As it has done so many times in the past, the Cardiac Center of Creighton University will once again pioneer a new endeavor. Next Spring the region's “first” cardiac center will occupy the only facility dedicated to cardiovascular education, research and treatment.

Last month the University's Board of Directors approved the use of a new building to be exclusively dedicated to cardiac care. Dr. Michael Sketch, Sr., Chief of Cardiology, briefed the Cardiac Center's 200 employees about the new facility.

The site of our new home is located right across the street from Saint Joseph Hospital, at 30th and Webster Streets. Originally the building was to house Cardiac Outpatient Rehabilitation, Pediatrics and Renal Dialysis. Now the building will provide 61,000 square feet for all cardiac outpatient services, including cardiac catheterizations. The Center's research and educational pursuits will also be headquartered in this building. New programs to be conducted in the building will be announced in the coming months.

The Cardiac Center patients and their families will appreciate a parking lot for their use only. It will be located right outside the main entrance, on the west side of the building.

The Cardiac Center will continue to provide all cardiovascular services for Saint Joseph Hospital in-patients, including EKGs and Exercise Tests, Echocardiography and Electrophysiology studies. We will continue to operate the catheterization laboratory in Saint Joseph Hospital, both for diagnostic purposes and interventional treatments such as angioplasty, atherectomy, radiofrequency ablation, and valvuloplasty.
Cardiopulmonary Resuscitation Learned

AICD Patients Take CPR Class
by Tami Docken, RN
Outpatient Cardiac Rehabilitation Nurse Specialist

Fifteen participants of the AICD support group gathered Saturday, October 5th to learn CPR. They spent three hours learning techniques that may someday save someone’s life. These people were extremely motivated to learn, as their loved one is at higher risk to develop problems in the future.

Terri Fogland, RN, BSN, MA (Outpatient Cardiac Rehabilitation Nurse Specialist), Martha Monnig, RN (Outpatient Cardiac Rehabilitation & Exercise Test Lab Nurse Specialist), and I were the instructors for the class. Participants included: Roy Bellis, AICD patient; Delbert Collison, AICD patient, and his wife, Dola; Kenneth Gangestad, AICD patient, and his wife, Norma; Charles Manzer, AICD patient, and his wife, Ruth; Delvan Tye, AICD patient, and his wife, Bette; Thomas Landsperger, AICD patient, and his family; Marvin Mann, AICD patient, and his wife, Arlene; Daniel Novak, AICD patient, and his wife, Marjorie.

Heart Saver CPR Class
by Terri Fogland, RN

The Cardiac Center’s Outpatient Rehabilitation section held a “Heart Saver” class on October 24th. Tami Docken, RN, and I taught the Outpatient Cardiac Rehabilitation participants, their spouses, family or friends.

Congratulations to these 10 courageous people who took an evening to learn how to save the life of someone near and dear to them: Deb and Roger Kline, daughter and son-in-law of John Santee, Cardiac Rehabilitation participant; Jim Herbert, CR participant and his wife, Helen; Lou Brecci, CR participant and his wife, Grace; Dale Harris, CR participant; Ellen Brosnihan, CR participant and friend, Bert Vasarkovy; Chet Stefanski, CR participant and his wife, Virginia.

Cardiac Center Sets the Pace

Phyllis Behrens, RN, CCRN, BSN, (Pacemaker Clinic Supervisor) conducted a continuing studies program for the Nebraska Methodist College of Nursing on October 25th. The topic was “Cardiac Pacemakers in the 90s and Beyond.” Bonni Leiserowitz, LPN (Pacemaker Clinic Technician) also attended the program.

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David Brown, MD (Cardiology Fellow) and Syed Mohiuddin, MD co-authored an abstract that was presented at the 64th Scientific Sessions of the American Heart Association annual meeting in Anaheim, Calif. The abstract, entitled, “Evidence That Most Patients With Tamponade Are in Distress For Days Before Percardiocentesis—Is It Time To Redefine the Criteria for Performing Pericardial Drainage in Tamponade?”, was co-authored by medical staff members at Tufts-New England Medical Center, Boston.

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Eddy Butkus, RN, BSN (Cardiac Drug Evaluation Clinic Nurse Specialist) attended an investigators’ meeting for the study initiation of the following: “A Randomized Placebo-Controlled Multicenter Study of the Effects of Intermittent Therapy with Transdermal Nitroglycerin on Left Ventricular Dilation and Function in Post Acute Myocardial Infarction Patients.” The meeting was sponsored by Schering-Plough Research. It was held in Anaheim, Calif. November 8-10th.

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Dean Eckel (Cardiac Center Administrator) attended the 65th annual Conference of the Medical Group Management Association in San Antonio, Texas, October 27-30th.

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Sonya Goddard, RN (Cardiac Drug Evaluation Clinic Nurse Specialist) and Tom Hee, MD attended an investigators’ meeting to initiate a study entitled, “Double-Blind, Placebo-Controlled Study of Oral Ipazilide in Subjects with Symptomatic Paroxysmal Supraventricular Tachyrrhythmias.” The November 8-11th meeting in Marina del Ray, Calif. was sponsored by Sterling Drug, Inc.

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Cardiac Positron Emission Tomographic (PET) Imaging:
Our First Two Years

by: Dennis J. Esterbrooks, MD
Clinical Coordinator of Nuclear Cardiac Imaging

September 29th marked the two-year anniversary of the opening of the Creighton University Center for Metabolic Imaging. The first cardiac patient was studied on November 29, 1989. As of September 30, 1991, a total of 461 patients have undergone cardiac PET imaging. This comprises approximately 50% of the total patients imaged at Creighton’s Center for Metabolic Imaging.

Of the 461 patients imaged: 332 were hospitalized; 241 had resting perfusion and metabolic studies to assess myocardial viability; 16 patients underwent rest/stress perfusion studies for diagnostic purposes; rest/stress perfusion along with metabolic imaging was performed in 204 patients, to assess for myocardial viability and multivessel coronary artery disease.

The combined rest/stress perfusion and metabolic imaging is a novel protocol established by the Creighton Cardiac Center, as an extension of investigational experience with stress myocardial perfusion imaging using adenosine, a potent coronary vasodilator. The pharmacologic effects of adenosine, as well as its very short half-life, made it ideally suited for performing sequential perfusion and metabolic imaging with the short half-life radioisotopes used in cardiac PET imaging.

CARDIAC PET STUDY PROFILE

Our results with combined rest/stress perfusion and metabolic imaging have been reported at national scientific sessions and symposia. This novel approach has been well received and as a result is now used in other PET centers in the United States.

Cardiac PET imaging has significantly contributed to patient management. Decisions to manage patients medically, to perform coronary revascularization, or to proceed with transplantation have been guided by the results of cardiac PET images. In some instances, cardiac PET imaging has also been used to assess cardiac transplant rejection and to assess myocardial ischemia in children with Kawasaki’s Disease. The latter is another experience unique to the Creighton Center for Metabolic Imaging.

Reasons for cardiac PET imaging have included: suspected cardiomyopathy in 48 patients; risk stratification following acute myocardial infarction in 201 patients; documentation or exclusion of coronary artery disease in 52 patients; and assessment of viability, as well as extent and severity of coronary artery disease, in 160 patients.

Cardiac PET imaging has also been used in patients with life-threatening ventricular arrhythmias and episodes of sudden cardiovascular death, to determine to what extent myocardial ischemia was a contributing factor. Stable ambulatory outpatients, as well as severely ill patients have been studied.

The severely ill have included a number of unstable patients, including those on vasopressors, ventilators, and intra-aortic balloon pumps. In addition, patients who had Swan-Ganz catheters and temporary pacemakers in place have been studied. Despite the inclusion of high risk patients, there have been no adverse cardiovascular events while the patients were at the Center for Metabolic Imaging. This is a testimony to the skill and dedication of the personnel performing the studies and supervising these patients.

That we are a regional center for metabolic imaging is attested to by the increasing numbers of referrals from outside the Omaha metropolitan area. Seven Omaha metropolitan hospitals have referred patients. Twenty-nine patients have been referred from other Nebraska communities or surrounding states, including Colorado, Iowa, Kansas, Missouri and South Dakota.

Academic endeavors have paralleled the growth of clinical cardiac metabolic imaging. Research interests include imaging protocols, determining prognostic

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Cardiac Center Sets the Pace
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Tom Hee, MD, has been elected to Fellowship in the Council of Clinical Cardiology of the American Heart Association. He received his certificate at the American Heart Association’s annual meeting on November 12th. Other representatives of the Cardiac Center at the AHA’s annual meeting included Drs. David Brown (Cardiology Fellow), Joseph Lynch, Michael Sketch, Sr., and Mark Williams, PhD (Cardiac Outpatient Rehabilitation Co-Director).

Daniel Hilleman, PharmD (Administrative Director of Clinical Research) spoke on “Non-Steroidal Anti-Inflammatory Drug Therapy in the High Risk Patient” at a recent meeting of the Louisville, Ky. Society of Hospital Pharmacists. He also attended a recent investigators’ meeting on felodipine, sponsored by Merck, Sharpe & Dome in Denver.

Dr. Hilleman addressed the Utah Pharmaceutical Society on “Update on Thrombolytic Therapy” in Provo, Utah on November 17th. He presented “TI-201 Reinjection (RI) vs PET Viability Study for Detecting Ischemic/Viable Myocardium” at the 57th Annual Scientific Assembly of the American College of Chest Physicians in November. This work was also co-authored by Drs. Naresh Gupta, Dennis Esterbrooks, Daniel Hilleman, Mathis Frick, and Michael Sketch, Sr.

Joseph Lynch, MD has been named regional representative (for Minnesota, Nebraska, North and South Dakotas) to the Council on Clinical Cardiology of the American Heart Association.

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Syed Mohiuddin, MD presented a paper entitled, “Safety of Intravenous Adenosine Myocardial Perfusion Imaging in Acute Myocardial Infarction,” at the American College of Chest Physicians’ November meeting. Co-authors of the paper are: Drs. Naresh Gupta, Dennis Esterbrooks, Daniel Hilleman, Mathis Frick, and Michael Sketch, Sr.

Dr. Mohiuddin also made a presentation on “Valvular Heart Disease” for members of the medical staff at the Columbus, Neb. Community Hospital on November 26th.

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Aryan Mooss, MD presented an abstract, entitled “Effects of Verapamil on Post-Extrasystolic Potentiation” at the American College of Chest Physicians November meeting in San Francisco. Co-authors with Dr. Mooss are Dr. Daniel Hilleman, and Michael Sketch, Sr., and Joseph Rysavy, BA.

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Chandra Nair, MD presented a poster entitled, “Mitral Valve Replacement in Patients With Mitral Anular Calcium” at the American College of Chest Physicians’ meeting in November. Co-authors with Dr. Nair are: Drs. Paul Biddle and Alan Kaneshige, Cornelia Cook, BFA, Kay Ryschon, MS, Amelia Andersen, and Michael Sketch, Sr. Cornelia Cook, Kay Ryschon and Amelia Andersen are members of the Cardiac Center’s Biostatistical Research section.

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Julie Stading, PharmD (Cardiac Drug Evaluation Clinic Research Fellow) presented “Effect of Buspirone on Withdrawal Symptoms Associated With Smoking Cessation” at the 26th Annual Midyear Clinical Meeting of the American Society of Hospital Pharmacists in New Orleans. Co-authors of this paper are Drs. Daniel Hilleman, Syed Mohiuddin, and Michael Del Core.

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PET Imaging: Our First Two Years

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significance of abnormal cardiac images, quantitating coronary perfusion and metabolism, identifying extent and severity of ischemic and viable myocardial segments, and co-registering cardiac PET and MRI images.

Our initial experience with cardiac PET imaging has been most rewarding for patients and the medical community. We remain optimistic that there will be continued use and growth of this innovative imaging modality.

Toward this end, Dr. James Nemec, who joined the Cardiology medical staff last July, will be interpreting PET images and doing research in cardiac imaging.

We are also planning an on-site visit next Spring by David Jan Skorton, MD, Professor in the Departments of Internal Medicine, and Electrical and Computer Engineering, and

Cardiac Center Sets the Pace

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Dr. Anne Stoysich (Clinical Research Pharmacist) attended a program on “High Performance Liquid Chromatography,” sponsored by Waters Division of Millipore, in Chicago on November 18-19th.

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Mark Williams, PhD participated in the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) Annual Meeting in Long Beach, Calif. He served as Chair of the Scientific Sessions and as Moderator for a free communication session entitled, “Primary and Secondary Prevention.”

Dr. Williams also presented a paper, entitled, “The Use of Dynamic Exercise for Adenosine Thallium in the Evaluation of Coronary Artery Disease in Elderly Females.” He co-authored this paper with Tamara Docken, RN (Outpatient Cardiac Rehabilitation Nurse Specialist), Martha Monnig, RN (Outpatient Cardiac Rehabilitation & Exercise Test Lab Nurse Specialist), Dr. Daniel Hilleman, Drs. Dennis Esterbrooks, Naresh Gupta, and Syed Mohiuddin.

Dr. Williams presented another paper at the AACVPR meeting, entitled, “Extension of Phase II Exercise Training Produces Significant Benefit in the Older Elderly Participant.” He co-authored this paper with Drs. Dennis Esterbrooks and Michael Sketch, Sr.

Dr. Williams will continue to serve as Vice-President at the national level of the AACVPR. He has also been named to the editorial board of the Journal of Cardiopulmonary Rehabilitation.
Communications Center Is Vital Link

by Cathy Ashe, Supervisor

The Communications Center processes approximately 150 telephone calls daily for all areas of Cardiology, in a timely manner. We are the first contact that most people have with the Cardiac Center. We are expected to know where all employees are and at what number they can be reached. If that person (or area) is not available, we take messages and deliver them as quickly as possible.

Not all calls that come into Cardiology are handled as a “transfer call.” Some take more time than others. Listening and understanding each call is a very important part of our job.

On a given day calls such as these are handled: patients who need to make an appointment with one of our doctors; referring doctors' offices needing to schedule a new patient to see one of our Cardiologists; patients calling in with questions on billing; pharmacies who call to fill prescriptions for patient needs; physicians' calls to have our doctors paged; questions regarding medical records; insurance companies' calls to get patients precertified and/or updates on their condition; patients who call with medical emergencies.

We also cover calls and take messages for the employees in Cardiology, when they are out of their offices. Another important facet of our work here in the Communications Center is to sort out the large volume of mail received daily. Each day there are three mail pickups to be distributed to the Cardiology employees.

Effectively handling these responsibilities makes the Communications Center an important component of the Cardiac Center's successful operation.

Communications Center receptionists, Chris Mackiewicz, left, Sue Plotl, seated, and Cathy Ashe, Supervisor.

All of us at the Creighton University Cardiac Center wish you a joyous holiday season and a happy and prosperous New Year!