Eberts and Jon Ralston, respectively. *Pathos* also hosted a great social event at Wild Wings in November at which over 50 students, residents, fellows, and faculty (and their respective families) attended. Finally, *Pathos* demonstrated their philanthropic side by recently participating in MUSC's Sugar Free Fall Festival. Based on the solid attendance and participation at these events over the past year, MUSC's student council recently formally recognized *Pathos* as a student interest group which is an attestation to the students' enthusiasm for the organization. We are thrilled to have such a group at MUSC and look forward to future events with the students. The current *Pathos* co-presidents are third year medical students **Dennis Orwat** and **Graham Theisen**.

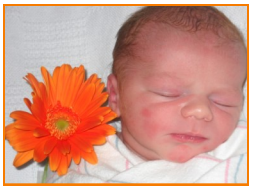
New Arrivals to the Pathology and Laboratory Medicine Family

Maria Gallego Attis, M.D., with husband, Brian and big brother, Alex, welcomed **Andrew James** on November 21, 2010.

Congratulations to Maria, Brian and Alex!!

Alina Sofronescu, Ph.D., Clinical Chemistry Fellow and husband, Zoli, welcomed their first child, **Christian**, on December 28, 2010.

Congratulations Alina and Zoli!!



Paul Eberts, M.D., wife, Julie and big brother, Joe, welcomed **Andrew "Drew" Thomas** on January 3, 2011.

Congratulations to Paul, Julie and Joe!!

Nick Batalis, M.D. and his wife, Gretchen, welcomed their first child, **Dennis Ike "Denny,"** on January 6, 2011.

Congratulations Nick and Gretchen!!

New Faculty Arrivals

Michael Caplan, M.D., Associate Professor, rejoined our faculty in January, 2011, after two years in a private practice in Michigan. He is board certified in Anatomic and Clinical Pathology, and subspecialty boarded in Forensic Pathology and Pediatric Pathology. Dr. Caplan will focus most of his time teaching anatomy for first year medical students along with lectures and labs for second year medical students, and other clinical duties including Pediatric Pathology and taking Forensic call.

Welcome Back Mike! See below for what Dr. Caplan has been up to....

Hi Everybody,

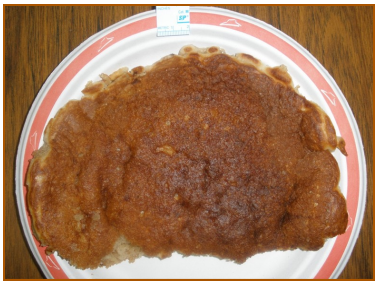
I am thrilled to be back here. I just wanted to give you a glimpse of what I was doing up in Michigan over the past couple of years. So I'm going to present this as a short story with pictures:

My son, Dan, finally got his act together and graduated from high school after he realized that he didn't want to end up as a permanent icicle up there!!

I realized that I missed teaching a lot, but it was quite a challenge identifying motivated students. I did have some temporary success in a Seminar Tutorial small group …. until this star pupil peed all over the microscope stage!!!

Finally, I tried my hand at a more entrepreneurial venture…

but I found myself quickly falling behind in the orders, because I spent a little too much time admiring and documenting my creations!!



So finally I returned to MUSC, where Dr. Lage graciously gave me the chance to do some things I was actually competent at!!

Thank you all for taking me back --- Mike Caplan

Ana Maria Medina, M.D. joined the Department as an Assistant Professor on January 1, 2011. Dr. Medina received her medical degree from the Universidad Central de Venezuela – Luis Razetti in Caracas, Venezuela. She completed her residency training in Anatomic and Clinical Pathology at Mount Sinai Medical Center in Miami Beach, Florida. Dr. Medina continued her training at the Medical University of South Carolina, Department of Pathology and Laboratory Medicine and completed a Cytopathology Fellowship under Dr. Jack Yang. The following year she completed a fellowship in Hematopathology under Dr. John Lazarchick, also here at MUSC. Dr. Medina is board-certified by the American Board of Pathology in Anatomic and Clinical Pathology, and subspecialty boarded in Cytopathology and Hematopathology. Welcome back Ana Maria!!

2010 Golden Apple Awards

The American Medical Student Association and the College of Medicine held the 2010 Golden Apple Awards Ceremony, November 30, 2010. The Golden Apple Award honors teaching excellence across the curriculum. Congratulations to Nick Batalis, M.D. for his remarkable achievement. The winners and nominees are listed below.

Winners:

1st year:	Golden Apple: Dr. Jerry Ondo	Special Appreciation: Dr. Donna Kern
2nd year:	**Golden Apple: Dr. Nick Batalis**	Special Appreciation: Beverly Pinder
Clinical years:	Golden Apple: Dr. Deborah DeWaay	Special Appreciation: Dr. Chris Pelic
House Staff:	Dr. Chakadhari Inampudi	

2009-2010 Award Nominations

First Year Class

Faculty Award

Dr. Thierry Bacro	Regenerative Med & Cell Biol	Dr. Paul McDermott	Medicine
Dr. Jerome Ondo	Neurosciences	Dr. Ed Soltis	Pharm & Biomedical Sci

Special Appreciation

Dr. Anne Beddingfield	Dean's Office	Dr. David Bernanke	Regen. Med & Cell Biol
Inda Johnson	**Ctr Clinical Eval. & Teach**	Dr. Donna Kern	Curric Integ & Implemt
Myra Haney Singleton	Dean's Office	Wanda Taylor	Dean's Office

Second Year Class

Faculty Award

Dr. Nick Batalis	**Pathology & Lab Medicine**	Dr. John Hildebrandt	Pharmacology

Special Appreciation

Dr. Jenny Ariail	Education & Student Suppt	Beverly Pinder	Dean's Office
Myra Haney Singleton	Dean's Office	Dr. Antine Stenbit	Dept. of Medicine

Third and Fourth Year Classes

Faculty

Dr. Milton Armstrong	Surgery	Dr. Deborah DeWaay	Medicine
Dr. O. Fred Guidry	Anesthesia & Periop Med	Dr. Kesh Hebbar	Family Medicine
Dr. Eric Lentsch	Otolaryngology	Dr. Sarah Mennito	Pediatrics
Dr. Julius Sagel	Medicine		

House Staff

Dr. Rob Bartlett	Anesthesia & Periop Med	Dr. Chakadhari Inampudi	Medicine
Dr. Cyrus Loghmanee	Surgery	Dr. Ashley Pyle	Medicine
Dr. Travis Reeves	Otolaryngology	Dr. Brent Taylor	Medicine

Special Appreciation

Dr. Jennie Ariail	Education and Student Suppt	Dr. Anne Beddingfield	Dean's Office
Willette Burnham	Education & Student Suppt	Laura Cousineau	Library
Della Delong	Family Medicine	Dr. Christopher Pelic	Assoc Dean, Students
Myra Haney Singleton	Dean's Office		

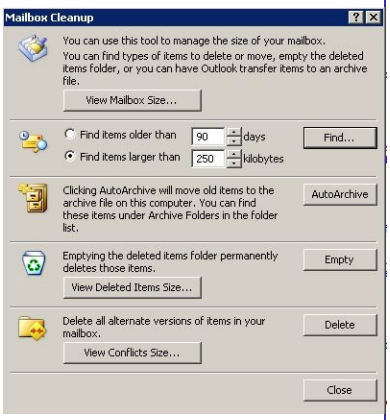
Information Services *by Tony Eisenhart*

MUSC Outlook Email & YOU

Although we are all enjoying the benefits of the Microsoft Exchange email system there are some very important things to be aware of, and rules to follow, concerning your email.

How big can my mail box get or what is my quota?

MUSC's Exchange email system is not an infinite system with unlimited storage capacity. The space in which your email resides has to be shared with everyone else. In order to accommodate all of us, your Outlook mail box must stay within a specified size.
Your personal Outlook mail box cannot be larger than 200MB.
Individual messages cannot exceed 20MB in size.
If you would like to view the size of your mail box, log into Outlook (using the local 2003 or 2007 client), then go to Tools>View Mail Box Size. You may also go to https://exchange.musc.edu using any internet browser, log in, and let the mouse hover over the mail box name on the left.



How long does my mail stick around (without my intervention)?

Your email will remain in your Inbox for 180 days. Messages that reach 181days of age will be moved to the Deleted Items folder. After an additional 28 days - the message is now 209 days old - it will be purged from MUSC's Microsoft Exchange Email system. Forever!!!

How can I retain\save mail?

Permanently storing your email can be accomplished by creating an email archive, otherwise referred to as a **PST** file (**P**ersonal **ST**orage file). There are 3 options you can choose from when saving\retaining your email:

1. I'm not concerned about email that is older than 180 days. I don't care if it gets deleted forever.
   Action: Do nothing. **(Poor Choice)**
2. I would like to create a PST file and archive\save my email. I would like to be prompted or asked before the archive process takes place.
   Action: Contact your IT representative **(Good Choice)**
3. I would like my email saved in a PST file automatically, without prompting me.
   Action: Contact your IT representative **(Best Choice)**

1st Annual Genomics Day

February 17, 2010
10:00 am—2:00 pm
Basic Science Building Auditorium
BSB100

Featuring Guest Speakers:

Elaine R. Mardis, Ph.D., Associate Professor in Genetics and Molecular Biology, Washington University in St. Louis, MO

Joseph Nevins, Ph.D., Barbara Levine University Professor of Breast Cancer Genomics, Duke University, Durham, NC

Research Division Update

By: Bradley Schulte, Ph.D.
Vice Chair for Research

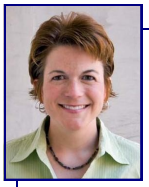
The Division of Research has had a productive time from October through December. Eleven grant proposals were submitted requesting $2,299,041 in total first year costs. It will be many months before we know whether or not those applications will be funded. Also, during this same time period, ten grants were awarded totaling $387,122 over a one-year period (see table below). Congratulations and many thanks to everyone involved in obtaining these awards.

Principal Investigator	**Title and Sponsor**	**Award Date/Amount**
Lazarchick, John	Safety & Efficacy of Recombinant Factor VIII (N8) in Male Children Previously Treated with Hemophilia A	9/20/10 $3,000
Brown, Erica	Mechanisms of Regulation of NHE-1 (sub-award with the University of Wisconsin)	10/1/10 $37,600
Lang, Hainan	MRI Imaging in the Adult Mouse Inner Ear (SCTR voucher pilot program)	10/28/10 $1,000
Turner, David	Linking ETS Factor Transcriptional Networks to Health Disparities in Prostate Cancer (pilot project with Department of Medicine/Health Disparities Research)	11/1/10 $4,550
Turner, David	SC CaDRe Pilot Research Project (pilot via HCC)	11/1/10 $10,000
Wolff, Daynna	The Cancer Cytogenomic Microarray Quality Control (CCM-QC) Project	11/1/10 $6,250
Wang, Yong	Role of miR-155 in Cellular Senescence and Lung Carcinogenesis (SCTR voucher pilot program)	11/16/10 $984.00
Steed, Lisa	Clinical Validation of the Molecular-Based Automated BD MAXTM MRSA Assay for the Direct Detection of Methicillin-Resistant Staphylococcus Aureus (MRSA) in Nasal Specimens	11/18/10 $57,562
Wang, Yong	p53 Regulates MicroRNA-155 Expression in Lung Cancer (SPORE/HCC Award)	12/1/10 $45,866
Wang, Yong	Targeting the ROS-p38 MAPK Pathway as a Novel Strategy for Stem Cell Expansion (NIH R21)	12/15/10 $220,310
		TOTAL = $387,122

Seminar in Pathology Conference Schedule

Conferences are held at 12:00 pm in CH204 unless otherwise noted
Guest speakers are in bold

2nd Semester	**Spring Course 2010-2011**
January 24, 2011	**Daitoku Sakamuro, Ph.D.** **LSU Health Sciences Center**
January 31, 2011	Josh Kellner, Graduate Student Dr. Zhou – Dr. Schulte's Lab
February 7, 2011	Venkatesababa Samanna, Ph.D. Post-Doctoral Student Dr. Dammai's Lab
February 14, 2011	**Cheng Du, Ph.D.** **University of Michigan**
March 7, 2011	**Azzeddine Afti, Ph.D.** **Harvard University School of Dental Medicine**
March 14, 2011	Phil Sobolesky, Graduate Student Dr. Moussa's Lab
March 21, 2011	**John P. Hagan, Ph.D.** **Harvard University School of Medicine**
March 28, 2011	**Jochen Schacht, Ph.D.** **Kresge Hearing Reseach Institute** **University of Michigan**
April 11, 2011	Elizabeth Fowler, Graduate Student Dr. Moussa's Lab
April 18, 2011	Linsday McDonald, Graduate Student Dr. LaRue's Lab



Faculty Departures

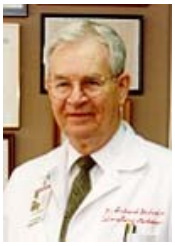
Lisa Cunningham, Ph.D., Assistant Professor, has resigned to accept a position at the National Institutes of Health starting January 1, 2011. Dr. Cunningham will be the Acting Chief of the Section on Sensory Cell Biology in the Intramural Program at the National Institute of Deafness and Other Communication Disorders. Lisa has been a highly valued member of the Department for seven years. She served as the Coordinator for Graduate Studies from 2005 until her departure and was a key element behind the growth and success of our Graduate Training Program in Experimental Pathology. A drop-in was held on December 1st to thank Lisa for her service and see her off. We wish Lisa all the very best!!

Pathology Spring Symposia

The Francis Marion Hotel
Charleston, South Carolina

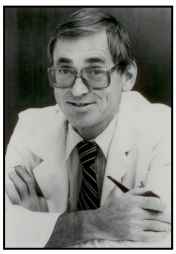
http://mckee-seminar.musc.edu

Gadsden-Holbrook Symposium in Clinical Pathology



April 12, 2011

Frederick S. Nolte, PhD, D(ABMM), F(AAM), MUSC Department of Pathology and Laboratory Medicine
Nikola Baumann, PhD, D(ABCC), Mayo Clinic, Rochester, MN
Bruce W. Hollis, PhD, MUSC Department of Pediatrics
Lisa L. Steed, PhD, D(ABMM), MUSC Department of Pathology and Laboratory Medicine
Mark H. Stoler, MD, University of Virginia School of Medicine, Charlottesville, VA
Daynna J. Wolff, PhD, MUSC Department of Pathology and Laboratory Medicine



Pratt-Thomas Symposium in Surgical Pathology

April 13-15, 2011

Janice M. Lage, MD, MUSC Department of Pathology and Laboratory Medicine
M. Timothy Smith, MD, MUSC Department of Pathology and Laboratory Medicine
David N. Lewin, MD, MUSC Department of Pathology and Laboratory Medicine
Mary S. Richardson, MD, DDS, MUSC Department of Pathology and Laboratory Medicine
Mahul B. Amin, MD, University of California, Los Angeles (UCLA), Los Angeles, CA
John N. Eble, MD, MBA, FRCPA, Chief Pathologist, Clarian Health Partners (Methodist · IU · Riley)
Peter A. Humphrey, MD, PhD, Barnes-Jewish Hospital, St. Louis, MO
W. Dwayne Lawrence, MD, MSc (Path), Brown Medical School, Providence, RI
Esther Oliva, MD, Massachusetts General Hospital; Harvard Medical School, Boston, MA
Victor E. Reuter, MD, Memorial Sloan-Kettering Cancer Center's Pathology Core Facility, New York, NY
Mark H. Stoler, MD, University of Virginia School of Medicine, Charlottesville, VA
Richard J. Zaino, MD, M. S. Hershey Medical Center, Hershey, PA

McKee Cytology Seminar

April 15-16, 2011

Jack Yang, MD, MUSC Department of Pathology and Laboratory Medicine
Mariam Alsharif, MD, MUSC Department of Pathology and Laboratory Medicine
Maria I. Gallego Attis, MD, MUSC Department of Pathology and Laboratory Medicine
Haytham Dimashkieh, MD, MUSC Department of Pathology and Laboratory Medicine
Celeste N. Powers, MD, PhD, Virginia Commonwealth University, Richmond, VA
Jan F. Silverman, MD, Drexel University College of Medicine, Temple University, Philadelphia, PA
Michael W. Stanley, MD, Hospital Pathology Associates, United Hospital, St. Paul, MN
Rosemary H. Tambouret, MD, Harvard Medical School, Boston, MA

Upcoming National Pathology and Pathology-related and Laboratory Medicine-related Meetings

February 24 - March 6, 2011
USCAP -United States and Canadian Academy of Pathology
100th Annual Meeting
San Antonio, TX

April 2 - 6, 2011
AACR - American Association for Cancer Research Annual Meeting
Orlando, FL

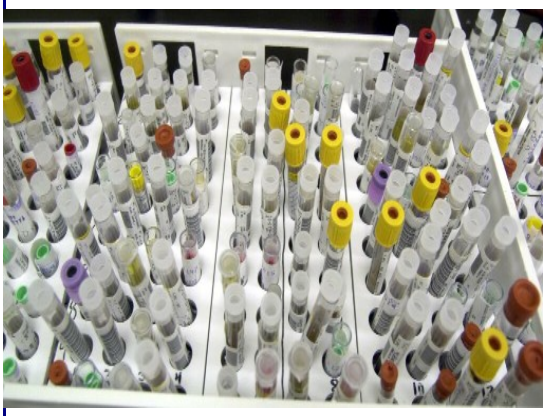
April 9 - 13, 2011
ASIP - American Society for Investigative Pathology Annual Meeting
Washington, DC

April 12 - 16, 2011
Gadsden-Holbrook Clinical Pathology Symposium
Pratt-Thomas Surgical Pathology Symposium
McKee Cytology Seminar
Francis Marion Hotel, Charleston, SC

May 22 - 25, 2011
CLMA - Clinical Laboratory Management Association Annual Meeting
Baltimore, MD

June 3 - 7, 2011
ASCO - American Society of Clinical Oncology Annual Meeting
Chicago, IL

June 5 - 7, 2011
ASCP - American Society for Clinical Pathology
Current Issues and Problems in Breast Pathology Conference
Charleston, SC



July 24 - 28, 2011
AACC - American Association of Clinical Chemistry Annual Meeting
Atlanta, GA

September 11 - 14, 2011
CAP - College of American Pathologists Annual Meeting
Dallas, TX

October 19 - 23, 2011
ASCP - American Society for Clinical Pathology Annual Meeting
Las Vegas, NV

MUSC DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE

MUSC Department of Pathology and Laboratory Medicine
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