

**February/March
2010**

Bryan Larsen, PhD *Executive
Director ICTCR*

Theodore Rooney, DO, FACP
*Director of Clinical Research,
Des Moines University*

Ronald J. Torry, PhD
*Drake Liaison to ICTCR,
Professor, Drake University
College of Pharmacy and
Health Sciences*

Joan McCleish, PhD
*Mercy College Liaison to ICTCR,
Mercy College of Health
Sciences*

Dale Andres, DO
*Chief Medical Officer, Mercy
Medical Center*

Simon Geletta, PhD
*Director of MIRIAM (ICTCR's
Informatics Arm)*

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About Us

The ICTCR facilitates patient-centered research through the combined strengths of its founders: Mercy Medical Center, and Des Moines University along with its partners Drake University College of Pharmacy and Health Sciences and Mercy College of Health Sciences and welcomes inquiries from interested clinicians and scientists.

For more information, please call
(515) 247-4435.
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Spring thaw for a quiescent study...

The National Children's Study in Polk County Iowa is Now on the Fast Track: Preliminary Recruitment to Begin this Summer

Polk County Iowa was named as a location for the twenty-plus year-long cohort study of children from before conception to their 21st year. This study, which seeks to follow 100,000 children nationwide, has been described as the "largest, boldest and most innovative study of children's health and disease ever done".

Although the study was awarded approximately a year ago through its principal investigator, Dr. Jeff Murray of the University of Iowa with Dr. Rizwan Shah (local site principal investigator) and with involvement of hospitals in Polk County, the Polk County Health Department, Des Moines University and the Visiting Nurse Association, the study was put on hold for the past year. The delay was needed so the lead sites, known as "Vanguard Sites," could refine their recruitment and data collection methods and share what they learned in the early stages of the study. Now with new approaches to the tricky problem of participant recruiting, it has been decided by national leaders of the study, the Polk County team is eligible to begin a limited effort at recruiting volunteers into the cohort.

The study is a hypothesis-driven longitudinal evaluation of numerous environmental and biological specimens for factors that may have a relationship to health and disease during the life of children during their formative years. The participation by a true cross section of our local population will allow researchers to make correlations between inborn and physical environment factors and social factors that may affect how infants develop through various stages of growth and cognitive maturation. Mothers in Polk County might have grown up here with life-long exposure to factors in the local environment or may have moved here from other places in the USA or from other countries. These diverse backgrounds and the conditions that develop as children mature may have had their origins in their parents' genes or in the environment.

The next challenge in advance of recruitment will be developing public

awareness of this important study among the general public and their physicians so mothers-to-be will have confidence in allowing their children to participate in this ambitious cohort study.



Questions about this study may be directed to the study communication director Juan Cadenillas at the Polk County Health Department by email (jcadeni@co.polk.ia.us). The national website provides additional details about hypotheses. (<http://www.nationalchildrensstudy.gov>)

The Use of Focus Groups in Qualitative Research

Software for Qualitative Data

Analysis: The simple acts of listening and taking notes while individuals are guided through discussion points seems a simple enough exercise, but in fact, a great deal of information may be elaborated in a focus group of 5-8 people over an hour or two, and dialog may be disorganized, repetitive or contain connections to ideas raised in earlier parts of the discussion. It may be difficult solely by reading the transcript to identify important themes and connections. Several software packages (referred to as “computer assisted qualitative data analysis software”) have been developed to help with this task. At least 10 commercially available software packages are used by researchers in a diversity of medical and non-medical disciplines including psychology, social sciences, and opinion research. Some of the specific methods that are evaluated by this software genre include “grounded theory, discourse analysis, ethnography, network analysis, and phenomenology. These may be foreign sounding concepts to the quantitative research community but are finding root in the psychology-oriented disciplines.

References for Focus Group Article (Right Column)

Morgan, D. (1996). Focus groups. *Annual Review of Sociology*, 22, 129-152.

Polit, D., & Beck, C. T. (2006). *Essentials of nursing research: Methods, appraisal, and utilization* (6th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Sim, J. (1998). Collecting and analyzing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing*, 28(2), 345-352.

The use of focus groups is growing as a technique used to collect data in qualitative research studies. Focus groups are defined by Morgan (1996) as “a research technique that collects data through group interaction on a topic determined by the researcher” (p. 130), and has three components: clearly states that focus groups are a research method for data collection, locates interaction in the group discussion as the source of data, and acknowledges the researcher’s active role in the process.

Focus groups may be used as a sole source of data for research studies; however, most often they are used in combination with surveys and/or in-depth interviews. The mixed method study is an emerging trend that combines use of qualitative and quantitative methods within a single study with the purpose of enriching the base of evidence (Polit & Beck, 2006). When used as a combination method for data collection, sequencing of the focus group is an important consideration. Morgan (1996) identifies the most common sequencing and purposes for the use of the focus group strategy as: a) focus groups are conducted first to determine the focus of questions prior to development of a more in-depth follow-up survey (most common); b) brief surveys are administered to gather data for the more in-depth focus group discussions that follow; c) more in-depth surveys are the primary method followed by focus groups to assist in explaining the survey information, often with specific quotes used to help more fully understand the survey responses (second most common method); and d) use of focus groups as the primary method, followed by a survey as follow-up, and the focus group themes may be used in formation of the survey questions.

Sim (1998) identified procedural aspects of the focus group that influence outcomes and should be considered. They include size of group, moderation by one or more individuals, and recording/documenting data. Group size is generally eight to twelve, but may also be effective in groups as low as four to six. The number of group sessions per study may vary, but usually consist of four to six group sessions, as the information becomes “saturated” at this point with little new information emerging (Morgan, 1996). The moderator plays a pivotal role as leader of the group, often assisted by a co-researcher. The moderator facilitates discussion without leading or biasing the process. The discussion is most often recorded to provide for an accurate analysis and frees the moderator to concentrate on the discussion. The role of the co-researcher in the focus group session is often to take notes and document non-verbal observations that otherwise may be lost, and in the case of a recorder malfunction, may serve as the sole recording of the session.

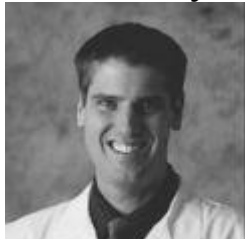
Using standardized procedures for conducting qualitative research is directly related to the quality of the research, and therefore, efforts toward standardization should be considered whenever possible, and appear in the reporting of the research (Sim, 1998). Reporting should include the procedural aspects of the focus group, how sampling was determined, method of recruitment, and demographic data collected from participants. Also, reporting whether a standardized set of questions was used, summary of question content, structure and process used by the moderator and/or co-researcher for questioning and recording data, and the training/qualifications of the moderators should be included. In addition, as with other types of research data collection, report ethical considerations.

Focus groups are one form of qualitative data collection that provide a valuable perspective to the research process. When used in combination with quantitative methods, focus groups may provide key data that enrich and enhance the total research study findings.

This article was provided by Joan McCliesh, PhD, Dean of Institutional Research and Distance Education at Mercy College of Health Sciences, Des Moines Iowa. For more information contact: the author: jmccleish@mercydesmoines.org

Featured Researchers

***Matt Severidt, DO
Resident Physician***



***Charles Goldman, MD
Surgery Program
Chair***



***Anuj Bhargava, MD
Iowa Diabetes
Education and
Research Center***



Collaborative Science Practiced by Surgery Resident Promises New Discoveries in Bariatric Surgery

Third year surgery resident Matt Severidt is not waiting to become a seasoned researcher to enhance his research through collaboration – he is actively engaged in significant collaborative work, even while continuing his residency in general surgery. Dr. Severidt is working with bariatric surgeons both in Des Moines and in Grinnell and is following patients who have undergone laparoscopic adjustable gastric banding surgery (lap-band) to aid in weight loss postoperatively.

Because bariatric surgery is not uniformly successful there would be considerable value to identifying biomarkers that could predict the likelihood of bariatric surgery procedures being successful for weight loss.

The contemporary understanding of obesity has included recognition of the role of cytokines (such as IL6 or TNF α) and adipokines (such as leptin and adiponectin) that are biologically active peptides that influence insulin resistance, hypermetabolism, inflammation, fever and sleep. The expression of these factors after lap-banding might be altered, or in some individuals a genetic background may alter the regulation of cytokines and adipokines making them refractory to change following surgery.

Building on this scientific background, and with the assistance of Dr. Charles Goldman, director of the Mercy Surgery Residency Program who has arranged for collaboration with an adipokine researcher at West Virginia University, a protocol was developed in which somatometrics of individuals undergoing lap-band surgery will be measured for a year after the surgery and blood samples will be taken at intervals to follow the changes in leptin, adiponectin, C reactive protein and Interleukin 6. In addition to the measurement of cytokines and adipokines, the patients in the study will also undergo lipid profile measurements. For this part of the study, Dr. Severidt is fortunate to have the involvement of Dr. Anuj Bhargava of the Iowa Diabetes and Endocrinology Research Center who will employ the center's resources to conduct lipid profile measures on the patients in the study.

While this study may contribute substantially to understanding the consequences of bariatric surgery with respect to cytokine expression, it also serves as a very valuable example of the level of research that may be achieved if barriers of discipline and space are overcome through alliances built around meaningful clinical problems. The power of collaboration makes this research a model for future studies by residents.

Statement of Purpose

The ICTCR is a research enterprise that facilitates productive research collaboration between its partners by sharing intellectual and infrastructure resources for the purpose of advancing patient-centered research that seeks better health for our communities and education and research opportunities for our faculty, staff, students and trainees. We believe the comprehensive training of medical students, residents and other health care professionals must be accompanied by a working knowledge of clinical research methods and best practices and that the best way to accomplish this is through active research endeavors. The ICTCR is dedicated to ethical and compassionate care for all individuals who participate in clinical research studies and actively supports the principles of autonomy, beneficence and justice in clinical research programs.