

Academic Physician Quarterly

A DEPARTMENT OF MEDICINE BULLETIN



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College of Medicine
Jacksonville

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CHAIRMAN'S MESSAGE

Dear colleagues:

As you all know July 1st marks the start of a new academic year. The Department has made substantial strides at expanding and evolving. The productivity is at an all time high and the operational efficiencies that were introduced have started to show the benefits. Undoubtedly there will be some obstacles as we move forward in upgrading our clinic operations. Nevertheless, with perseverance and cooperation of all involved it will be a gratifying experience.



I am pleased to announce that the Department of Medicine had an exceptionally successful presence at the Research Day on May 15th, 2008.

One third of platform and poster presentations from fellows and residents were made by members of the Department. Four of our residents received the top awards for their research presentations. The first prize for the Platform presentations went to Dr. Andrew Darlington (Internal Medicine), the second prize was awarded to Dr. Stuart A. Smalheiser (Cardiology) and the third prize went to Dr. Ivan E. Rascon-Aguilar (Gastroenterology). In addition Dr. Joe E. Khoury (Gastroenterology) was the First Prize winner in Poster presentations. To top it off, Dr. Dominick Angiolillo (Cardiology) received the 2008 Researcher/Scholar of the Year award. Please join me in congratulating the prize winners and the participants of research day.

I am proud to report that 16 faculty members of the Department were recognized for their exceptional contributions to the teaching mission of the University of Florida. The Department of Medicine at both campuses (Gainesville and Jacksonville) was awarded the Golden Apple award for the second year in a row. The award is in recognition by the medical students of the teaching excellence of the Department.

It has been a wonderful spring season to finish off a very successful and productive academic year.

Arshag D. Mooradian, M.D.
Professor of Medicine
Chairman, Department of Medicine



Linda R. Edwards, M.D.

**Associate Professor of Medicine
and Chief**

**Division of General
Internal Medicine**

General Internal Medicine: Who Are We and How Do We Stay Alive?

The discipline of General Internal Medicine has been challenged from multiple directions in the past two decades. These challenges have led to a decline in the number of primary care physicians available to provide comprehensive primary care for our aging population. Challenges include: 1) Compensation for the physicians who are expected to coordinate the care of extremely complex patients with multiple chronic diseases; 2) Internal Medicine resident pursuit of procedure oriented fellowships; 3) The hospitalist movement, while still a part of General Internal Medicine (although there is discussion of certification in Hospital Medicine), is drawing significant numbers of graduating residents into its growing ranks; and 4) The lack of exceptional role models. There are efforts underway from the groups that represent Internal Medicine, including the American College Physicians and the Association of Program Directors in Internal Medicine, to address the challenges facing Internal Medicine and particularly General Internal Medicine.

Here at home, the Division of General Internal Medicine is focusing on exceptional role models in the hope of increasing student and resident interest in Internal Medicine. The Division is comprised of 14 individuals, ranging from the recent Chief Medical Resident to the more seasoned clinician. While the interests and expertise of the members of the Division vary, they share a common goal of being excellent clinician educators of students, residents and colleagues. Not only do they desire to excel in being superb clinician educators, they also strive to pro-

vide comprehensive quality care, and possess the desire to advance medical knowledge.

Our practice ranges from outpatient management of patients with complex medical illnesses, acute care of the hospitalized patient to the longitudinal care of those who require short term rehabilitation, and long term care. In all of these settings the faculty serve as role models, mentoring students and residents.

Our most decorated faculty member is Dr. Malcolm Foster. He has been recognized as "The Doctor's Doctor" and his opinion regarding difficult cases is sought out across the country from prior trainees and colleagues. He is currently the Governor of the Florida Chapter of the American College of Physicians and is an advocate for internists and the role they play in the provision of care to patients. He is a previous recipient of the Excellence in Teaching Award presented annually to a faculty member by the medical students. He continues to be recognized by the medical students and residents as an excellent teacher.

Several faculty members, including Drs. Palacio, Masri, Sottile, Alexandraki, Ketty and Petrucelli have completed, or are currently enrolled in, the Master Educators in Medical Education Program offered by the University of Florida College of Medicine. This 18 month course prepares these individuals to be better clinician educators.

Dr. Sottile spent a month at Stanford where she com-



A group photo of the Division of General Internal Medicine

pleted the Stanford Faculty Development Course in Clinical Teaching. She returned invigorated and excited to impart what she had learned. All members of the Division of General Internal Medicine have now completed a 16 hour faculty development seminar in Clinical Teaching under the tutelage of Dr. Sottile. This seminar is now being offered to all members of the Department and I would strongly encourage everyone to take advantage of this opportunity and Dr. Sottile's expertise in this area.

Several faculty members, including Drs. Edwards, Foster, House, Palacio, Petrucelli and Relan have received the

Excellence in Teaching awards presented each spring by the College of Medicine. In the past few years Drs. Foster, Ketty, House and Meenrajan have been recognized by the residents as the best teacher for the year. The faculty members in the Division of General Internal Medicine are exceptionally bright and energetic people who are interested in the welfare of their students and residents and are dedicated to enhancing the discipline of Internal Medicine. While the challenges exist, the Division's hope is that through mentoring and excellent role models, our training program will see a resurgence of interest in the discipline of General Internal Medicine.

A CLINICAL CASE

Ashwin Mehta, MD, PGY-3, Department of Medicine

Nilmarie Guzman, MD, Department of Medicine, Division of Infectious Diseases

**Rajesh Rangaswamy, MD, Department of Radiology
UF College of Medicine - Jacksonville**

A Central Nervous System Manifestation of Immune Reconstitution Inflammatory Syndrome

INTRODUCTION

The advent of combination antiretroviral therapy for HIV has prolonged the lives of patients with AIDS. In some cases, however, initiation of therapy can precipitate a paradoxical neurological deterioration, despite improvements in HIV viral load and CD4+ T-cell counts. This case describes a presentation of Immune Reconstitution Inflammatory Syndrome (IRIS) in a patient who recently began antiretroviral therapy.

CASE REPORT

A 45 year old college-educated man with a history of HIV/AIDS diagnosed in 2005 presented with worsening confusion of one week duration. He complained of intermittent nausea although denied any subjective fevers, chills, vomiting, photophobia or headaches. Subtle changes, including short-term memory loss and inattention, began one month prior but were insufficient to keep

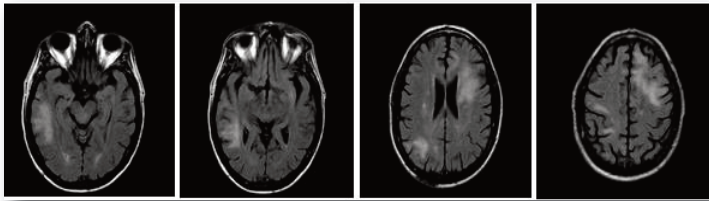
him from working as a real estate agent. His mental state progressively deteriorated, began to compromise his work and interfere with his activities of daily living. He had not been adherent to a combination antiretroviral regimen including abacavir, lamivudine, lopinavir and ritonavir until two months prior to admission. His pre-treatment CD4 count was 66.

Upon presentation, vital signs were stable and physical examination revealed an alert, cooperative man with only partial orientation to time and place. He demonstrated good eye contact although slow speech, difficulty word finding, poverty of thinking, two to three word answers to questions – sometimes irrelevant to what was asked. His recall was impaired 0/3 and he was unable to spell world backwards. No focal sensory or motor deficits were elicited. No overt meningeal signs were noted. A lumbar puncture was performed and he was started on empiric coverage for meningitis with vancomycin, ceftriaxone, and acyclovir. Laboratory values including CBC, BMP, urine toxicology screen and LFTs were within normal limits. Upon hospital admission, his CD4 count was 380 and viral load was 2000 copies per ml. CSF protein was 69, glucose 51, gram stain and cultures were negative as were serum cryptococcal antigen and toxoplasma antibody screens. MRI revealed multifocal bilateral leukoencephalopathy with enhancement consistent with inflammatory disease and immunocompromised state (See attached figure). In spite of empiric treatment for meningitis, his mental state continued to decline during his hospitalization. He was started on a course of dex-

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amethasone. CSF PCR studies were negative for HSV, CMV, EBV, and positive for JC virus.

Magnetic resonance imaging studies



Diffuse multifocal abnormalities primarily involving the white matter of the cerebral hemispheres is suggestive of inflammatory or infectious etiologies. This can be seen with HIV encephalitis and progressive multifocal leukoencephalopathy.

DISCUSSION

Progressive multifocal leukoencephalopathy with abundant JC virus is one known etiology of IRIS. Antiretroviral therapy is associated with dramatic reductions in HIV-1 RNA and increases in CD4+ lymphocyte counts. It can also be associated with paradoxical worsening of underlying opportunistic infections. The clinical presentation of immune reconstitution syndromes varies according to the pathogen. Not every patient who has im-

munologic improvement with antiretroviral therapy experiences paradoxical worsening. The risk factors for the development of these syndromes are not well understood, however, it is most commonly presented in patients with pre-treatment CD4 count < 100, after the first 2-6 weeks of initiating antiretroviral therapy with evidence of immunologic response to the current regimen. Intraparenchymal and perivascular infiltration of T lymphocytes, predominantly of the CD8 subtype, in response to latent viral infection in AIDS patients can also give rise to IRIS when combination antiretroviral therapy is begun. IRIS should be suspected in patients who show clinical or radiologic deterioration following initiation of antiretroviral therapy accompanied by improvement in CD4 cell count and viral load.

REFERENCES:

- (1) Riedel DJ, et al. Therapy Insight: CNS manifestations of HIV-associated immune reconstitution inflammatory syndrome. *Nat Clin Pract Neurol.* 2006 Oct;2(10):557-65.
- (2) Venkataramana A, et al. Immune reconstitution inflammatory syndrome in the CNS of HIV-infected patients. *Neurology.* 2006 Aug 8;67(3):383-8.
- (3) Crum-Cianflone NF. Immune reconstitution inflammatory syndromes: what's new? *AIDS Read.* 2006 Apr;16(4):199-206.
- (4) Lipman M, et al. Immune reconstitution inflammatory syndrome in HIV. *Curr Opin. Infect Dis.* 2006 Feb;19(1):20-5.

GME CORNER



N. Stanley Nahman, Jr., M.D.

Professor of Medicine

Associate Chairman

**Program Director, Internal
Medicine Residency**

The Medicine Residency Program honors its graduates every June with a formal dinner. Sponsored by the GME program, all residents are invited to help celebrate the graduation of our senior residents and fellows, and the preliminary interns. The event includes a dinner, the recognition of the graduates, and the acknowledgment of

individual accomplishments through specific annual awards.

The **Malcolm Foster Outstanding Intern Award** is named for Dr. Malcolm Foster, Chairman of Medicine from 1976-1979 and Associate Chairman from 1979-1994. The Foster Intern is that individual who best personifies the features of a physician comrade-in-arms. She/he is peer selected, and, above all, places the health and well-being of the patient first. In addition, this physician is that person who is always ready to work, always willing to help, and is the one you know you can call upon when a "go-to" person is needed.

The **Outstanding Senior Resident Award** is reserved for the graduating senior whose performance has been

characterized by a willingness to go beyond the call of duty in the care of the sick, who is genuinely excited about learning medicine, who willingly helps colleagues in a jam, and someone whose name evokes a good feeling when you see it next to yours on the on-call sheet. The Senior of the year is peer selected.

The **Housestaff Teaching Award** identifies the faculty Teacher of the Year and is designed to recognize the faculty member who best demonstrates exemplary effort and teaching ability. The Teacher of the Year Award is the most prestigious of annual awards, and is a clear reflection of an individual faculty member's dedication to the educational development of physicians in training.

Finally, one of the most coveted "awards" is the **University of Florida wooden rocker** that is given to each

graduating senior resident. Made possible by a generous endowment from Mrs. Anne Michael, wife of Dr. Max Michael, the first Dean of the Jacksonville campus, each piece is a hand crafted full-sized rocking chair affixed with the University of Florida seal. Mrs. Michael wanted to foster pride in both the institution and the accomplishment symbolized by successful completion of residency training.



She surely has succeeded, for of all the awards, this is the one most bragged about by the graduates.

RX UPDATES

Patrick Aaronson, Pharm.D.

Ashley Schields, Pharm.D., BCPS

Ezetimibe and the ENHANCE Trial

There has been much press regarding the safety and efficacy of ezetimibe monotherapy (Zetia®) and combination therapy ezetimibe/simvastatin (Vytorin®). Vytorin is not in the Shands Jacksonville Inpatient or Ambulatory Formulary, but the ezetimibe and simvastatin individually are available. However, the utility of ezetimibe has been questioned by some.

ENHANCE was a prospective, randomized, double-blind, multicenter trial comparing the effects of simvastatin alone versus in combination with ezetimibe in 720 patients with familial hypercholesterolemia (FH). These patients entered the study without regard of previous lipid lowering agents, including statins, but with a placebo washout period for 6 weeks. The duration of the trial was 24 weeks. The primary endpoint was mean change in carotid-artery intima-media thickness (IMT). Results included a significant decrease in LDL (16%) with Vytorin versus simvastatin alone; however, there was not a significant difference regarding mean change in IMT. Although this is not an outcomes trial, questions regarding the efficacy of ezetimibe are raised due to the consid-

eration of IMT as a surrogate marker for cardiac events. A comparison with a previous trial in FH patients, ASAP (Atorvastatin 80 mg vs. Simvastatin 40 mg on Artherosclerosis Progression) study, showed a significant difference in the atorvastatin group with regards to decrease in IMT. Conversely, the simvastatin group did not have a significant decrease in IMT.

Editorialists suggest that the ASAP patients had a thicker IMT at baseline compared to the ENHANCE patients, which raises the question of study design flaws with extensive prior statin use by patients. However, 19% of patients in the ENHANCE trial that were not on a statin did not have a decrease in IMT thickness. Concerns regarding a relatively short evaluation period of 24 weeks and relation to progression of IMT thickness have also come into question.

Outcomes data are projected to be reported in 2011. The American College of Cardiology (ACC) suggests considering decreasing lipid levels as much as possible with agents that presently have favorable outcomes data including the use of statins at optimized doses in combination if needed with other agents with proven outcomes data such as nicotinic acid, fibrates, and bile acid sequestrants. Ezetimibe may be best considered in patients who are unable to tolerate alternative regimens.

Editor's note: The last quarter was exceptionally bountiful of good news for the Department of Medicine. Here are some highlights of these successes.

Exemplary Teacher Awards

Sixteen faculty members in the Department of Medicine were chosen to receive the 2008 University of Florida College of Medicine's Exemplary Teacher Award.

The awardees include (arranged alphabetically): **Drs. Irene Alexandraki, Theodore A. Bass, James D. Cury, Linda R. Edwards, Malcolm T. Foster, Luis Guzman, Steve S. Hsu, Arpitha K. Ketty, Ghania Masri, Senthil R. Meenrajan, Alan B. Miller, N. Stanley Nahman Jr., Carlos Palacio, Olga M Petrucelli, Michael Sands and Elisa M. Sottile.**

This award is given in recognition of outstanding teaching contributions of an individual faculty member. The awardees will receive a plaque, lapel pin and a financial award determined by the compensation plan incentive for outstanding teaching.

Teaching Awards for Dr. Alexandraki



Dr. Irene Alexandraki was chosen as the 2008 University of Florida-College of Medicine's Excellence in Student Education Award. The award is given annually to the faculty member identified as the most outstanding teacher by medical students. Dr. Alexandraki received the award during the graduation ceremonies on June 18, 2008.

But wait... that's not all! Dr. Irene Alexandraki was chosen as the Outstanding Clinical Year Instructor by the Class of 2008 of the University of Florida Physician Assistant Program. Dr. Alexandraki was recognized for this Award during the 2008 Honors and Convocation Ceremony on Saturday June 21, 2008. The award is given annually to a faculty member in recognition of her or his commitment to clinical education.

Please join me in congratulating Dr. Alexandraki for these multiple honors.

Annual Research Day Awards

Department of Medicine Residents received the top prizes at the UF-COM JAX Annual Research Day on May 15th, 2008. Four of our residents received the top awards for their research presentations. The first prize for the Platform presentations went to Dr. Andrew Darlington (Internal Medicine), the second prize was given to Dr. Stuart A. Smalheiser (Cardiology) and the third prize went to Dr. Ivan E. Rascon-Aguilar (Gastroenterology). In addition Dr. Joe E. Khoury (Gastroenterology) was the First Prize winner in Poster presentations.

Congratulations to the prize winners and the participants of research day presentations.

American Society of Gastroenterology 2008 Minority Award: Dr. Kenneth Vega



Dr. Kenneth Vega was selected as the recipient of the 2008 ASGE Minority Award. The award is granted to physicians who submit an outstanding abstract for Digestive Disease Week promoting minority-related healthcare research.

Congratulations to Dr. Vega.

Outstanding Presentation at the Southern Society for Clinical Investigation Nephrology Fellows Research Forum

Bobby Sullivan (Nephrology Fellow) placed third out of 11 abstracts for his outstanding presentation at the Southern Society for Clinical Investigation Nephrology Fellows Research Forum. He presented the Hep C work from the USRDS which included the new data on cirrhosis.

Way to go Bobby...

MEET YOUR COLLEAGUES

Editor's note: Periodically the "Academic Physician Quarterly" will introduce our readership to new faculty members who have exceptional clinical skills. In this issue we highlight the Chief of Rheumatology and Clinical Immunology who joined UF-Shands Hospital in the last year.



Ghaith Mitri, MD, MMM, Assistant Professor of Medicine and Chief of Division of Rheumatology and Clinical Immunology.

Dr. Mitri completed his residency in Internal Medicine at Scranton Temple University in Scranton, PA, his fellowship in Rheumatology and Clinical Immunology at the University of Pittsburgh School of Medicine in Pittsburgh, PA., and he achieved his Master of Medical Management (MMM) degree from the University of Southern California Marshall School of Business in Los Angeles, CA. Dr. Mitri's special academic interests include rheumatoid arthritis, scleroderma, myositis and gout.

SHANDS BRAND

New Magnet at Shands Jacksonville Creates 3-D Images of the Body in Just 6 Minutes Shands

Jacksonville Center for Advanced CT & MR Imaging Now Open

Written by Kelly Brockmeier

On Feb. 14, a 28,600-pound, high-powered imaging magnet was hoisted through the roof of a new imaging building behind the Pavilion that was built exclusively for the Siemens 3T TIM Trio and an accompanying state-of-the-art dual source 64-slice CT system. The magnet is the core of Shands Jacksonville's advanced MRI system from Siemens Medical Solutions.



The 3T is capable of rapidly creating 3-D images of different parts of the body, including the moving heart. The 3T is so fast that it can scan the entire body in just six minutes. It is also better suited than traditional MRI systems at evaluating abnormalities in organ metabolisms and function before permanent damage has occurred.

With the 3T system, UF physicians and imaging scientists are able to see into the most microscopic corners of the human body. In the heart for instance, it enables them to observe mildly impaired blood flow to its muscle and early scarring.

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“3T MR technology allows us to better diagnose the most complex cardiovascular, neurological and oncologic conditions, and, thus, better support the subspecialty care of patients,” said Richard D. White, MD, chairman of the UF Department of Radiology on the Shands Jacksonville campus.

In addition to the 3T magnet, the new Shands Jacksonville Center for Advanced CT & MR Imaging houses a dual-source 64-slice CT scanner. The scanner, primarily used for imaging of cardiac patients, allows radiologists to evaluate patients quicker than traditional CT technology. Previously, patients having single-source CT scans had to take medication to slow their heart rate for imaging purposes, but the speed of the dual source system eliminates that need in most cases. In addition, the new imaging system provides substantially less radiation than a single-source CT scan.



For more information or to refer patients, call the Shands Jacksonville Center for Advanced CT & MR Imaging at 244-7232.

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