CREIGHTON
MEDICINE

CREIGHTON UNIVERSITY ✦ DEPARTMENT OF MEDICINE ✦ SEPTEMBER 2001 ✦ VOL. II, NO. 2

Corticosteroid-Induced Osteoporosis

by **Jay Kenik, M.D.**
ASSOCIATE PROFESSOR OF MEDICINE


Jay Kenik, M.D.

Osteoporosis is a systemic skeletal disease characterized by low bone mass and micro-architectural deterioration of bone tissue. Corticosteroid induced osteoporosis has become the most common form of secondary osteoporosis in the United States and in the world. This is as a result of the wide use of corticosteroids for a number of different clinical conditions and their much more liberal use today in Rheumatology.

This condition, unlike primary osteoporosis which predelects for the elderly and is affected by gender and race, affects both men and women of any age and racial group. Up to 50% of patients on chronic corticosteroid therapy in doses once considered very low, have been shown to sustain fractures.

Corticosteroids have a number of different adverse effects on the normal health and physiology of bone. Corticosteroids have been shown to suppress the main bone-forming cell, known as the osteoblast, shortening both its life and decreasing its function. They also decrease absorption of calcium from the gut and increase excretion through the kidney. Corticosteroids have been shown to decrease the effect of estrogen on bone and decrease production of the male hormone testosterone.

All of these effects result in excess resorption of bone as compared to formation leading to osteoporosis. While this is a dose-related phenomenon, it is clear that there is no safe dose. Minute absorption from inhaled corticosteroids has been shown to have suppressive effects on biochemical markers of bone formation, while increasing markers of bone resorption.

Diagnosis of Corticosteroid-Induced Osteoporosis

Diagnostically, a number of biochemical assessments can be done documenting the adverse effects of steroids on bone turnover. We do not feel these tests are practical. At the time of initiation of steroids, a baseline bone mineral density (DEXA scan) is routinely ordered on all of our patients going on long-term use. This scan is often repeated at two-year intervals. This test provides a reliable measure of bone mineral density predicting future risk of fracture as a result of osteoporosis. Medicare and most insurance carriers will cover the relatively low cost of this procedure on patients using corticosteroids.

Management of Corticosteroid Osteoporosis

Goals of treatment include reducing fracture risk, maintaining current bone mineral density, as well as maintaining or even increasing muscular strength. Obviously, keeping the dosage of corticosteroids at the lowest effective level is the first priority. While alternate day corticosteroids may preserve pituitary-adrenal function, they do not prevent further bone loss.

Muscle strengthening exercises may help to maintain bone mass. We also recommend eliminating alcohol intake, no smoking, and maintaining an optimal diet.

While calcium and vitamin D alone are not enough, their supplementation remains very important. Eight hundred units of vitamin D along with 1500mg of additional calcium per day is our standard recommendation, regardless of the baseline bone mineral density. A 1000 unit vitamin D tablet is available over the counter in certain local pharmacies.

Pharmacological Treatment of Corticosteroid Osteoporosis

Hormone replacement therapy and the bisphosphonates (alendronate and risedronate) have been clearly shown to maintain bone mass in patients initiating corticosteroid therapy. Steroid-related bone loss should not be an issue, if the drugs are started when steroids are started.

It should be emphasized that the most significant adverse effects occur within the first six months of steroid use. It is therefore of paramount importance that preventive therapy be initiated early to retain the most protective effects. For those women not on estrogen and male patients, we routinely begin alendronate 70mg per week or risedronate 5mg per day.

continued on page 5

2 | *From the Chair*
Clinical Trials Office

3 | *Pillars, Past and Present*
Division News

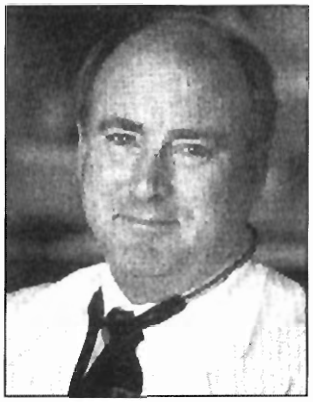
4 | *A Physician-Scientist Looks at Osteoporosis*

5 | *Residency Program News*

6–7 | *Division News*

8 | *Faculty and Service Awards*

From the Chair


Eugene Rich, M.D.

As we begin the new academic year, it seems appropriate to recognize the many accomplishments of our faculty during the past 12 months. To this end we have inserted an "Awards" section in our newsletter again this year. Please take a moment to peruse this feature, on page 8, honoring some of our exemplary Creighton Medicine faculty.

There is another group of Medicine physicians who are critical to Creighton's success and who have often gone unrecognized, our Contributed Service faculty. Each year over 70 physicians in Nebraska and Iowa aid our Creighton Medicine students, residents, and fellows as officially appointed "Contributed Services" faculty.

These individuals provide invaluable services to the clinical education of future physicians. Contributed Service faculty efforts include classroom teaching as lecturers, case conference discussants, Journal Club presenters, and small group leaders, as well as bedside instruction in the clinics, on the wards, and in private practice offices. For their effort, these Creighton faculty typically receive no reward other than the joy of imparting their knowledge to future physicians, and the satisfaction of contributing to Creighton's mission.

Over the past two years we have initiated a process whereby we especially honor a few Contributed Service faculty at the Annual Medicine Residents Graduation Banquet. This year, the Department of Medicine leadership chose to honor **Dr. Tom Connolly** with a Special Lifetime Achievement award, for his superlative, long-lasting efforts as a Creighton Contributed Service faculty member in Internal Medicine. **Dr. Greg Ochuba** received the Medicine Contributed Services award for excellence in student education, and **Dr. P.J. Connor** received the Medicine Contributed Services award for excellence in resident education.

I'd like to take this opportunity to extend our heartfelt thanks to our entire Contributed Services faculty for volunteering their time and talents to enhancing the education of our Creighton students. I want to especially thank Drs. Connolly, Ochuba and Connor for their exemplary efforts!

Eugene Rich, M.D.
Tenet Professor and Chair
Department of Medicine
Director, Center for Practice Improvement
and Outcomes Research

Clinical Trials Office

by **Thomas Casale, M.D.**
PROFESSOR OF MEDICINE

The Clinical Trials Office (CTO) is a new service of Creighton University. The goal of CTO is to enhance the ability of individual investigators and the University as a whole to obtain clinical trials. Ultimately, this should provide the community with new therapeutic options for a variety of diseases.

Under the direction of Thomas B. Casale, M.D., the CTO is structured to provide a matrix of services including: procurement of clinical trials for Creighton University, contract negotiations, budget assistance, IRB support, investigator and coordinator training, centralized study coordinator services, participant recruitment assistance, performance review, protocol design review, case report and source document design, centralized data management/biostatistics, and facilitate community and patient participation in clinical trials.

The construction of an inpatient facility for the conduct of phase 1 and more intensive clinical trials is currently under way.

The CTO personnel are as follows: **Rosemary Batts** (Grants Administrator), **Barb Dineen** (Administrative Assistant), **F. Tony Romero, M.S.**, (Research Coordinator), **Jonathan Clasemann** (Regulatory Documents Coordinator), and **Sharon Kochanowicz, R.N.**, (Research Nurse Coordinator).

Clinical trials outside the Department of Medicine

Adolescent outpatients with social anxiety disorder. For more information, please contact **Sashi Bhatia, M.D.**, Associate Professor of Psychiatry and of Pediatrics, Principal Investigator, or Study Coordinators: **Davin Dickerson, R.N.** (402-449-7100) and **Sharon Kochanowicz, R.N.** (402-280-5972).

Treatment of community-acquired pneumonia of suspected pneumococcal origin in countries with a high prevalence of drug-resistant respiratory pathogens. For more information, please contact **Mark Goodman, M.D.**, Assistant Professor of Family Practice, Principal Investigator, or Study Coordinators: **Penny Fredrick, R.N.** (402-280-5562) and **Sharon Kochanowicz, R.N.** (402-280-5972).

CREIGHTON MEDICINE is published three times a year by the Creighton University Department of Medicine. Address all mail to Larry Maxwell, 3006 Webster Street, Omaha, NE 68131-2044 or EMAIL: *lmaxwel@cardiac.creighton.edu*

Pillars, Past and Present

J. Dan Egan, M.D., Professor of Medicine, Nephrology Section, VA Medical Center.

Dr. Egan graduated from the University of Buffalo School of Medicine in 1949. After serving a Rotating Internship in Boston from 1950-51, he completed his Internal Medicine Residency training at the VA Medical Center in Buffalo from 1950-54. He also served in the United States Navy and Marine Corps from 1951-53.

Why did you come to Creighton? A long story; I came to Creighton initially after my Residency and two years service in the U.S. Marines in Korea. I stayed from 1954 to almost 1959, and then tried to go home again (back East). I returned in 1962 after a recruiting visit by Dr. Robert Heaney, who incidentally put Creighton together again after mass resignations of faculty and medical residents as a result of a town and gown squabble. Doctor J. Sullivan and I recruited the first residents and re-started the Medical Residency Program.

Who were your most influential teachers? I've had many. A botany and a history professor in college. Both took a personal interest in my future, with their guidance and stimulation.

Does Creighton have anything unique to offer? Yes, I believe it does. We are a small school—the students and residents have more exposure to faculty, especially at the bedside. This enhances clinical skills and allows the faculty to be role models in clinical problem solving and compassionate care.

What are your greatest regrets? Oh, I have many and even more failures. I especially regret not thanking my parents and my wife enough and those teachers who gave me guidance, stimulation and example. Perhaps I could not thank them enough.

Your favorite trip? To Rome on our 50th wedding anniversary.

What will medicine be like in the future? I don't know, but pressures on physicians are growing, both from government and corporate sources. We must hold fast to our heritage of altruism and the pursuit of excellence to sustain us. I'm afraid we must be politically vigilant yet responsible—neither arrogant nor selfish-in what we advocate.

What do you do to relax? Hike or jog daily, read history, especially biographies (A. Lincoln, W. Wilson recently) and read the ball scores before bedtime to forget all my problems.

Division News

Allergy

submitted by **Thomas Casale, M.D.** and **M. Janet Barger-Lux, M.S.**

New leadership

Robert Townley, M.D., Professor of Medicine, was honored at a July 27 reception that marked the end of his long tenure as Chief of the Division of Allergy and Immunology at Creighton University. He served in that position since 1969. Dr. Casale has been named successor, effective July 1.

Professional activities

At the Third Triennial World Asthma Meeting (WAM) held in July in Chicago, Dr. Casale discussed effects of monoclonal anti-IgE in asthma at a dinner symposium, *IgE-Bench to Bedside.*

Clinical Trials

In recent years, the importance of inflammation has become apparent in the pathogenesis of allergic disorders. Allergic inflammation is characterized by increased numbers of activated T-helper lymphocytes, eosinophils, and mast cells, which comprise what is termed a Th-2 paradigm. Thus, strategies to treat allergic inflammation include those aimed at shifting the inflammatory profile from Th-2 to Th-1, thereby promoting a "non-allergic state."

The Division will soon begin studies aimed at decreasing inflammation and the Th-2 pattern. This work will examine treatment of allergic asthma by use of monoclonal antibodies to IgE, a critical molecule in allergic disease. Three different antibodies will be studied: (1) an anti-IgE antibody that depletes IgE from the circulation; (2) an anti-CD23 antibody that decreases IgE synthesis and allergic inflammation in general; and (3) an antibody against IL-4, which is critical for the induction of Th-2-like responses, including the production of IgE. We will evaluate the effects of these novel treatments on symptoms of asthma, as well as the pathogenic and physiologic changes characteristic of allergic asthma. Physicians, who wish to learn more about these studies, including entry criteria for subjects, should contact the Center for Allergy, Asthma & Immunology at 402-280-5975.

Cardiology

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

Our anniversary

The Cardiac Center of Creighton University marked its 40th anniversary on July 1, 2001. **Richard Booth, M.D.** and **Vincent Runco, M.D.** came to Omaha from Ohio State University, to establish the region's first cardiac center.

The Cardiac Center is planning several activities to observe this anniversary throughout the year. As details become available, they will be reported in this newsletter.

Clinical Trials

Five studies currently underway at The Cardiac Center include:

CAMELOT – Patients with documented coronary artery disease who have undergone recent diagnostic catheterization or percutaneous intervention are being enrolled to evaluate the use of amlodipine in preventing clinical events. For more information, please contact **Michael Del Core, M.D.**, Assistant Professor of Medicine, and Principal Investigator, or Study Coordinators, **Nancy Hilleman, R.N.** and **Lois Rasmussen, R.N.** at 402-280-4566.

continued on page 6

A Physician-Scientist Looks at Osteoporosis

by **Robert R. Recker, M.D.**
PROFESSOR OF MEDICINE AND CLINICAL PROFESSOR OF PERIODONTICS, AND
M. Janet Barger-Lux, M.S.
SENIOR RESEARCH ASSOCIATE IN MEDICINE


Robert R. Recker, M.D.


M. Janet Barger-Lux, M.S.

The osteoporotic skeleton is underweight, with thin cortices accounting for much of the bone mass deficit. Bone quality is also impaired, with defects that include unrepaired fatigue damage and disruption of trabeculae. As the skeleton becomes more and more fragile, less and less force is required to produce fracture. Osteoporosis leads to nothing less than structural failure of the human skeleton.

Fractures among adults. In the US, the incidence of distal forearm fractures increases steadily among white women from age 40 to 65, and then levels off. Among men, the incidence is fairly constant from age 20 to 80.

Overwhelming trauma and local pathology account for only a minority of hip fractures (10% and 1%, respectively). The remaining 89% typically involve an older person with osteoporosis who falls from no greater than standing height.

Wedge and crush deformities of the vertebrae do not necessarily occur as distinct events after which the victim seeks medical care. However, persons with fragile vertebrae can suffer repeated injuries in the course of ordinary activities, and the cumulative effects can be devastating. Persons with at least one vertebral deformity have 7-10 times the risk of another vertebral fracture event than do those without, and the risk of a second hip fracture is similarly increased. In fact, the greatest risk factor for osteoporotic fracture is having sustained a previous fracture of the same type.

The fractures that are characteristic of osteoporosis are termed "low-trauma" or "fragility" fractures. However, even in high-force situations, persons with fragile skeletons suffer fractures with greater frequency than do those whose skeletons are strong.

Bone mass. Osteoporosis probably develops through a varied mixture of inherited and environmental causes. Bone mass, usually as bone mineral density, or BMD, accounts for much, but not all (i.e., 75-90 percent) of the variance in bone strength. Bone mass is conveniently measured by dual-energy x-ray absorptiometry (DXA), which delivers small doses of radiation to measure BMD and bone mineral content, or BMC, at sites of interest at the proximal femur, distal forearm, and lumbar spine. A rapid DXA scan of the entire body measures total-body BMC in grams and body composition. The inverse relationship between bone mass and fracture risk is a continuous one. Each standard deviation decrement in BMD is associated with a 1.5 to 3-fold increase in risk of fracture.

Assessment and follow-up. About 70 percent of fractures that occur among patients aged 45 and over involve underlying osteoporosis. Unfortunately the diagnosis is often missed, and many patients are never offered the treatment that could well have prevented their next fracture. The Table below connects items in assessment of patients with putative causes of osteoporosis.

In cases of secondary osteoporosis, it is not unusual to find that the primary condition has not been previously identified. However most patients with secondary osteoporosis have been treated with corticosteroids, anticonvulsants, antimetabolites, or any of a long list of other drugs, or who have developed osteoporosis as an unfortunate side effect of long survival with another chronic health problem.

In younger patients (i.e., under age 45), osteoporosis is an unlikely contributor to non-spine fractures; however spine fractures in this age group suggest possible osteoporosis, particularly secondary osteoporosis. As already noted, underlying osteoporosis is likely when fractures (spine or non-spine) occur in patients age 45 and older. Evaluation for osteoporosis should include a thorough health history, laboratory work, and hip BMD by DXA. If findings suggest osteoporosis, either primary or secondary, we recommend referral for confirmation, development of a treatment plan, and follow-up. Other fracture patients should receive information about osteoporosis prevention.

Approaches to treatment. Of the patients who visit the osteoporosis clinic, some can be evaluated, informed about effective approaches to prevention, and reassured. Others will be found to have low bone mass or occult osteoporosis. Nearly all these patients can benefit from efforts to (a) improve nutritional status, (b) maintain or increase bone strength, and (c) prevent future fractures. Patients with active complaints commonly have spine fractures with acute or chronic pain, appendicular stress fractures, and/or secondary osteoporosis. When established osteoporosis (e.g., osteoporosis with at least one fracture) is present, two additional goals are essential, namely to (d) relieve pain and discomfort, and (e) restore function and mobility. In selected patients, the stability and shape of vertebrae damaged by wedge and crush fractures can be restored by use of new surgical techniques, vertebroplasty and kyphoplasty, that are now offered at Saint Joseph Hospital.

The antiresorptive agents (e.g., estrogen, selective estrogen receptor modulators or SERMs, and bisphosphonates) used to prevent and/or treat osteoporosis, require adequate supplies of calcium and vitamin D. Persons who habitually avoid calcium-rich foods have calcium intakes that average only 300-500 mg/d, in contrast to the 1000-1500 mg/d that are recommended for adults and used in virtually every treatment regimen. Reference values for serum 25-hydroxyvitamin D, useful to evaluate vitamin D status, frequently identify as "low" only the dramatically deficient levels characteristic of osteomalacia. However scientists in the bone field now believe that the lower limit for optimum 25-hydroxyvitamin D is about 32 ng/mL (8We can recommend two authoritative online sources of authoritative information.

- The statement of the March 2000, NIH consensus conference on *Osteoporosis Prevention, Diagnosis, and Therapy* is available online at consensus.nih.gov.

continued on page 5

A Physician-Scientist Looks at Osteoporosis

continued from page 4

- The National Osteoporosis Foundation maintains its *Physician's Guide to Prevention and Treatment of Osteoporosis* at www.nof.org.

Both reflect the best current thinking of the physician-scientists who work in this field.

The table for this article was adapted from: Recker, R.R., and Barger-Lux, M.J. Osteoporosis: etiology, diagnosis and treatment. In: Goldberg, V.M., and Johnstone, B., eds., Orthopaedics. London, Mosby, 2001.

Table of Patient Assessment and Causal Factors

Patient Assessment	Casual Factors								
Osteoporosis is necessarily a diagnosis of exclusion. However the items below suggest the putative causes of osteoporosis and osteoporosis-related fractures that are listed on the right. Occurrences need not be recent to be significant.	Established osteoporosis	Hereditary influences	Inadequate body weight	Poor nutrition	Hypovitaminosis D	Inadequate skeletal loading	Deleterious effects on bone	Hypogonadism	High likelihood of falling
Any fracture after age 45, especially if low-trauma	X								
Height loss of an inch or more since midlife	X								
Development of posture changes characteristic of osteoporosis	X								
Osteoporosis, height loss, or fractures in relatives		X							
Persistent underweight (i.e., BMI less than 20)			X						
Anorexia nervosa or female athlete triad				X				X	
Any malabsorption syndrome or long-term GI complaint				X					
Long-term avoidance of calcium-rich foods				X					
Avoidance of (or lack of opportunity for) sun exposure					X				
Extended periods of bed rest						X			
Avoidance of (or incapacity for) exercise or physical work						X			
Treatment with corticosteroids, anticonvulsants, or antimetabolites							X		
Cigarette smoking or heavy alcohol comsumption							X		
Treatment with thyroid hormone without yearly monitoring							X		
Hyperparathyroidism without periodic monitoring of bone mass							X		
Treatment with radiation therapy							X		
Late menarche or extended oligomenorrhea or amenorrhea								X	
Menopause or oophorectomy without estrogen replacement								X	
Thinning of beard or body hair (men)								X	
Frequent falls or current falling hazards in the home									X
Impairment of vision, balance, mobility, or level of consciousness									X

Corticosteroid-Induced Osteoporosis

continued from page 1

The current American College of Rheumatology guidelines have established a bone mineral density T-score of -1 or less as the criterion for those who need prophylactic therapy to prevent corticosteroid-induced osteoporosis. Some investigators and clinicians advocate use of prophylactic pharmacological therapy in everyone going on long-term steroids. This is the Rheumatology Division's current approach for those patients going on immunosuppressant doses (greater than 20mg per day). Our Endocrinology Division's policy is even more aggressive in terms of prophylactic therapy, treating essentially all patients going on long-term therapy.

With the wider use of steroids in clinical practice, we now have the ability to obviate the most significant side effect profile of these agents. Steroid-related bone damage is a preventable problem.

Clinical trials

Assessing the safety and efficacy of 2 doses of COX 189 (200mg and 400mg qd) in patients with primary knee osteoarthritis using celecoxib (200mg qd) as a comparator. For more information, please contact **John Hurley, M.D.**, Associate Professor of Medicine, Principal Investigator, or **Sharon Kochanowicz, R.N.**, Study Coordinator, at 402-280-5972.

Residency Program News

Residents and Fellows Departing 6/30/2001

– Third Year Residents –

Demitri Adarmes, M.D. . . . . *Private Practice, Sonora, CA*

Charmaine Ansari, M.D. . . . . *Chief Resident, Department of Medicine, Creighton University*

James Bowers, M.D. . . *Chief Resident, Department of Medicine, Creighton University*

Devin Fox, M.D. . . . . *Chief Resident, Department of Medicine, Creighton University*

Loreli Oka, M.D. . . . . *Gastroenterology Fellowship, University of Iowa*

Arman Pajnigar, M.D. . . . . *Midwest Minor Medical, Omaha*

Susan Schuckert, M.D. . . . . *Private Practice, Internal Medicine Associates, North Platte, NE*

Joseph Tuma, M.D . . . *Chief Resident, Department of Medicine, Creighton University*

Himachal Veligandla, M.D. . . . . *Cardiology Fellowship, Creighton University*

– Medicine/Pediatrics Residents –

Pauline Bridgeman, M.D. . . . . *Infectious Diseases Fellowship, Pennsylvania State University*

Timothy Goggins, M.D. . . . . *Hematology/Oncology Fellowship, Duke University*

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

Division News

continued from page 3

BENECOL – Patients with current lipid- lowering statin therapy with LDL values > 10% above current NCEP guidelines are being enrolled to evaluate Benecol as additive therapy. For more information, please contact **Roger Riedel, M.D.**, Cardiology Fellow, and Principal Investigator, or **Lois Rasmussen, R.N.**, Study Coordinator, at 402-280-4566.

SPORTIF – Patients with atrial fibrillation and on warfarin therapy are being evaluated for a new anticoagulant. For more information, please contact **Amy Arouni, M.D.**, Assistant Professor of Medicine, and Principal Investigator, or Study Coordinators, **Eddy Butkus, R.N.** and **Lois Rasmussen, R.N.**, at 402-280-4566.

Telemanagement of CHF Patients – This study will follow rural congestive heart failure patients with a telemanagement system. For more information, please contact **Aryan Mooss, M.D.**, Professor of Medicine, and Principal Investigator, or Study Coordinators, **Richard Wurdeman, Pharm.D.** and **Katie Packard, Pharm.D.** at 402-280-4566.

Smoking Cessation – Active smokers, who have been recently hospitalized for myocardial infarction or coronary bypass surgery, will be enrolled in this study comparing intensive relapse prevention smoking cessation versus brief intervention treatment. For more information please contact **Syed Mohiuddin, M.D.**, Principal Investigator, **Daniel Hilleman, Pharm.D.**, Sub-Investigator, or **Tim Grollmes, M.P.A.**, Health Education Coordinator, at 402-280-4566.

Dermatology

by **Christopher Huerter, M.D.**

ASSOCIATE PROFESSOR OF DERMATOLOGY AND CHIEF OF THE DIVISION OF DERMATOLOGY

The rapid expansion of our understanding of immunology is yielding valuable dividends in dermatology. New medications that alter the immune response have tremendous potential in the treatment of chronic inflammatory disorders. These drugs are being developed in forms for intravenous, intramuscular subcutaneous, oral, and topical administration.

One of the products that have reached the market is Protopic (tacrolimus) ointment, which is FDA-approved for the treatment of atopic eczema. This topical immunomodulator is very effective in reducing the itch and rash associated with this condition. Because it is non-steroidal, the side effect profile is much more favorable than that of cortisone-type drugs.

The Dermatology Division will be involved in four separate clinical trials in the near future. We will enroll adult patients with **psoriasis, atopic eczema,** and **actinic keratosis.** We will also collaborate with Pediatrics to conduct a trial of topical treatment of atopic eczema in young patients.

The psoriasis study will involve ISATX247, with a mechanism of action similar to that of cyclosporine, but without its risk of renal toxicity. If it proves effective, ISATX247 could become an important therapeutic option for treating psoriasis. For more information, please contact **Dr. Huerter**, Principal Investigator, or **Lori Mahon, R.N.**, Study Coordinator, at 402-280-5968.

The study of actinic keratosis will involve the use of Aldara (imiquimod) cream, which may help to destroy precancerous skin cells by inducing a cytotoxic T-lymphocyte immune response. For more information, please contact **Dr. Huerter**, Principal Investigator, or **Tony Romero**, Study Coordinator, at 402-280-5960.

The study of the efficacy and safety of ASM 981 (pimecrolimus) Cream 1% BID vs. standard of care management of mild to severe atopic dermatitis in adults. For more information, please contact **Dr. Casale**, Principal Investigator, or **Jean Kessler, R.N.**, Study Coordinator, at 402-280-5965.

The study of the efficacy and safety of Elidel (pimecrolimus) Cream, 1% in young patients with atopic dermatitis. For more information, please contact **Russell Hopp, D.O.**, Professor of Pediatrics and of Medicine, Principal Investigator, or **Susan Yordt, R.N.**, Study Coordinator at 402-280-5961.

Endocrinology

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

Professional meeting

Participation by Creighton faculty at the 2001 meeting of the American Society for Bone and Mineral Research, to be held October 12-16 in Phoenix, will include a number of posters and five oral presentations. In the latter, **Robert P. Heaney, M.D.**, Professor of Medicine, will outline dose response relationships for vitamin D; **Dr. Robert Recker** will describe effects of alendronate and estrogen replacement on periosteal bone formation in postmenopausal women; **Joan Lappe, Ph.D.**, Associate Professor of Nursing and of Medicine, will present a study in which exercise without sufficient calcium failed to increase the rate of bone mass accrual in pubertal girls; and **Hong Wen Deng, Ph.D.**, Assistant Professor of Medicine and of Biomedical Sciences, will describe a large-scale whole-genome search for regions that influence bone mineral density. His graduate student, **Hui Shen**, will present a study identifying genomic regions that affect bone size.

Research funded

The US Department of Defense has recommended two new projects for funding. In *Ethnic and Environmental Influences on Vitamin D Requirement of Military Personnel,* **Dr. Heaney** will continue earlier work in vitamin D pharmacology to clarify the quantitative relationships between vitamin D (via both oral dosing and solar/dermal production) and serum 25-hydroxyvitamin D among light and dark-skinned individuals.

Dr. Lappe will conduct a treatment trial, *Efficacy of Calcium and Vitamin D Supplementation for the Prevention of Stress Fractures in Female Naval Recruits,* involving 5200 female recruits undergoing basic training.

Robert J. Anderson, M.D., Professor of Medicine and of Biomedical Sciences, is author of the Adrenal Section of the 200 *ASAP Syllabus* (AACE Self Assessment Profile in Endocrinology and Metabolism).

Several Creighton scientists, including **Jack A. Yee, Ph.D.**, Professor of Biomedical Sciences, **Xinying Li, Ph.D.**, Post-Doctoral Fellow in the Department of Medicine, **Mark L. Johnson, Ph.D.**, Associate Professor of Medicine and of Biomedical Sciences, and **Dr. Anderson**, are among the authors of a report, *Thermostable (SULT1A1) and thermolabile (SULT1A3) phenol sulfotransferases in human osteosarcoma and osteoblast cells,* in a recent issue of Bone.

Gastroenterology

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

PROFESSOR OF MEDICINE, AND OF PREVENTIVE MEDICINE AND PUBLIC HEALTH

New leadership

Dr. Stephen Lanspa was appointed Associate Dean for Clinical Affairs and President of Creighton Medical Associates on May 1, 2001. With this added responsibility, Dr. Lanspa stepped down as Division Chief of Gastroenterology.

continued on page 7

Division News

continued from page 6

On July 6, 2001, **Jeremiah Donovan, M.D.**, Professor of Internal Medicine, was appointed Chief of the Gastroenterology Division.

CME

John J. Ferry, M.D., M.B.A., F.A.C.P., Associate Professor of Medicine, was the course director for the Fourth Annual "Practical Gastroenterology for Primary Care Physicians and Their Support Staff," scheduled on September 14, 2001 at the Omaha Marriott Hotel. The course featured a Colloquium on Colon Cancer, Issues in End-of-Life Care, and Electronic Medical Informatics in Practice, among other topics.

Clinical trials

The Gastroenterology Division is involved in many trials, including the following: Patients with chronic hepatitis, patients with functional dyspepsia, patients with gastroenterological reflux disorders and other GI motility disorders. If you or your patients have an interest in these trials, please contact **Shelley Donovan, R.N.**, Study Coordinator, at 402-449-4692.

General Internal Medicine

submitted by **Joann Derby, M.D.**
ASSISTANT PROFESSOR OF MEDICINE

Publications

Dr. Rich received the "Article of the Year" award from the Academy for Health Services Research and Health Policy, as co-author of "The Effects of Medical Group Practice and Physician Payment Methods on Costs of Care." In addition, the article won the National Institute of Healthcare Management Research and Educational Foundation's Seventh Annual Research Award, in the general health care category.

Sakowski H, Rich EC, Turner PD. "Web-based Case Simulations for a Primary Care Clerkship" Academic Medicine, 2001 May; 76(5):141.

Turner PD, Bramble JD, Rich EC. "Outcomes of Care in Academic Health Centers: The July Phenomenon Revisited." JAMA, (accepted 1/01)

Clinical trials

Patients with Type 2 Diabetes Mellitus who have inadequate glycemic control with diet and exercise. For more information, please contact **Anna Maio, M.D.**, Adjunct Assistant Professor of Medicine and Principal Investigator, or Study Coordinator, **Sharon Kochanowicz, R.N.**, at 402-280-5972

Grants funded

Kahn, NB (Project Director), Rich, EC (Project Co-Director), and Wilson, M. Genetics in Primary Care (GPC): A Faculty Development Initiative. Funded by the Maternal and Child Health Bureau and the Bureau of Health Professions of the Health Resources and Services Administration (HRSA) with co-funding from the National Human Genome Research Institute, National Institutes of Health, and the Agency for Health Care Policy and Research, 9/98-9/2001. Extension 9/29/02.

Hematology/Oncology

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

James Mailliard, M.D., Professor of Medicine, has been awarded a grant entitled, "Multicenter Phase III Randomized Trial for Stage IIIB or IV NSCLC Comparing Weekly Taxol (Paclitaxel) and Carboplatin (Paraplatin) Regimen Versus Standard Taxol and Carboplatin Administered Every Three Weeks Followed by Weekly Taxol," in the amount of $17,500 from Bristol-Meyers Squibb. He has also been awarded a grant entitled, "Phase III Study of Atamestane Plus Toremifene in Metastatic Breast Cancer," in the amount of $47,200 from BioMedicines, Inc.

Infectious Diseases/VA Hospital

submitted by **Marvin Bittner, M.D.**
ASSOCIATE PROFESSOR OF MEDICAL MICROBIOLOGY AND IMMUNOLOGY, AND OF MEDICINE

Educational and professional activities

Laurel Preheim, M.D., Professor of Medical Microbiology and Immunology, Professor of Medicine, and Acting Chief of the Medical Department at the VA, attended the VA's national meeting, "Camp CPRS," in Portland, Oregon, May 21-25. The VA demonstrated cutting edge applications of its Computerized Patient Record System that are in place at the Washington, DC Medical Center. These include online access to still images of x-rays and histology, as well as access to movies of cineangiography and endoscopy. Dr. Preheim spoke at Good Samaritan Hospital in Kearney on "Infectious Diseases Emergencies" in May.

Dr. Bittner attended the Conference of the International Society of Travel Medicine. The Conference included "Destination of the Day" sessions for Peru, Nepal and Kenya. Each session included discussions with a native physician and a U.S. physician who had lived in the country for several years, on topics such as travel opportunities, health risks and management strategies.

Martha Gentry-Nielsen, Ph.D., Associate Professor of Microbiology and Immunology, presented results of her research in Montreal at the June meeting of the Research Society on Alcoholism. She spoke on Smoking- and Ethanol-Induced Defects in Pneumonia Defenses. Dr. Gentry-Nielsen also spoke on Bioterrorism Preparedness at the regional meeting for infection control nurses in North Platte in June.

David Dworzack, M.D., Professor of Medical Microbiology and Immunology, and of Medicine, presented a series of conferences to Creighton faculty and staff on the conduct of research involving human subjects. He did so in his role as the Chairman of Creighton's Institutional Review Board. Some of the material reflected increased federal emphasis on compliance with regulations involving human subjects research. He also highlighted special policies adopted by Creighton consistent with its role as a Catholic institution.

Pulmonary

submitted by **Naresh Dewan, M.D.**
PROFESSOR OF MEDICINE

Clinical trials

The effect of new therapy on exercise endurance in patients with chronic obstructive pulmonary disease. For more information, please contact **Dr. Dewan**, Principal Investigator, or **Sharon Kochanowicz, R.N.**, Study Coordinator, at 402-280-5972.

Treatment of moderate to severe community-acquired acute bacterial pneumonia due to S. Pneumoniae. For more information, please contact Principal Investigators **Dr. Dewan** and **J. Clayton Campbell, M.D.**, Associate Professor of Medicine, or Study Coordinators, **Sharon Kochanowicz, R.N.** and **Tony Romero, M.S.**, at 402-280-5960.

June 2001 Faculty and Service Awards

Golden Apple/ Aesculapian Awards

Class of 2001

Faculty: **J. Clayton Campbell, M.D.** (nominee)
Robert W. Dunlay, M.D. (nominee)
James T. Frock, M.D. (winner)

Resident: **Devin Fox, M.D.** (winner)

Medicine Distinguished Professor Award

Syed M. Mohiuddin, M.D.
given by the Creighton University School of Medicine for his exemplary personal commitment to teaching, scholarship and service thereby having a major influence on the career choices of former students.

Dedicated Teacher Award

Bruce L. Houghton, M.D.
given by the Creighton University School of Medicine for his long and meritorious teaching of biomedical, behavioral, or clinical sciences thereby leaving a mark of excellence and providing students with a critical understanding of the faculty member's discipline.

Teaching Service Awards

Teaching Service

Nephrology Service
given by the residents in recognition consistent excellence in house staff education

JF Sullivan Award

Naresh Dewan, M.D.
given by the house officers for excellence and dedication to resident education

Community Service

Joseph D. Lynch, M.D.
for exemplifying the service mission of Creighton University and the medical profession through voluntary service to the human community

Contributed Services Awards

Gregory Ochuba, M.D.
for excellence in student education

Thomas Connolly, M.D.
Special Lifetime Achievement Award for superlative long-lasting efforts

P.J. Connor, M.D.
for excellence in resident education

THE CARDIAC CENTER of CREIGHTON UNIVERSITY
Quality Patient Care Through Education and Research

Attn: Larry Maxwell
3006 Webster Street • Omaha, NE 68131-2044

Non-Profit Org.
U.S. Postage
PAID
Permit No. 227
Omaha, NE