

CREIGHTON MEDICINE

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New Approaches to Asthma and Allergies

by **Devendra Agrawal, Ph.D.**, PROFESSOR of MEDICINE and
Robert Townley, M.D., PROFESSOR of MEDICINE

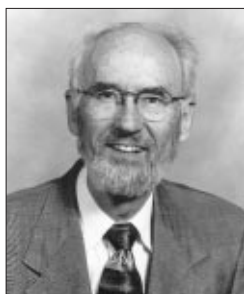
An Epidemic of Asthma?



Devendra Agrawal, Ph.D.

In November 1999, *Scientific American* ran a news/analysis piece on "The Invisible Epidemic." The prevalence of asthma in the developed countries has doubled in the last 20 years. In the U.S., deaths attributed to asthma have increased almost three-fold. Better diagnosis probably does not account for more than a fraction of the phenomenon. The increase is real and frightening. It is most dramatic in the poorest urban areas,

where as many as half of the children are carrying inhalers.



Robert Townley, M.D.

In a general pattern common to many chronic health problems, asthma seems to involve the interaction of environmental exposures or deficiencies and genetic vulnerability. Various studies have associated the development of asthma with dust mites, cockroaches, or cats. However, these factors are hardly new to the urban habitat. Scientists speculate that something about today's Western lifestyle promotes asthma and allergies. What are

the candidate factors? What has changed? Young children are being raised indoors (where extended exposure to indoor allergens can occur). They are getting relatively little exercise (perhaps exercise protects the lungs). Some children are growing up in relatively affluent environments that are practically germ-free.

BCG and Asthma

In countries where anti-tuberculosis immunization with BCG during infancy is routine, asthma is less common. Creighton University scientists recently examined the effect of mycobacterial antigens (BCG vaccine and *M. vaccae*), on antigen-induced bronchoconstriction, airway hyperactivity to methacholine, and several other variables in a strain of laboratory mice sensitized to ovalbumin. Challenge with ovalbumin produced bronchoconstriction. However both the early (within minutes) and late (1.5 to 6 hours post-exposure) allergic responses were significantly attenuated by both BCG and *M. vaccae*. Intra-nasal administration of BCG was much more effective than the intra-peritoneal route in preventing manifestations equivalent to bronchial asthma in the sensitized mice.

These and other studies suggest that specific childhood infections may modulate the immune system either to increase or to decrease the risk of allergen sensitization and asthma. BCG vaccine stimulates a pattern of immune-system findings, the Th1 profile, that differs from the Th2 profile seen in allergic persons.

The Allergy Division is carrying out studies to determine the effect of BCG vaccine on the development of asthma and allergy. This is a five-year study supported by the Health Future Foundation.

Seasonal Allergies

With the arrival of spring came the sneezing, wheezing, and itching associated with spring pollen allergies, and the mild winter led to an unusually early appearance of tree pollen.

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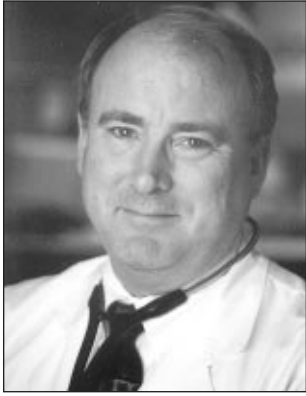
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From the Chair



Eugene Rich, M.D.

“Creighton exists for students and learning.” These powerful words from our University Mission Statement capture the essence of the Medicine Department’s purpose, achieving excellence in our professional training programs. To realize this purpose, our department adopted many ambitious goals in medical education in 1966. I am pleased to report that our dedicated faculty and staff have made great progress on these goals the past few years. .

We have undertaken a variety of faculty development initiatives to improve skills as clinical teachers and scholars of medical education. We have established explicit, systematic support for all faculty teaching efforts, as well as mechanisms to reward faculty for teaching excellence. We have established a program of scholarship in medical education, reflected by publications and by numerous invitations to present work at national medical education meetings.

Our faculty have investigated methods to improve the evaluation of students in their various course work. We have established methods to provide faculty and department leaders feedback on the quality of our teaching. We have expanded Ambulatory Care curricula on Managed Care issues, quality improvement and medical professionalism.

We have introduced new curriculum on Evidenced-Based Practice and the use of Electronic Medical Knowledge Resources in clinical practice. We have established new community-based clinical teaching sites for inpatient and outpatient education. We have undertaken initiatives to enhance Department of Medicine Conferences with an emphasis on Internal Medicine Grand Rounds. To this end, we have expanded the number of Distinguished Visiting Professors in Internal Medicine who come to our campus to share important and new perspectives and findings with our students, residents and faculty.

Another goal for the Internal Medicine education at Creighton is to attract high quality candidates into our graduate medical education programs. The past decade has been a difficult time for recruiting medical students into Internal Medicine. Nationally, 5-10% of the internship positions in internal medical programs remain unfilled each year by the National Residency Matching Programs (NRMP). Accordingly Creighton’s Medicine Residency Programs have struggled the last 10 years to fill all of the positions through the NRMP, as have hundreds of other medicine programs throughout the country.

In recent years our medicine-pediatrics residency program, our preliminary medicine internship, and our fellowships in cardiology, infectious disease, allergy/immunology, and pulmonary/critical care have done well. But our core internal medicine program, the “categorical Internal Medicine Residency,” has struggled to fill all of its positions on “Match day,” as have 20 to over 50% of other categorical medicine residency programs. In recent years, the Office of Education in the

Department of Medicine has focused much attention on filling with high quality candidates all of our internal medicine internship positions through NRMP. .

We know we have an excellent curriculum; this has been repeatedly confirmed by the National Internal Medicine Residency Review Committee which consistently accredits our program with commendations during its routine site visits. To improve our results on “Match Day,” our educational program faculty and staff have focused on increasing the number of highly qualified applicants, on ensuring consistency in the high quality of our teaching, on continuously re-evaluating and improving our core curriculum, and on adding state-of-the-art educational innovations.

As a result of these efforts, we had great success in recruiting interns for all our internal medicine programs this year. On the March 16, 2000 “Match Day,” our Categorical Internal Medicine internship, as well as our Medicine-Pediatrics internship and preliminary medicine programs, filled all of our positions through the NRMP. Indeed, we did not go near the “bottom of our list” of acceptable candidates for any program! This important achievement is particularly noteworthy because the proportion of filled positions fell nationally for both internal medicine and medicine-pediatrics this year. Indeed, over 25% of categorical internal medicine programs did not fill their positions through NRMP.

Julie Nelson, Director of the Office of Education, and her staff, **Stacy Davis** (Staff Coordinator for Resident Education) and **Colleen Conway** (Staff Coordinator for Student Education) deserve much credit, as do our energetic and dedicated chief residents, **Drs. Richard Lund, Brad Oldemeyer** and **Bernie Fischbach**. Of course, **Walter O’Donohue**, M.D., as Associate Chair for Medical Education, and **Bo Dunlay**, M.D., Program Director for the Internal Medicine Residency, played key leadership roles devising and implementing various initiatives to improve our training programs and our recruitment process.

The faculty leaders played an important role as well. Our residency programs attracted many outstanding Creighton medical students; clearly the high quality and continuing innovations in our medical school curriculum have demonstrated to our students our commitment to internal medicine education. These faculty include **Anna Maio**, M.D. (Physical Diagnosis), **Drs. Joseph Lynch, John Hurley, James Woodbury, Naresh Dewan, Laurel Preheim, Mark Johnson** (Introduction to Clinical Medicine), and especially **Bruce Houghton**, M.D. (Third-year Inpatient Medicine Clerkship) and **Hank Sakowski**, M.D. (Primary Care Clerkship). Of course, all of our more than 80 faculty in the department of medicine play key roles in the success of our educational programs.

As we say in our mission statement, Creighton Medicine “exists for students and learning.”

Eugene Rich, M.D.
Tenet Professor and Chair
Department of Medicine

The Pulmonary Division Rises to Meet the Challenge of Increased Lung Disease

by **Teri Bowman, M.D.**
ASSISTANT PROFESSOR of MEDICINE



Teri Bowman, M.D.

The Epidemiology and Statistics Unit of the American Lung Association recently released national statistics on lung disease in an updated report in December 1999. Despite all the recent medical and technological advances, lung disease is currently America's third cause of death. Heart disease and cancer take the number 1 and 2 spots respectively, but their death rates are dropping, while the lung disease death rate rose by 17.5% between 1979 and 1997 (Figure 1). Broken down by the type of lung disease, more than 14 million Americans are living with asthma. Recent statistics reveal that the asthma death rate has been on the rise.

More than 16 million have chronic obstructive pulmonary disease (COPD) in the forms of chronic bronchitis and emphysema. The death rate for women is increasing at a much faster rate (Figure 2).

How can we as physicians intervene in order to alter this alarming increase of lung disease? There has been a significant variability among physicians in the diagnosis and management of patients with lung disease. Evidence-based medicine has become important for more consistent methods of diagnosis and effective treatment to improve outcomes. With the introduction of asthma management guidelines, therapy has become standardized for improved patient care. However, COPD therapy has continued to be more variable in approach.

To look at improving awareness of the COPD problem, as well as improving outcomes, the National Heart, Lung, and Blood Institute and the World Health Organization are currently working on developing guidelines for COPD management: the Global Initiative for Chronic Obstructive Lung Diseases (GOLD).

Even though the final recommendations are not yet released, it's interesting to note that the preliminary GOLD recommendations indicate that smoking cessation has the only proven effect on long-term lung function decline. Otherwise, inhaled bronchodilators in the form of B2-agonists or anticholinergics, or both, are the first line of therapy in the COPD patient. There is a role for inhaled corticosteroids as second-line therapy, but the evidence shows this does not alter long-term lung function.

Due to the Pulmonary Division's active interest in improving outcomes for lung disease patients, the faculty and staff have been working together in various areas. The St. Joseph Hospital Pulmonary Function Lab is a fully-equipped diagnostic laboratory. This lab has been doing outreach pulmonary function tests, complete with telephone transmission, for more than 20 years for hospital clinics, doctors' offices, and occupational health. The lab staff is able to not only provide standard pulmonary function studies, but also draw arterial blood gases, provide trans-tracheal catheter and tracheostomy teaching services, shunt studies, provochole challenge studies, walking oximetry studies, indirect calorimetry analysis, and complete cardiopulmonary exercise studies.

The medical director of the busy pulmonary lab is **J. Clayton Campbell, M.D.**, Associate Professor of Medicine, who also has been an on-site evaluator for the Joint Review Committee of Respiratory Therapy Education since 1978. Due to his ongoing interest in education, Dr. Campbell is also the Pulmonary-Critical Care Post-Graduate

FIGURE 1: ASTHMA: AGE-ADJUSTED DEATH RATE BY SEX, 1979-1997



FIGURE 2: COPD AGE-ADJUSTED DEATH RATE, BY SEX, 1979-1997



Rheumatology Report

by **John A. Hurley, M.D.**
ASSOCIATE PROFESSOR of MEDICINE



John A. Hurley, M.D.

Rheumatoid arthritis (RA) remains one of the most challenging diseases treated by physicians in the Rheumatology Division. RA is a chronic multisystemic inflammatory disease with autoimmune features associated with characteristic joint deformities and increased mortality rate. This disease affects about one percent of the population worldwide, most commonly middle-aged women. Current treatments with first and second line

drugs are inadequate in that they only partially control established disease. They also have side effects that limit their use early in the disease process and interfere with prolonged administration. Thus, despite optimal use of current antirheumatic therapy, the outcome for many patients with RA consists of pain, severe functional decline and work disability.

The gloomy recent data regarding the prognosis of RA with the use of therapeutic regimens suggests a need for new approaches to the treatment of this disease and better understanding of its pathogenesis. Fortunately our understanding of the mechanisms involved has recently increased dramatically. This has opened up the opportunity for new therapies directed toward specific cell interactions and toward the mediators that they produce.

Over the last several years, two new nonsteroidal anti-inflammatory drugs and three new disease-modifying drugs have been introduced. Celecoxib (Celebrex) and Refecoxib (Vioxx) are the first anti-inflammatory drugs available in the United States that selectively block COX-2. Of importance, the efficacy of these COX-2 inhibitors does not differ substantially from that of conventional anti-inflammatory drugs. Their advantage is principally because of a reduced rate of adverse events, especially upper GI bleeding.

The three new disease-modifying drugs are Exanercept (Enbrel), Infliximab (Remicade) and Leflunomide (Arava). Etanercept and Infliximab are tumor necrosis factor (TNF) antagonists that have powerful anti-inflammatory effects in patients with RA. TNF is a potent inflammatory cytokine expressed in increased amounts in the serum and synovial fluid of patients with RA. It promotes the release of other inflammatory cytokines and is crucial in recruitment of inflammatory cells into synovial tissues. As a result, TNF is a prime therapeutic target in patients with RA.

Etanercept is a TNF receptor fused with human immunoglobulin. Its purpose is to bind to soluble TNF, thereby rendering it biologically inactive. About 70 percent of patients receiving subcutaneous Etanercept at dosages of 25 mg twice a week have substantial improvement in the extent of joint inflammation, often within one to two weeks after initiation of therapy. This improvement can be enhanced by combination with methotrexate. weeks after initiation of therapy. This improvement can be enhanced by combination with methotrexate.

Infliximab is a monoclonal antibody directed against TNF. It is given intravenously once every eight weeks after an initial "loading" dose.

Potential long-term risks of these TNF antagonists have not been established. However, physicians have to be vigilant in assessing patients for increased risk of infection, malignancy or autoimmune disease. The cost of these drugs is considerable and in general they should be considered in patients with recalcitrant disease not well-controlled by methotrexate.

Leflunomide (Arava) is a pyrimidine synthesis inhibitor, which is taken orally in a dose of 10 or 20 mg per day. This follows an initial loading dose of 100 mg a day for the first three days. Its efficacy is generally equivalent to that seen with methotrexate.

The Rheumatology Division is under the direction of **John Hurley, M.D.** and **Jay Kenik, M.D.**, Associate Professor of Medicine. Both Dr. Hurley and Dr. Kenik received their medical degrees and completed their Internal Medicine residency training at Creighton University. Dr. Kenik completed a rheumatology fellowship at the University of Michigan in Ann Arbor. Dr. Hurley completed his rheumatology fellowship at the University of Toronto in Canada. Both doctors returned to Creighton in 1980 and have been on the faculty since that time.

The Rheumatology Division has been quite active. In addition to seeing patients at Saint Joseph Hospital, Alegant Health Bergan Mercy Medical Center, and the Omaha VA Hospital, Creighton Rheumatology has expanded to multiple outreach areas. Patients are seen in Albion, Bellevue, Columbus, and Norfolk in Nebraska, as well as Denison, Harlan, Missouri Valley, Onawa, and Red Oak in Iowa.

Division News

Allergy

submitted by **M. Janet Barger-Lux, M.S.**

Participation and leadership

Faculty, fellows, students and professional staff from the Allergy Division presented findings of 10 studies at the 56th Annual Meeting of American Academy of Allergy, Asthma and Immunology, recently held in San Diego. **Robert Townley, M.D.** moderated a workshop and a seminar on the mechanism and measurement of nitric oxide in allergic asthma. As program director for the event, **Thomas Casale, M.D.**,

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Pillars, Past and Present



Robert P. Heaney, M.D. F.A.C.P., F.A.I.N., is John A. Creighton University Professor and Professor of Medicine

Dr. Heaney has worked for over 40 years in the study of osteoporosis and human calcium physiology, and is an internationally recognized expert and lecturer in this field. He served as Chairman of his alma mater's Department of Internal

Medicine from 1961-69. Dr. Heaney was Creighton's first Vice-President for Health Sciences, a position he held from 1971-84. Since 1984 he has held the all-university chair named in honor of the University's co-founder.

Why did you choose to work at a Catholic medical school, and why have you stayed? Probably many different reasons over these past 43 years as a member of Creighton's faculty. Basically it boils down to my conviction that scientific progress, while important, is not the ultimate value, that we are called to be persons for others, and that I felt I'd have a better chance of doing that if I joined with others of like mind.

Who have been your most influential teachers? First, my parents, who expected me to achieve and who gave me their faith; then my colleagues, all of whom seem to know more than I, and from whom I am continually learning new things.

Which research event has had the most effect on your work? As a teenager I discovered the formula for the sum of N consecutive integers. It had been done centuries earlier, of course, but I did it afresh, and I remember the Aha! exhilaration well. I remember also how I did it. It's the exact same approach I've subsequently taken in all of my biomedical research.

What are your greatest regrets? One, that I cannot sing nor speak French; two, that I'll never understand relativity; and three, that I haven't yet figured out how everything works.

What are you now reading? "Does God Need the Church?" by Gerhard Lohfink; "Just Six Numbers" by Martin Rees; "Jesus, the Victory of God" by N.T.Wright; "The Simple Science of Flight" by Hank Tennekes.

What advice would you offer new medical graduates? I'd quote Sir William Osler: "Listen to your patients; they are telling you what is wrong." And I'd add the advice that the Harvard alums gave the class of '37: "Expect to work hard, but don't expect to make much money." Medicine is still hard work, but in the U.S. at least, it's become a lucrative profession. But that is an anomaly, worldwide, and can't last here forever.

What is your favorite building? Actually cities-city architecture, generally. Some are ugly; all are interesting. Paris is my favorite for sheer beauty; Rome for its palpable antiquity.

How do you relax? Tinkering in my shop and fixing things that are broken

Division News

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Professor of Allergy/Immunology, coordinated the educational content of the meeting.

The Allergy Report

The American Academy of Allergy, Asthma and Immunology, in partnership with the National Institute of Allergy and Infectious Disease and several other organizations, have released the first consensus document on allergy diagnosis and treatment. *The Allergy Report*, an extensive guide for primary care professionals, is the result of a 2-year effort.

Camp Superkids®

Since 1978, the American Lung Association of Nebraska has held a week of outdoor adventure and health education for children aged 7-16 with asthma at Camp Kitaki, near Platte River State Park. For further information, contact the American Lung Association at 402-572-3030 or 1-800-LUNGUSA.

Young scientist recognized

The AAAAI encourages young physician-scientists with summer research awards. A third-year student in the Creighton MD/PhD program, **Michael Hopfenspirger**, has won an AAAAI award for two successive summers. He presented his work on the relationship of mycobacterial antigens and asthma at the Midwest Research Forum, and won first prize in the graduate student/resident category or for his oral presentation.

Calling all volunteers

Creighton scientists are now seeking volunteers to test new treatments for allergic rhinitis in children aged 2-5, exercise-induced asthma in children aged 6-14, chronic urticaria or seasonal allergic rhinitis in persons older than 15, chronic plaque-type psoriasis in persons older than 18, and COPD in adults aged 40-80. For further information, please call 402-280-1847.

Cardiology

submitted by **Syed Mohiuddin, M.D.**

Dietitian added to staff



Rita Frickel, M.S., R.D.

Rita Frickel, M.S., R.D., has been joined The Cardiac Center's staff. Ms. Frickel had been the Nutrition Educator in the Family Medicine Department at UNMC. She obtained her B.S. in Food and Nutrition at Kearney State College in 1980 and she earned an "M.S. degree in Health Education at the University of Nebraska at Omaha in 1987.

New invasive procedure

Recently, a new procedure involving the removal of thrombus from coronary arteries was utilized at The Cardiac Center's Catheterization Lab. This procedure, using the AngioJet Catheter, will add to our current arsenal for treating patients that present with acute coronary

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Division News

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syndromes. A high velocity saline jet within the catheter creates a vacuum that pulls thrombus into the catheter and out of the patient's body. For patients that present with a large amount of thrombus burden, this procedure will now allow effective removal of the thrombus with less risk of distal thrombo-embolism.

Poster presentations

Amy J. Arouni, M.D., Assistant Professor of Medicine, made a poster presentation entitled "Oral Estrogen Replacement Therapy Reduces the Diagnostic Accuracy of Exercise Stress Tests in Women," at the 49th Annual Scientific Session of the American College of Cardiology in Anaheim, Calif.

Thomas Lenz, Pharm.D., Cardiovascular Research Pharmacy Fellow, made the following poster presentations at the annual meeting of the American College of Clinical Pharmacy in Monterrey, Calif. in April 2000: "Therapeutic Interchange Among Dihydropine Calcium Channel Blockers: Economic and Formulary Considerations;" "Therapeutic Interchange From High Dose Calcium Channel Blockers to a Fixed-Dose Combination Product in Hypertension;" "Comparative Diagnostic Accuracy of Adenosine, Dipyridamole and Dobutamine Myocardial Perfusion Imaging: A Meta-Analysis;" "Cross-over Comparison of Gemfibrozil and Fenofibrate in Patients with Type IIA or Type IIB Dyslipidemia;" and "Evidence-Based Approach to Formulary Selection of Angiotensin Receptor Blockers: A Meta-Analysis."

Patient education suite

Patient education is challenging, especially in the fast-paced ambulatory environment. The Cardiac Center is establishing a patient education suite for our patients. Space is being prepared in the waiting area of our outpatient clinic, which will allow patients Internet access and a TV/VCR, as well as many pamphlets for their information. The computer will have multiple links to web sites for patients to expand their knowledge of their disease and how to participate in their care and lifestyle modifications.

Dermatology

submitted by **Christopher Huerter, M.D.**
ASSOCIATE PROFESSOR OF MEDICINE

New staff member



Melissa Ryan, M.S., A.R.N.P.

Melissa Ryan, an Advanced Registered Nurse Practitioner (ARNP), joined Dr. Huerter's Dermatology practice in April. Melissa graduated from Creighton University magna cum laude with a Bachelor of Science in Nursing degree in 1996, and with her Master of Science degree in May of 1999. She is certified by the American Nurses Credentialing Center (ANCC) and the American Academy of

Nurse practitioners (AANP).

Melissa will be working at the Saint Joseph Hospital clinic site and at the 110th & Q Street clinic location. She will also do some outreach clinics in the future. With the addition of Melissa to the staff, Dr. Huerter plans to expand clinic operations to include some early evening and weekend hours. Melissa will also be providing some focused clinics that will concentrate on adolescent acne. Please join us in welcoming Melissa Ryan to the Dermatology staff.

Endocrinology

submitted by **M. Janet Barger-Lux, M.S.**
SENIOR RESEARCH ASSOCIATE IN MEDICINE

Growth hormone deficiency in adults

Robert Anderson, M.D., Professor of Medicine and Assistant Professor and of Biomedical Science, is among the principal investigators for an international, multicenter study of recombinant human growth hormone in the treatment of hypopituitarism in adults. The Hypotuitary Control and Complications (HypoCCs) Study, sponsored by Eli Lilly, has been launched and will run for 5 years. It is expected to provide important information about dose requirements and treatment effects of GH on bone mineral density, lean body mass, fat mass, and sense of well-being.

Antifracture efficacy

The bulk of published work on effects of calcium supplementation have used bone mass as a surrogate for antifracture efficacy. In a population-based study now underway, **Robert Recker, M.D.**, Professor of Medicine and Clinical Professor of Periodontics, and his team will examine the effectiveness of calcium, with and without supplemental vitamin D, in reversing secondary hypoparathyroidism and preventing fractures among community-dwelling older adults.

Painful diabetic neuropathy

There is new hope for patients with painful diabetic neuropathy. Prosaptide, a membrane-bound peptide with neurotropic activity, has shown initial promise in treatment trials and **Marc Rendell, M.D.**, Professor of Medicine and of Biomedical Sciences, has presented Phase II data to the FDA. Several other agents for treating this condition are now under study at the Creighton Diabetes Center. These include intravenous lipoic acid, pregabalin, and topiramate (an antioxidant and two gamma amino butyric acid receptor agonists, respectively).

Dr. Recker to lead research society

Robert Recker, M.D. was recently elected president of the American Society for Bone and Mineral Research. Beginning with its 22nd annual meeting, to be held in Toronto in September, he will serve successive one-year terms as president-elect, president, and past president of the organization. The ASBMR brings together physicians, basic scientists and clinical investigators whose interests span every aspect of bone and bone disease. Its last annual meeting drew nearly 5,000 attendees from 40 countries.

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Residency Program News

Residents and Fellows Departing 6/30/00

First Year Residents	
Chad Bauerly, M.D.	Vandenberg AFB, CA
Douglas Casady, M.D.	Ophthalmology, Scott and White
Scott Durrett, M.D.	Ophthalmology, University of Florida, Gainesville
Vineet Gambhir, M.D.	Anesthesia, Barnes Jewish Hospital, St. Louis
Jeffrey Gilroy, M.D.	Radiation Oncology, University of Florida
Karl Haake, M.D.	Anesthesia, UNMC
Karry Leslie, M.D.	Ophthalmology, UNMC
Robert Manahan, M.D.	Ophthalmology, NE Ohio Medical College
Gelerie Stenbakken, M.D.	Anesthesia, UNMC
Thuc Tran, M.D.	Anesthesia, Brigham & Womens Hospital, Boston
William Thomas, M.D.	Ophthalmology, Loma Linda University, CA
Third Year Residents	
Syed Abdul-Aziz, M.D.	Cardiology, Creighton
Nicolas Aguilera, M.D.	Kaiser, Sacramento, CA
J. Daniel Davis, M.D.	Chief Resident
Melanie Eggleston, M.D.	Chief Resident
Joleen Fixley, M.D.	General Medicine, Creighton Department of Medicine
Katrina Glover, M.D.	Chief Resident
Hack Kim, M.D.	GI, Mayo Clinic, Rochester
Matthew Koch, M.D.	Nephrology, Vanderbilt University
BaoLong Nguyen, M.D.	GI, UNMC
Sylvia Rael, M.D.	Pulmonary/Critical Care, Creighton
Roger Riedel, M.D.	Cardiology, Creighton
Ahmad Shamsin, M.D.	Chief Resident
Caroline Tahara, M.D.	Private Practice, Minneapolis, MN
Charles Wendling, Jr., M.D.	Hem/Onc, University of Arkansas, Little Rock
Medicine/Pediatrics Residents	
Richard Curulla, M.D.	Private Practice, Virginia
Sarah Devine, M.D.	Private Practice, Onawa, IA
Jennifer Guss, M.D.	Faculty in Internal Medicine & Pediatrics, Creighton
Chief Residents	
Bernard Fischbach, M.D.	Nephrology, Vanderbilt University
Richard Lund, M.D.	Nephrology, Washington University, St. Louis
J. Bradley Oldemeyer, M.D.	Cardiology, Creighton
Fellows	
Palvannanathan Ganesan, M.D.	Pulmonary, Undecided at this time
Martin H. Ellbogen, Jr., M.D.	Infectious Diseases, Private Practice, Wyoming
Karuna Sree Gaddam, M.D.	Infectious Diseases, Grand Island VAMC
Muhammad Akram, M.D.	Cardiology, EP Fellowship University of Texas, Houston
Atul Chawala, M.D.	Cardiology Heart Intervention Fellowship Des Moines, IA
Hari Krishna Reddy Baddigam, M.D.	Cardiology, EP Fellowship University of Chicago
Husam Baki, M.D.	Allergy/Immunology, Undecided at this time

We congratulate all the departing members of the Residency and Fellows Programs and wish them every success in their future endeavors!

Gastroenterology

submitted by **Stephen Lanspa, M.D.**

PROFESSOR OF MEDICINE and of
PREVENTIVE MEDICINE and PUBLIC HEALTH

Research studies

The Division of Gastroenterology is evaluating two new multicenter research projects as we wind down our involvement with studies on the aggressive factors of *Helicobacter pylori*. We will participate in a study using NSAIDs in the prevention of colorectal cancer in high-risk groups (we are completing a similar study of Cox-II inhibitors in Lynch Syndrome). We also are being evaluated as a site for drug studies of a new acid suppressant. This is being done under the direction of **Thomas Casale, M.D.** and **Anna Maio, M.D.**, Chief of the Division of General Internal Medicine.

Stephen Lanspa, M.D. has been appointed to the Editorial Review Board of *Gastrointestinal Endoscopy*. Dr. Lanspa gave a presentation at the Community Conference sponsored by the American Cancer Society at the end of March, Colon Cancer Awareness Month.

General Internal Medicine

submitted by **Joanne Derby, M.D.**

ASSISTANT PROFESSOR OF MEDICINE

Faculty and community physicians' development

Bruce Houghton, M.D., **Anna Maio, M.D.**, **Henry Sakowski, M.D.** and **Joanne Derby, M.D.** attended a General Internal Medicine Faculty Development Meeting in December, that was organized by the General Internal Medicine Generalist Education Leadership Group. Currently, they are putting together a program for faculty development geared toward contributing and core faculty, both in the medical school and in the community.

The community physicians play a very important role in the education of the internal medicine residents and medical students. We are returning to our roots with this approach to medical education. The history of medical education is largely that of an apprenticeship in community settings. Many community-based physicians find teaching rewarding, both in a professional and personal manner. In the medical climate that now exists, motivation appears to be largely intrinsic. Community physicians report that teaching helps develop them professionally, and often returns a more dynamic, stimulating environment to their workplace. It establishes a legacy that physicians value.

The program is open to any physician that is interested. It will be held on July 19, 2000. The topics that will be covered, both by speakers and individual workshops are: teacher/student communication, self-directed learning, evidence-based medicine, giving feedback/evaluation, and establishing a learning environment.

Hematology/Oncology

submitted by **Joanne Derby, M.D.**

Star Trial

James Mailliard, M.D., Professor of Medicine, is participating in the Star Trial. This trial is designed to study reducing risk of occurrence of breast cancer in post-menopausal women who are at increased risk of developing the disease.

It is estimated that approximately 22,000 women over the age of 35 will take part in this trial. Each woman will be randomly assigned to receive either tamoxifen or raloxifene. The study will also be double-blinded. Tamoxifen has already been shown to be effective in reducing the incidence of invasive breast cancer in women who are high risk for developing breast cancer. This study's hypothesis is that since raloxifene is chemically similar to tamoxifen, it too could reduce breast cancer incidence. Currently, raloxifene is used for prevention of osteoporosis.

Infectious Diseases

submitted by **Marvin Bittner, M.D.**

ASSOCIATE PROFESSOR OF MEDICAL MICROBIOLOGY and
IMMUNOLOGY, and of MEDICINE

Governor for Nebraska

Infectious Diseases section chief **Laurel Preheim M.D.**, Professor of Medical Microbiology and Immunology, and Professor of Medicine, was inaugurated as American College of Physicians-American Society for Internal Medicine Governor for Nebraska at the ACP-ASIM Annual Session on April 15 in Philadelphia.

IRB news

Infectious Diseases specialist **David L. Dworzack M.D.** serves as chair of Creighton's Institutional Review Board. The IRB culminated a revision of its policies and procedures, including the issues of genetic research, in cyberspace at <http://www.creighton.edu/Grants/>.

Expanding your horizons

Martha Gentry-Nielsen, Ph.D., Associate Professor of Medical Microbiology and of Medicine, presented a workshop March 10 on "Expanding Your Horizons." The goal was to keep girls in Grades 7-9 interested in science. This was the third consecutive year that Dr. Gentry-Nielsen had been asked to present this workshop. She was also invited to talk on Women in Science for high school students.

Professional activities

Marvin Bittner M.D. was chosen by the Metro Omaha Medical Society to be an alternate delegate to the Nebraska Medical Association House of Delegates. Dr. Bittner presented research results at two national meetings in March. he gave a slide presentation on "The impact on handwashing frequency, of nursing workload and the winter season in an adult intensive care unit" at the 4th Decennial Conference on Nosocomial and Healthcare-Associated Infections in Atlanta.

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Division News

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He also presented data on "Time spent by interns with hospitalized patients: Association with physician characteristics, patient length of stay, and patient satisfaction" at the 18th Annual Meeting of the VA's Health Services Research & Development Service in Washington D.C.

Editors note

The new feature column in this edition, **Pillars, Past and Present**, will highlight a faculty member's thoughts on a variety of topics. We want to thank **Dr. Marvin Bittner** for agreeing to develop this addition to **CREIGHTON MEDICINE**. — **Syed Mohiuddin, Editor**.

Pulmonary

submitted by **Teri Bowman, M.D.**

Professional activities

J. Clayton Campbell, M.D., Program Director of the Pulmonary-Critical Care Fellowship Program, was an invited speaker at the recent Clinical Update in Internal Medicine meeting. He spoke on "Tuberculosis 2000 and Beyond."

Naresh Dewan, Ph.D., was an invited speaker at the First Central American ACCP Pulmonary and Critical Care Conference at San Pedro Sula, Honduras. His topics were asthma pathogenesis, community acquired pneumonia management update, and sleep apnea. Dr. Dewan also made a poster presentation in February on "Outcome factors in Acute Exacerbation of COPD" in Monte Carlo.

Walter O'Donohue, M.D. is revising his CPT coding textbook. He spoke on CPT coding at the National Association of Medical Directors meeting in March 2000, and is an invited speaker on CPT coding at a post-graduate course for the American College of Chest Physicians in October 2000, and two pulmonary board review courses in June and July 2000 at Anaheim and Pittsburgh, respectively, for the ACCP.

Editor's Note

One of the members of our Editorial Board, **Teri Bowman, M.D.**, has resigned her position in the Pulmonary Division to pursue other opportunities at the University of Nebraska Medical Center. We would like to extend our appreciation to Dr. Bowman for her contributions to the **CREIGHTON MEDICINE** newsletter and we wish her every success in her new endeavor. — **Syed Mohiuddin, M.D., Editor**.

CREIGHTON MEDICINE Editorial Board

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...Meeting the Challenge of Increased Lung Disease

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Fellowship Director at Creighton University. His excellence in teaching has also been appreciated by the senior medical students who have nominated him for the Golden Apple at least eight times.

Not only is **Walter J. O'Donohue, Jr., M.D.**, the Chief of the Pulmonary-Critical Care Division and Associate Dean of Graduate Medical Education, he is also the Medical Director of the Intensive Care Unit, Respiratory Therapy Service, and Pulmonary Rehabilitation. The Pulmonary Rehabilitation Program of St. Joseph Hospital/Creighton University Medical Center is the only one of its kind that is totally dedicated to the rehabilitation, teaching, and care of patients with pulmonary disorders. This program has been cited as one of the premier programs in Omaha. Pulmonary rehabilitation is a multidisciplinary program designed to enhance and restore optimal pulmonary function in areas of exercise, dietary teaching, occupational therapy, respiratory education, and interactive support from other pulmonary patients and their families. The pulmonary rehabilitation program has received tremendous response since opening in 1986 with a current extended referral base that includes Blair, Nebraska and Griswold, Iowa.

Naresh A. Dewan, M.D., Associate Professor of Medicine, has been attacking pulmonary disease as Chief of the Pulmonary Section at the Omaha VA Medical Center in addition to his work at Creighton University. Our veterans have a significant incidence of COPD and pulmonary neoplasms, that may have fueled Dr. Dewan's passion for working on outcomes in acute exacerbation of COPD, pharmaco-economic evaluation of COPD, and his work in two lung cancer projects.

The Pulmonary Division, in cooperation with **Thomas Casale, M.D.**, Professor of Allergy/Immunology and Assistant Chair of Medicine for Clinical Research, will embark on a new venture with his vision of a multidisciplinary approach to airway disease. Due to our collective concern over the rising morbidity and mortality of obstructive pulmonary diseases, clinical research and patient management in the form of a multidisciplinary approach is the wave of the future. There are plans in progress for a new airway center at Creighton for a more comprehensive program that will include both adult and pediatric pulmonary disease patients. The hope is to not only improve outcomes of patients with lung diseases from a multifaceted approach, and also result in lower overall health care costs.

The Pulmonary Division is actively involved in making a positive difference to help resolve the continually rising lung disease morbidity and mortality through diagnosis, education, rehabilitation, treatment, teamwork among other disciplines and clinical research.

...Asthma and Allergies

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Grasses have released their pollen during April, May and June, to be followed by weeds in July, August, September, with ragweed appearing in mid-August. Symptoms of seasonal allergy are similar to those of upper respiratory viral infections and/or sinusitis. In addition, people with allergies seem more likely than others to develop sinusitis.

Treatment of allergic disease involves: (a) avoidance, whenever possible, of the allergens that contribute to the patient's symptoms; (b) medications to deal with the manifestations of allergic disease; and finally (c) immunotherapy to develop the patient's capacity to tolerate allergen exposure. Successful avoidance rests upon accurate diagnosis and identification of the specific allergens that trigger symptoms. This process involves a careful medical and allergy history, physical examination and laboratory tests (e.g., allergy skin tests and breathing tests).

New Medications

Newer antihistamines such as Allegra, Claritin and Zyrtec are non-sedating anti-allergic medications with favorable safety profiles. For asthma and allergic rhinitis, leukotriene receptor antagonists and leukotriene synthesis inhibitors, such as Accolate, Singulair, and Zileutin are now available. Also, more effective topical corticosteroids, given by inhalation, are now available for both upper and lower respiratory allergies.

The Creighton Center for Allergy, Asthma and Immunology is now studying the combination of a leukotriene receptor antagonist and an antihistamine for treating both allergic rhinitis and asthma. Another new medication being studied is Desloratadine, a metabolite of Claritin that has an anti-inflammatory effect. Creighton scientists recently observed that Desloratadine attenuates the chemotaxis, adhesion, and degranulation of eosinophils. Tissue and blood eosinophilia is a hallmark of bronchial asthma.

Anti-IgE

Anti-IgE is a monoclonal antibody that binds with IgE in the serum and prevents its attachment to mast cells and basophils. Minutes after it is given, anti-IgE can bring the high levels of circulating Ig-E in an allergic subject down to those found in persons without allergic disease. In studies carried out at Creighton and elsewhere, anti-IgE appears to be effective for treating asthma and allergic rhinitis, both seasonal and perennial.

In Phase III studies reported at the recent meeting of the American Academy of Allergy, Asthma and Immunology, asthmatics treated with anti-IgE had fewer serious exacerbations of their disease; at the same time, many could be completely withdrawn from inhaled corticosteroids. Safety and efficacy for anti-IgE are now undergoing FDA review.



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