From the Director

Hello springtime! The UNM GCRC continued to thrive through the long, not-so-cold winter months, but the sunshine is welcome nevertheless. March came in with a bang this year, with inpatient census reaching an all-time record of 89 admits according to my own unofficial record-keeping (i.e.- my memory). The increased activity is largely attributable to a pair of ambitious junior investigators from the Department of Pediatrics, Aaron Jacobs, M.D., and Alberta Kong, M.D. The outpatient also continued at its usually busy pace as well. The DEXA body composition and bone mineral density facility is now open for business! We welcome Elizabeth Duran-Valdez to the GCRC as a part-time radiation technologist who will maintain the equipment and perform the studies. DEXA studies will be offered at a cost-share discount to investigators, with a larger discount being offered to those investigators who are performing investigator-initiated research. Investigators interested in using DEXA technology for their studies should contact Monica Thompson at 272-0195 for further information.

We also welcome Ron Sanders to the Biomedical Informatics Core as an Analyst Programmer. Mr. Sanders will be working with Lori Sloane to increase the efficiency and utility of the GCRC’s web-based services. Perhaps you have noticed the new electronic protocol application procedures? The GCRC Annual report was sent to NIH in early March thanks to the efforts of Monica Thompson, Lori Sloane, Kathy New! Interactive GCRC Application

In an effort to facilitate research, the GCRC has recently re-vamped the application paperwork. If you are considering submission of a new protocol, please visit our website, http://hsc.unm.edu/som/gcrc/ProtocolForm.shtml, or the administrative office on 5 North to pick up a new packet. The forms online are now interactive and the format has been streamlined to make the GCRC application process flow more easily with the HRRC application.

Top Investigators for 2005

The UNM GCRC would like to thank all GCRC investigators and their research subjects for an excellent year in 2005. Fifty investigators were responsible for over 7,000 research visits from 72 different protocols. Subjects spent a total of 497 days on the inpatient unit participating in research. Special thanks go to the following investigators for their outstanding commitment to clinical research:

**Most Inpatient Days:**
- David Schade, MD (92)
- Kathleen Colleran, MD (58)
- Mark Schuyler, MD (41)

**Most Adult Outpatient Clinic Visits:**
- Gregory Mertz, MD (515)
- Mark Schuyler, MD (345)
- Janice Thompson, PhD (147)

**Most Pediatric Visits:**
- Eve Espey, MD (695)
- Shawn Ralston, MD (423)
- Ronald Poland, MD (300)

**Most Pediatric Hours:**
- Robin Ohls, MD (528)
- Ronald Poland, MD (316)
- Erika Fernandez, MD (246)

Many thanks also to the Study Coordinators and Research Nurses who helped make it all possible.

Who We Are

- An essential resource for the performance of high-quality, patient-oriented research at UNM
- Part of a national network of 80 General Clinical Research Centers funded by the NCRR
- Our center provides a framework for non-industry based clinical investigation
- We support investigator-initiated research into the cause, progression, prevention, control, and cure of human disease
- We also support projects investigating normal and abnormal physiology

Got Research?

We’ve got resources!

UNM faculty, staff, and students are eligible to receive support from the GCRC for clinical research. The GCRC offers the following forms of support:

- Financial
- Inpatient Beds
- Outpatient Clinic
- Laboratory Services
- Bionutrition
- Informatics
- Nurse Practitioner
- Registered Nurses
- Pharmacist
- Biomedical Research Consultation

Call 272-2366 and begin your application process today!

http://hsc.unm.edu/gcrc

by Mark Burge, MD

by Sarah Sanders

continued page 2
On the Lighter Side

From the Director (continued from page 1)

Legoza, and others. Strong work team!

The proposal for a CTSA Planning Grant was sent to NIH on March 21. This application represented a truly institution-wide effort, and the institutional support for this endeavor has been pledged by the Vice President and the Deans of the Schools of Medicine, Nursing and Pharmacy for sums exceeding $2,000,000 over the next two years. Moreover, this institutional support does not include the provision of space and necessary renovation costs. Although we will not hear about funding of the grant until September 2006, we are going to go ahead and start CTSA implementation activities now. This will include the competitive provision of substantial pilot project awards in clinical and translational research, the development of a Master’s Degree in Clinical Research, and the competitive awarding of faculty career development awards from across the HSC to guarantee time and resources to promising young faculty members who wish to pursue a career in clinical and translational investigation.

So much is happening in and around the UNM GCRC. Our competitive renewal is due in October of 2006, and work will begin in earnest over the summer. But for now, enjoy the springtime and be thankful for the little things. Four days in Manhattan recently reminded me of why I live in and love New Mexico. I hope I see you all on the golf course someday soon!

-Mark R. Burge, M.D.
Program Director, UNM GCRC

Welcome DEXA!

The GCRC has recently acquired a GE Lunar DPX-NT dual-energy x-ray absorptiometry (DEXA) machine. The DEXA offers bone density measurements of the spine, femur, and total body. DEXA measurements are useful for research studies of osteoporosis, sports medicine, wellness programs, eating and growth disorders, and metabolic assessments.

The total body application is the fastest growing application in densitometry today. Total body assessment using DEXA provides the unique capability of non-invasive measurement of skeletal bone status, as well as lean and fat tissue components including percent fat, and lean tissue mass. Total body bone mineral density (BMD) and body composition are valuable tools in the study of many clinical disorders. DEXA measurements are useful for research studies involving weight-reduction treatment, growth hormone treatment, primary hyperparathyroidism, secondary hyperparathyroidism, anabolic steroids therapy, anorexia nervosa, Cushing’s syndrome, exercise, muscular dystrophy, malabsorptive syndromes, and cachexic disorders (such as AIDS and cancer). In addition, study of regional fat distribution is useful in relation to cardiovascular disease risk, glucose metabolism, and insulin resistance.

DEXA measurements involve a low radiation dose: spine or femur - 3.0 mrem and total body - 0.02 mrem. Selectable output can include BMD using NHANES reference data, T-score, Z-score and World Health Organization Fracture Risk Assessment. Patient trending can be examined as well. Measurements take minutes to complete. For example, a fast throughput total body scan takes as little as 8 minutes. Higher resolution scans take longer.

We are very excited that we will be able offer this new assessment tool for clinical body composition to our investigators. We hope to have a technologist to operate the machine on board soon. Remember to include DEXA in your research proposals through the GCRC.

For further information, contact Rosemary Wold, MS, RD, LD at the GCRC Bionutrition Unit (272-5501).

by Rosemary Wold

Please Don’t Forget...

A friendly reminder to GCRC investigators to remember to credit the GCRC grant in all publications:

Study supported by DHHS/PHS/NIH/NCRR/GCRC Grant# M01 RR00997”

Thank you for your attention to this important matter.
Herpes Vaccine Trial

The University of New Mexico is one of 36 study sites across the United States and 6 study sites in Canada currently enrolling patients in the Herpevac Trial for Women. The Herpevac trial is a NIH sponsored trial testing the efficacy of an investigational vaccination to prevent the acquisition of herpes simplex virus type-2 in young women. Dr. Gregory Mertz oversees the protocol at the University of New Mexico with the help of coordinator Sarah Koster, the UNM GCRC and the HOPE clinic. To date they have enrolled 105 participants and screened well over 500 young women for this valuable trial. Overall the trial has enrolled over 5000 participants and is two-thirds of the way to a final enrollment goal of 7,550 participants.

It is estimated that one out of four adult American women has been infected with herpes simplex virus type 2, the most common cause of genital herpes. Because there is no medication that eliminates the herpes virus once infection occurs, an investigational vaccine was developed with the goal of reducing transmission of genital herpes. This vaccine does not contain live virus and cannot cause herpes infection. It has passed preliminary testing for safety and effectiveness and is now in its final phase of clinical trials.

Among the 7,400 subjects in earlier studies, the vaccine was shown to decrease the risk of developing symptomatic HSV infection in women who were not previously infected with herpes simplex. For these women, the risk of contracting genital herpes and developing symptoms was reduced by about three quarters. The risk of developing antibodies to herpes (representing infection) was reduced by about 40%. Unfortunately, women who were already infected with herpes simplex virus type 1 (HSV-1), the usual cause of cold sores and of some genital herpes infections, did not benefit from the herpes vaccine in these earlier studies, and the vaccine was not effective in men. (Results were published in the New England Journal of Medicine in November 2002.)

For more information, visit the study website at: http://www.niaid.nih.gov/dmid/stds/herpevac/, or contact study coordinator, Sarah Koster at 977-4449.

GCRC Nurses Newly Trained in Motivational Interviewing

by Terri Eldridge, RN

The nursing staff is focusing efforts on incorporating the spirit of MI into the nursing practice in the GCRC, defining the therapeutic relationship as “more like a partnership or companionship than expert/recipient roles. The therapist respects the client’s autonomy and freedom of choice (and consequences) regarding his or her own behavior.” (Rollnick and Miller, 1995).

We encourage investigators to consider incorporating a Motivational Interviewing component into appropriate protocols to measure its ability to enhance protocol compliance, behavior change, or other outcome measures. Please contact Sandra McClelland, CFNP, Manger of Clinical Operations (272-2336) for more information.

GCRC Contacts

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<td>Mark Burge, MD</td>
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<td>Lu-Ann Papile, MD</td>
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<td>Sandy McClelland, CFNP</td>
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<td>Clifford Qualls, PhD</td>
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<td>David S. Schade, MD</td>
<td>Core Lab Director</td>
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<td>Tony Brazfield, MT, ASCP</td>
<td>Laboratory Manager</td>
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<tr>
<td>Bill McCurdy, BS</td>
<td>Research Technician III</td>
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<td>Nutrition</td>
<td>272-5501</td>
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<td>Rosemary Wold, RD</td>
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New Program Manager: Monica Thompson

Monica Thompson joined the GCRC in December 2005 as the Program Manager. This position was recently vacated by Selina Keryte. Monica is currently working on learning the GCRC system, SCT Banner, submitting the 2006 Annual Report and the Competing Renewal.

Monica brings a wealth of knowledge and experience to the GCRC. Monica received her Master degree in Public Administration from UNM in 2003 and completed The Joan Gibson Certificate in Healthcare Ethics in 2004. Her previous employment experiences include positions at the Human Research Review Committee, Native American Diabetes Program, and the Cancer Research and Treatment Center. Monica considers research administration, public finance and healthcare ethics to be some of her specialties.

Monica's hobbies include playing on her women’s soccer team, hanging out with her fiancé and son, reading and traveling.

Please stop by the administration office and welcome Monica to the GCRC.

Monica after a recent skydiving adventure – the GCRC will be her newest plunge!

Abstract: North Valley Water Study

**Title:** Evidence of elevated *Cryptosporidium* infections in households with onsite septic systems and private wells.

**Authors:** Kristine Tollestrup, Floyd Frost, Twila Kunde, Stephanie Jackson, Marilyn Yates

**Background:** Ground water may be subject to fecal contamination from a variety of sources, including onsite wastewater treatment (septic) systems. Most public health concerns about onsite waste disposal have focused on the migration of enteric viruses from septic systems to water supplies. However, it is considered unlikely that large microbes such as *Cryptosporidium* are able to move significant distances through soils.

**Methods:** Rather than using the more traditional method of obtaining evidence of water contamination, we examined whether users of groundwater had an increased risk of infection from *Cryptosporidium* using a serological marker. We obtained sera from 100 Albuquerque, New Mexico residents with onsite private wells and septic systems (exposed) and 100 nearby residents served by city water and sewer systems (unexposed). Water samples were also collected from the exposed group and tested for bacterial and bacteriophage indicators of contamination.

**Results:** Exposed study participants compared to unexposed participants had statistically significantly higher serological responses. Other risk factors were unrelated to the intensities of the serological responses. There was no association between bacterial or bacteriophage indicators of contamination and the intensity of the serological responses.

**Conclusions:** This study suggests that having an onsite private well and septic system may increase the risk *Cryptosporidium* infection. It also suggests that relatively large parasites may be capable of moving considerable distances through the soil.

**Abstract: North Valley Water Study**

by Twila Kunde