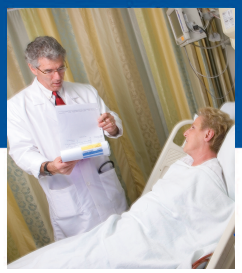
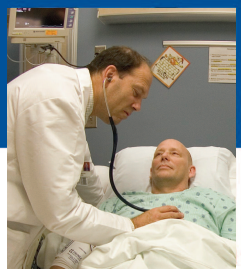
Volume 2, Issue 4, October 2008

Academic Physician Quarterly

A DEPARTMENT OF MEDICINE BULLETIN

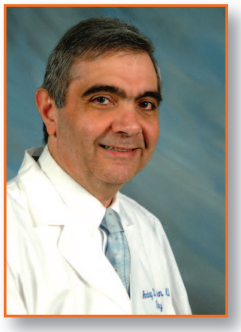




UF UNIVERSITY of FLORIDA
College of Medicine
Jacksonville

CHAIRMAN'S MESSAGE

Dear colleagues:



I am pleased to share with you the Fall 2008 issue of Academic Physician Quarterly (APQ) newsletter.

As you all know we went through the first major hurricane of the season with relatively minimal consequences. Fortunately, The Institution and the Department had a comprehensive hurricane preparedness plan in place that was executed seamlessly. We hope that hurricanes in our area would not detract us from the excitement of upcoming presidential elections. Indeed, these are exciting times to be part of making history when the country for the first time will either have a woman vice president or an African American president.

The Department of Medicine continues to make headway in delivering clinical care, educating residents and students and developing research projects. In this issue, we describe our Division of Hospital Medicine in the Focus section. This is currently the largest division within the Department of Medicine and is comprised of over 20 providers. Most recently 7 internists joined the Division to make it one of the largest in the country. Other Divisions were also successful in recruiting talented faculty some of whom are highlighted in the section on Meet Your Colleagues.

As always, if you have any comments or observations to share with colleagues please e-mail them to me and I will be happy to include them in our future issues. My e-mail address is arshag.mooradian@jax.ufl.edu.

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

Jeff House, D.O.

Assistant Professor of Medicine and Chief

Division of Hospital Medicine

Hospitalist and Patient Care:

Keeping with the Times

In 1996 Drs. Robert Wachter and Lee Goldman coined the term "hospitalist" in a publication in the New England Journal of Medicine, referring to physicians whose practice emphasizes providing care for hospitalized patients. Since this review the hospitalist profession has experienced dynamic growth. In 2007 there were an estimated 20,000 hospitalists practicing in the United States, and this number is expected to exceed 30,000 by 2010. Today there are more jobs available in hospital medicine than any other career in internal medicine.

Membership is not the only area where hospital medicine has evolved. What began as a temporary job has now become a career for many physicians. Today's hospitalist activities not only include patient care, but teaching, research, and leadership related to hospital medicine. Interest from medical students and residents has lead many academic institutions to develop hospitalist residency and fellowship programs. Hospitalist tracks offer additional exposure to the broad range of issues confronting hospital-based physicians, such as end-of-life care, quality improvement, and medical consultation.

The University of Florida Division of Hospital Medicine is not without its own growth and evolution. Since the program's inception in 2000, it has grown from a one physician, one physician assistant service to 18 full time physicians and 2 physician extenders. The division now has an established team of highly qualified, specially trained, experienced providers, some who have been on service here for over 6 years. They have grown from an average daily census of approximately 20 patients in 2000 to 125 in 2008. The service routinely handles 20-30 new admissions a day, and they are the exclusive health care providers of all medical patients transferred from outside facilities. Their service is not limited to ED admissions and hospital-to-hospital transfers. They are also the receiving service for direct admissions from University of Florida satellite offices. This service allows primary care physicians to focus on their office patients.

Just as with the national trend in hospital medicine, this division's growth can be measured by more than just the number of employees or degree of clinical service demands. The division has ventured into other areas outside of patient care including scholarly activity, education, and quality improvement. This past year marks the division's first successful elective in hospital medicine. This one-on-one Hospital Medicine rotation, designed for 3rd year residents, was complete with a written curriculum and didactic sessions on advanced topics such as palliative care, insurance, and billing. Dr. Praveen Garg has completed an 18 month course in the Master Educators in Medical Education Program to further develop clinical educator skills. Scholarly activity has been a new focus over the last year, and this has resulted in 6 publications as well as several abstracts.

The division also participates in a number of administrative activities that directly affect patient care. These in-

A group photo of the Division of Hospital Medicine

Continued on Page 3

Focus continued from Page 2

clude the Med Safety Committee, Throughput Committee, Medical Performance Improvement Committee, and Faculty Council. Many of these programs directly impact the quality of health care delivered in this hospital.

As the national picture of hospital medicine continues to evolve, so too will this program. The division's primary focus remains to provide high quality care for all hospitalized patients. Our team works in partnership with various entities within the hospital including specialists and case management. Our mission is to support and promote changes to the health care system that lead to higher quality and more efficient care for all hospitalized patients.

A CLINICAL CASE

Vu, Ho John MD (University of Florida (UF), Medicine)
Mannepalli, Supriya MD (UF, Infectious Disease)
Ahmad, Maria MD (UF, Pathology)
Laos, Luis MD, FCCP (UF, Pulmonary & Critical Care)

Non-Infectious Cause of Pneumonia in an Immunocompromised Patient

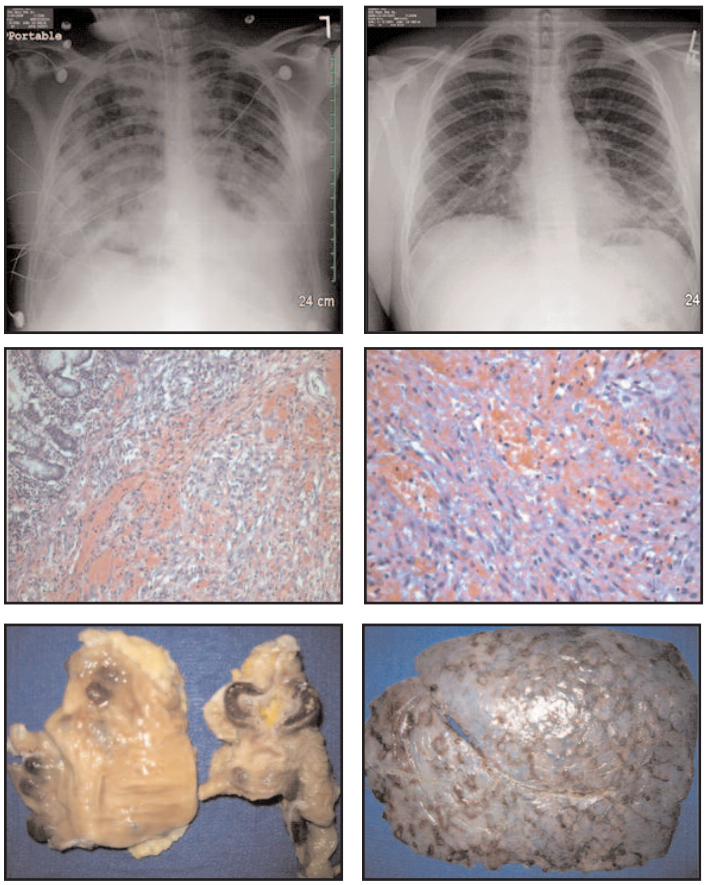
Case Report

A 24 year old man with untreated HIV/AIDS with a CD4 count of 6 presented with progressive shortness of breath, nausea and vomiting for more than 3 weeks. Initial Chest X-ray demonstrated a reticulonodular pattern bilaterally throughout the lung fields and he was treated empirically for Pneumocystis jiroveci and hospital acquired pneumonia. No clinical improvement was noted even on broad spectrum antibiotics including anti-fungals. Blood and sputum cultures were consistently negative. There were no suspicious skin lesions on physical examination and brochoalveolar lavages performed on two separate occasions were negative for organisms but did show alveolar hemorrhage.

His condition worsened and he developed respiratory distress, multi-organ failure and expired in the ICU. His autopsy report showed widespread Kaposi's sarcoma involving the lungs, liver, small and large bowel, mediastinal and mesenteric lymph nodes (see included pathology pictures).

Discussion

Pneumonia in the patient with HIV/AIDS can be attributed to a number of different causes: most commonly bacterial then Pneumocystis jiroveci and, depending on the endemic region, fungal and viral. This case report



demonstrates a rare cause of pneumonia in a 24 year old man: neoplasm.

In HIV disease, the development of Kaposi's sarcoma (KS) is dependent on the interplay of a variety of factors including HIV-1 itself, human herpes virus 8 (HHV-8), immune activation, and cytokine secretion. KS is an angio-proliferative disease with excessive proliferation of spindle cells that are believed to be of vascular origin and have features in common with endothelial and smooth-muscle cells.

Pulmonary Kaposi's sarcoma is often associated with

Continued on Page 4

A Clinical Case continued from Page 3

dyspnea, nonproductive cough, fever, and hemoptysis. Although Kaposi's sarcoma is typically a multicentric neoplasm with skin, gastrointestinal, and lymph node involvement, many patients with pulmonary Kaposi's sarcoma do not have the characteristic cutaneous violaceous macules, papules, or nodules or clinical evidence of disease in other organs. It is important to consider Kaposi's sarcoma when evaluating HIV/AIDS patients with respiratory distress and alveolar hemorrhage even in the absence of classical disease findings.

GME CORNER

Senthil Meenrajan, M.D., M.B.A.

Assistant Professor of Medicine, General Internal Medicine

Associate Program Director, Internal Medicine Residency

The start of the academic year could not have been better for the Internal Medicine Residency. Every year we think we have the best cohort of trainees and the very next year we are proven wrong. We are delighted to be wrong again this year!! The anxiety of having new interns and some new residents went away when everyone seemed to take to their duties like 'fish to water'. One of the keys for ensuring that everyone does their part really well is having exemplary role models. The Graduation Dinner was held to celebrate our graduating residents and also to honor those that were peer selected to be the best – Dr. Michael Hernandez (Senior Resident of the Year) & Dr. Jasdip Matharu (Intern of the Year). Oh! By the way, Dr. Cury won the 'Teacher of the Year' award. The number of times he has won this award in the past – 2 (I don't think anyone knows the real number for sure but I think I might have forgotten a zero after the 2!!). We are privileged that he teaches our residents.

While we have many distinguished faculty on our staff, we still miss Dr. Arpitha Ketty who had to move on to pursue other goals. As a physician, colleague, teacher and Associate Program Director, she was loved and respected by all. She has left a pair of shoes that are impossible to fill and she is dearly missed.

Moving on, the educational platform continues to be stronger than ever. The expanding number of fellowships and the accomplished fellows we attract also make us proud. This year during the fellowship match our residents had an astounding showing:

- Tom Nguyen - Nephrology, UF Jax
- Vinny Samuel - Nephrology, UF Jax
- Siva Suryadevara - Cardiology, UF Jax
- Ruchi Gupta - Gastroenterology, University of Mis souri Columbia
- Mohammad Asif Khan - Oncology, UF Jax

Congratulations to all of them. Talking about congratulating and being strong also reminds me of a number of residents (and faculty) that have 'graduated' to being parents or being parents again and we offer them our best wishes. The program is also making positive changes in the way several educational activities are conducted including Morning Report and Board Review. All of this has been very well received by students, residents and faculty.

Like in everything else, the circle of life continues and I am back to where I started i.e. recruiting the very best. The interview season looms and we have made significant changes to our process, partly guided by feedback from those who have successfully interviewed and matched with us. Standardization of the interview routine will eliminate some of the loose ends in the process. They will also be given a 'view' that showcases the best the Institution has to offer – new look for the webpage, enthusiastic residents leading tours, outstanding conferences that interviewees attend and a brief presentation on the history and laurels of the program. So, in the next few months, if you see some of these well dressed, young doctors in the hallway have your smiles and 'hellos' ready! Be part of the team that continues to prove us wrong!!

Edward K. Partyka MD, Former Assistant Professor of Medicine, Division of Gastroenterology

Lubiprostone (Amitiza) , a novel drug for chronic idiopathic constipation

The newest stimulant-type drug for chronic idiopathic constipation is Lubiprostone (Amitiza,by Sucampo Pharmaceuticals). The FDA approved it January 31,2006. (1) Last July, the company submitted a new drug application to the FDA for lubiprostone to be used in Irritable Bowel Syndrome with constipation (IBS-C). Research is underway to determine the efficacy of lubiprostone in post-operative and opiod-induced bowel dysfunction.

Lubiprostone is a bicyclic fatty acid (prostaglandin E1 derivative) that selectively stimulates the type 2 chloride channels, C1C-2, increasing intestinal chloride,sodium and water secretion without altering sodium and potassium serum concentrations. Prostones have no significant pharmacologic effect on smooth muscle contractions. (1,2) The C1C-2 chloride channels are on the apical(luminal) aspect of gastrointestinal epithelial cells (along the villous surfaces). The CFTR (cystic fibrosis transmembrane conductance regulator) chloride channels are not affected by lubiprostone (see Fig. 1). (3,4)

As a result of this stimulation the stool softens, motility increases and spontaneous bowel movements (SBM"s) occur. Minimal distribution of the drug occurs beyond the immediate GI tissues. It is rapidly metabolized by reduction/oxidation,mediated by carbonyl reductase. There is no metabolic involvement of the hepatic Cytochrome P450 System. Data indicate that metabolism of the drug occurs locally in the stomach and jejunum. Excretion is renal (60%) and fecal (30%). (1)

Approval by the FDA was based on data from two placebo-controlled, randomized phase 2 clinical trials in 479 patients with a history of less than 3 SBM's per week for a period of at least 6 months. Lubiprostone (24mcgs orally, twice daily) yielded a SBM within 24 hours in (56.7%,first study;62.9%,second study). In addition, the increase from baseline in SBM frequency at one week was significantly greater in those receiving lubiprostone compared with those receiving placebo, an effect that was maintained through the four week study period. Also, results of three long-term clinical safety studies in 871 patients showed that lubiprostone decreased constipation severity, abdominal bloating, and discomfort for six to twelve months. Results were consistent among sex and race subpopulations and in patients aged 65 years and older. (5)

In a double-blind, placebo-controlled, dose-ranging study to evaluate efficacy and safety, 129 patients with chronic constipation were randomized to receive lubiprostone (24,48 or 72 mcg/day) or placebo for three weeks. Results showed more patients taking the 48 and 72 mcg/day doses experienced a SBM on the first treatment day(P<_ 0.009).The most common AEs were nausea, headache and diarrhea. Increased AE severity at 72 mcg/day did not provide a clear risk-to-benefit advantage compared with the 48 mcg/day, the dose chosen for subsequent Phase 3 studies. (6)

Other study data reveal that nausea, diarrhea, headache, abdominal pain, and distention occur in 31.7%, 12%, 11.7%, 8%, and 6% respectively. Nausea was mild to moderate, which resulted in treatment discontinuation in 5% of treated atients. (4)

Lubiprostone does not show signs of tolerance, dependency, or altered serum electrolyte concentrations. Upon withdrawal, a graded return to pre-treatment bowel movement frequency should be expected. Contraindications are in patients with known mechanical bowel obstruction or chronic diarrhea (of course!). Women of child-bearing ages should have a negative pregnancy test prior to starting the drug. (Category C),Also it has not been studied in pediatric pa-

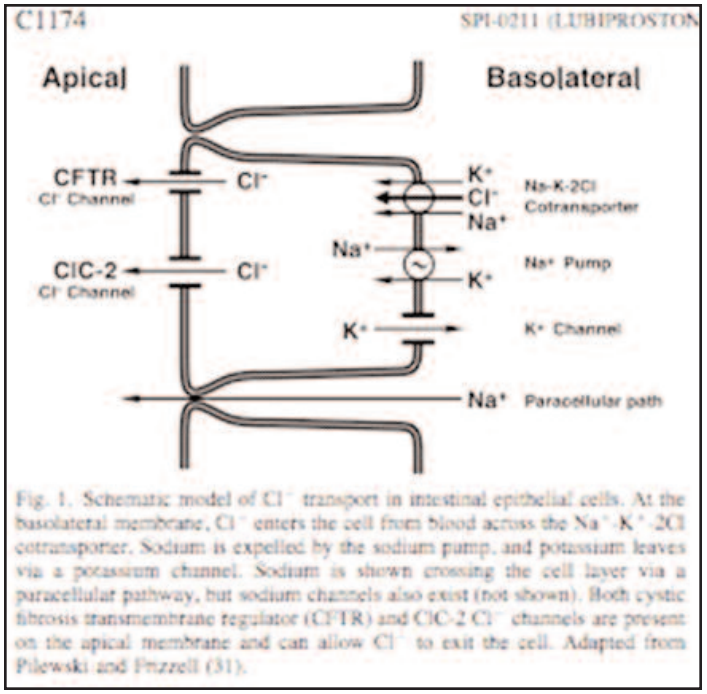


Fig. 1. Schematic model of Cl^- transport in intestinal epithelial cells. At the basolateral membrane, Cl^- enters the cell from blood across the Na^+-K^+-2Cl cotransporter. Sodium is expelled by the sodium pump, and potassium leaves via a potassium channel. Sodium is shown crossing the cell layer via a paracellular pathway, but sodium channels also exist (not shown). Both cystic fibrosis transmembrane regulator (CFTR) and ClC-2 Cl^- channels are present on the apical membrane and can allow Cl^- to exit the cell. Adapted from Pilewski and Frizzell (31).

Continued on Page 6

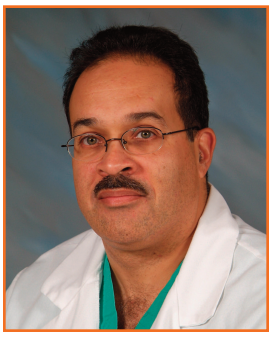
tients. (5) Takeda Pharmacy (on-line) lists 60 capsules for $216.30, a month's supply.

It is the opinion of this author that lubiprostone has now replaced tegaserod(zellnorm), as the premier "high-end" stimulant laxative of choice, since tegaserod was asked to suspend sales by the FDA on March 30, 2007, due to associated cardiovascular events .(5) Time will tell if lubiprostone will suffer any similar fate. In the meantime, I am hopeful that it will pass scrutiny by the FDA for use in IBS-C, and especially opiod-induced bowel dysfunction .

References

1. Ambizas EM Lubiprostone: A Chloride Channel Activator for Treatment of Chronic Constipation The Annals of Pharmacotherapy 2007 June,V.41,957-964.
2. Attaluri A, Diagnostic and Therapeutic Approaches to Patients with Constipation, Practical Gastroenterology Nov. 2006,V.30, #11, 30-44
3. Cuppoletti J et al SPI-0211 activates T 84 cell chloride transport and recombinant human C1C-2 chloride currents Am J Physiol Cell physiol 287:C1173-C1183,2004
4. Johanson JF et al Multicenter, 4-week, Double-Blind, Randomized, Placebo-Controlled Trial of Lubiprostone, a Locally-Acting Type-2 Chloride Channel Activator, in Patients with Chronic Constipation Am J Gastroenterol 2008;103(1):170-177.
5. Johanson JF Review of the Treatment Options for Chronic Constipation Medscape General medicine 2007;9(2):25.
6. Johanson JF Lubiprostone, a Locally Acting Chloride Channel Activator, in Adult Patients with Chronic Constipation, a Double-Blind, Placebo-Controlled, Dose-Ranging Study to Evaluate Efficacy and Safety. Aliment Pharmacol Ther 25,1351-1361,2007.

NEWS & NOTES



Dr. Kenneth Vega, Associate Professor of Medicine, Division of Gastroenterology, was the recipient of the 2008 American College of Gastroenterology Award for excellence in research regarding health disparities between genders. The award is granted to physicians who make seminal contributions to research in health care.

As the recipient, Dr. Vega will be receiving an award in the amount of $1,000. He will be recognized at the 2008 American College of Gastroenterology meetings.

Please join me in congratulating Dr. Vega for this honor.

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 11 faculty members who have joined the Department of Medicine this fall.

Aiham Al Ashhab, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Al Ashhab earned his medical degree from Damascus University in Damascus, Syria and completed his residency in Internal Medicine at Case Western Reserve University in Cleveland, OH.

Win Aung, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Aung earned his medical degree from the Institute of Medicine in Mandalay, Myanmar and completed his residency in Internal Medicine at Lutheran Medical Center in Brooklyn, NY.

Continued on Page 7

Lyndon Box, M.D., Assistant Professor of Medicine
Division of Cardiology

Dr. Box earned his medical degree from the University of Alabama School of Medicine and completed his residency in Internal Medicine at Oregon Health & Science University in Portland, OR. Dr. Box completed his fellowships in Cardiovascular Disease and Interventional Cardiology at the University of Florida College of Medicine - Jacksonville.

Sian Chisholm, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Chisholm earned her medical degree from Ross University School of Medicine in Dominica, West Indies and completed her residency in Internal Medicine at the University of Florida College of Medicine - Jacksonville.

Ruchi Gupta, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Gupta earned her medical degree from the University of Delhi in Delhi, India and completed her residency in Internal Medicine at the University of Florida College of Medicine - Jacksonville.

Charles Heilig, M.D., Professor of Medicine and Fellowship Director
Division of Nephrology & Hypertension

Dr. Heilig earned his medical degree from the University of Minnesota Medical School in Minneapolis, MN, and completed his residency in Internal Medicine at Mayo Clinic in Rochester, MN. Dr. Heilig completed his fellowship in Nephrology at Harvard Medical School, Brigham & Women's Hospital in Boston, MA.

Michael Hernandez, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Hernandez earned his medical degree from Florida State University College of Medicine in Tallahassee, FL and completed his residency in Internal Medicine at the University of Florida College of Medicine, Jacksonville.

Robert Kim, M.D., Assistant Professor of Medicine
Division of Cardiology

Dr. Kim earned his medical degree from Tufts University School of Medicine in Boston, MA, completed his residency in General Surgery at St. Elizabeth's Medical Center in Boston, MA and his residency in Internal Medicine at University of Massachusetts Medical Center in Worcester, MA. Dr. Kim completed his fellowships in Cardiovascular Disease and Cardiac Electrophysiology at Dartmouth-Hitchcock Medical Center in Lebanon, NH.

Murali Kodali, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Kodali earned his medical degree from NTR University of Health Sciences in Vijayawada, Andhra Pradesh, India and completed his residency in Internal Medicine at Resurrection Medical Center in Chicago, IL.

Roger Maalouf, M.D., Assistant Professor of Medicine
Division of Hospital Medicine

Dr. Maalouf earned his medical degree from the Lebanese University School of Medicine in Beirut, Lebanon and completed his residency in Internal Medicine at the University of Kansas School of Medicine in Wichita, KS.

Shands HealthCare Wins Sterling Award

Shands HealthCare is the proud recipient of the 2008 Governor's Sterling Award – the state's top honor for performance excellence.

The award is given to organizations and businesses in Florida that are role models for improving the way they do business. Few healthcare systems have been recognized this way for quality, outcomes and organizational excellence.

Since its inception in 1992, only 57 organizations have received the honor. Shands is the largest organization thus far. "To be in the company of the other great organizations that have received the award is such an honor," Jim Burkhart, president and administrator of Shands Jacksonville, said.

To be considered for the award, Shands HealthCare had to submit a 50-page application. The application was scored based on the following seven categories: leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process management and business results. After reviewing the application, examiners interviewed more than 500 staff members over a three-day period at all of the Shands facilities.

In a press release announcement, the governor applauded the organization's ability to provide critical healthcare services to patients in Florida and around the country. He went on to say, "The use of technology and innovation is apparent in the organization's endeavor to allocate all the resources needed to serve patients with excellence."

In October, Shands Jacksonville will host the Sterling Showcase of Best Practices. This one-day event will offer other businesses and healthcare organizations the opportunity to learn the processes and measurements that earned Shands Healthcare this award.

UF UNIVERSITY of FLORIDA
College of Medicine
Jacksonville
653-1 West Eighth St.
Department of Medicine
Jacksonville, FL 32209-6511
904-244-8846; fax: 904-244-8844

NON-PROFIT ORG.
U.S. POSTAGE
PAID
JACKSONVILLE, FL
PERMIT NO. P173