

THE



COMPASS

Charting
New Directions
for the
University of
Connecticut
School of
Dental
Medicine

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FALL, 2007

With the recent funding from the Connecticut State Stem Cell Initiative, research into the application of human embryonic stem cells for the musculoskeletal system has been initiated within the SDM. A nine-component research plan received a three-year grant for \$3.52 million to pursue an integrated program designed to direct human embryonic stem cells toward progenitor cells capable of making peripheral and craniofacial bone, cartilage, skeletal muscle and dermis. The leadership of the program and three of the research projects came from the SDM and were joined by participants from the School of Medicine, School of Engineering and School of Liberal Arts and Sciences at Storrs. New video conferencing facilities within the SDM and at Storrs has facilitated the scientific communication between these investigators. The success in building this stem cell research program is a direct result of a NIH Research Enhancement award obtained by **Dr. Susan Reisine** (Oral Health & Diagnostic Sciences) in 2002. That grant lead to the recruitment of **Dr. David Rowe** (Reconstructive Sciences) to the SDM who organized



STEM CELL RESEARCH

IN THE SCHOOL OF DENTAL MEDICINE

Clockwise from the top: David Goldhamer, Alexander Lichtler, Caroline Dealy, David Rowe, Dong-Guk Shin, Jon Goldberg, Leonardo Aguila, Liisa Kuhn, Mina Mina, Robert Kosher.

Connecticut stem cell grant plus the development of the video conferencing facility. The combination of the two awards has shifted the major focus of research within the SDM to stem cell and regenerative medicine as it relates to the musculoskeletal and dental systems, and has attracted new research grants in this topic from the NIH and DOD.

The Stem Cell Grant is anchored by **Dr. Alexander Lichtler** (Reconstructive Sciences) by developing the human embryonic cell culture facility from which all the other investigators will obtain cells that have been directed toward cells capable of making their tissue of study. **Dr. Leonardo Aguila** (Immunology) has obtained the most advanced cell sorting instrumentation essential for isolating specific cell types from the human cell cultures that can be used for molecular or tissue repair studies. The isolated cells will undergo

gene chip studies that capture the activity of all the genes associated with stem cells becoming a mature tissue. The analysis of these large data sets will be lead by **Dr. Dong-Guk Shin** (Computer Science & Engineering-

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**Message
from the
Dean**

Monty MacNeil, DDS, MDS

Beware of drivers who don't use maps.

I don't use Mapquest that much since its stock suggestions are often way off base. But I have an old Rand McNally map in my car, and I always check it before a new trip to make sure I have the basic directions. And I like the saying that "Trying to go in too many directions at once makes it impossible to move forward."

We are at that stage in our School when we have to decide the direction of that forward movement. I know that the thought of "strategic planning" does not usually get people jumping up and down with excitement, but it is a very necessary part of guiding the School forward. On August 27, our Strategic Planning Committee had its first meeting to discuss a new Strategic Plan, having done some excellent summary assessment work this spring on our soon-to-be retired 2000 Strategic Plan. While we were successful in achieving the majority of the goals in that plan (our final grade was about 75%, which in most cases is considered a pass!), some good lessons were learned about how to approach a new plan. The committee will work with faculty through the fall and winter months to create a more focused plan that will more clearly describe "Who We Are" and perhaps the more difficult decision of "Who We Are Not."

It seems to me that, at times, we have tried as a school to be "Everything to Everybody," and we really need to reconsider if that is the optimal way to use our resources. A key task will be to agree from the very beginning on the outcome measures and thresholds we will use to evaluate our progress. Just like checking the map in our car, we will need to ensure that we periodically check along the way that we are on the right road and heading in the right direction. The Committee and I look forward to your help over the coming months in mapping out our next five-year journey.



**Statewide Oral Health Plan
Released**

by Ardell Wilson, DDS, MPH
Assistant Dean for Community Health

The Connecticut Coalition for Oral Health Planning recently released a plan to improve the oral health of Connecticut residents over the next five years.

The "Connecticut Oral Health Improvement Plan 2007-2012" was released at the *Sharing the Vision* statewide oral health conference in June. The process to develop the plan occurred over a two-year period and began with a statewide conference in 2004, "Building and Embracing a Vision of Oral Health in Connecticut."

As a result of the 2004 conference, the Coalition for Oral Health Planning was formed. The Coalition represented a diverse group of key stakeholders that took leadership for researching background information and drafting the oral health plan for Connecticut. Membership included the University of Connecticut School of Dental Medicine, the Departments of Public Health and Social Services, the Connecticut Oral Health Initiative, the CT State Dental Association, the Connecticut Dental Hygienists' Association and community-based organizations.

Connecticut is now one of 23 states nationally with a state oral health plan.

The vision of the Coalition in developing the planning process was "Connecticut's children and adults will have good oral health as part of their overall health and well-being."

Information obtained from the 2004 conference, the "Healthy People 2010: Oral Health Objectives for the Nation," other states, and input from consumers, medical and dental professionals, social services providers, government and non-profit agencies, and legislators guided the Coalition in formulating the goals of the plan. Most importantly, a series of community focus groups were conducted around the state to gather comments on the proposed goals and objectives for the plan.

The plan has four goals to improve oral health:

- (1) Increase integration of oral health promotion into all aspects of public health.
- (2) Ensure there is an adequate dental workforce to meet the needs of Connecticut residents.
- (3) Build a strong and sustainable oral health infrastructure.
- (4) Advance best practices for oral health.

The plan can be viewed at:
www.dph.state.ct.us/bch/oralhealth or <http://www.ctoralhealth.org/>

Whether you are an individual, health care provider, organization or community, there is something in the plan for you to do to improve oral health in Connecticut. Objectives are prioritized and measurable for easy tracking.

The Coalition will continue to meet to monitor progress toward implementation of the plan. For more information about the *State Oral Health Improvement Plan 2007-2012* or if you are interested in helping to implement the plan contact Ms. Linda Ferraro at 860-509-8203.

► New Business Services Managers

This summer brings the addition of two new Department Business Service Managers in the School of Dental Medicine.

Joan Williams has replaced Eileen Chmura in the Department of Reconstructive Sciences who retired after nearly 15 years of UCHC service. Joan began working at the Health Center in May 1999 initially in the Payroll/Human Resource Department and then in the Department of Cell Biology in the School of Medicine. In March 2006, she accepted a position in the Department of Reconstructive Sciences and in July was promoted to Business Services Manager.

Sandy Pelletier accepted her position as Business Services Manager in the Department of Oral Health and Diagnostic Sciences. A Health Center employee since August 1973, Sandy worked in the Department of Oral Radiology, the Department of Pharmacology and most recently in the Division of Endodontology. She replaced Mani Vijayasekar.

Joan and Sandy join business service manager **Diana Mikulak** (Department of Craniofacial Sciences). Together they have considerable background in computers, supervision, scheduling, budgets, data management, State and Health Center policies and procedures, and office management and administration, and look forward to leading the administrative staff into a model of cooperative support of our numerous and diverse activities and responsibilities.

► Dental Clinics Manager Retiring

Barbara Rudnick retired from the School of Dental Medicine after nearly 30 years. Ms. Rudnick was the first dental assistant to work in the student clinics and also worked in Faculty Practice. She was promoted to a Lead Dental Assistant I working for both the Restorative and Periodontics Departments. In May, 1989 she was promoted to Dental Clinics Manager.

According to Barbara she plans to spend more time with her family and numerous pets, to travel, and to volunteer at animal rescue groups, which is her passion. "I also hope to improve my golf game, but for anyone that has ever seen me play that just may not be obtainable." She also says there are so very many people here that she will miss, not only within the Dental School, but also within the Health Center as a whole. "I realized it was time to retire when I met dental students who are the children of dentists that graduated from here when I was an assistant!"

► New Dental School Finance Director

Dr. Monty MacNeil is pleased to announce the appointment of **Mr. John Brigada** as Director of Finance and Administration in the School of Dental Medicine.

John joins us from UCHC Financial Services where he has been Finance Manager-Academic Decision Support, providing financial analysis services for the School of Medicine, John Dempsey Hospital and Office of Research since 2003. Prior to that appointment, John worked in the private sector from 1993 to 2003 as a finance manager and financial analyst. John holds a B.S degree in accounting from the University of Connecticut and an MBA from Rensselaer Polytechnic Institute.

► New President of the Hispanic Dental Association

Dr. Sarita Arteaga, Assistant Clinical Professor, Department of Reconstructive Sciences at the University of Connecticut School of Dental Medicine was recently elected as the fifteenth President of the Hispanic Dental Association.

The Hispanic Dental Association is a national organization of dental professionals dedicated to promoting and improving the oral health of the Hispanic community and providing advocacy for Hispanic oral health professionals across the United States.

Dr. Arteaga is actively involved in the preclinical and clinical curriculum of the School of Dental Medicine and teaches in the Divisions of Operative Dentistry and Prosthodontics.

► Dental Student Joins Pilot Study

Demetress L. Davis, a junior dental student at Meharry Medical College in Nashville, spent six weeks at UCHC working with **Drs. Susan Reisine** (principal investigator), and **Robert Aseltine, Joanna Douglass, Edward Thibodeau** (co-investigators).

She was involved in a pilot study concerning pregnant women within their first and second trimester who have been identified with a salivary sample of moderate or high levels of *streptococcus mutans*. The study evaluates the receptiveness of the women to nutritional health interventions and assesses factors within their health histories and lifestyles that affect their dental health and the amount of the acquisition of the *streptococcus mutans* in their babies.

Stem Cell Research

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Storrs). There are five application projects that will use human embryonic cell derived progenitor cells potentially capable of repairing adult structures. They include peripheral skeletal tissue (**Dr. David Rowe**, Reconstructive Sciences), tooth and craniofacial bone (**Dr. Mina Mina**, Craniofacial Sciences), cartilage (**Dr. Robert Kosher**, Reconstructive Sciences), skeletal muscle (**Dr. David Goldhamer**, Molecular & Cell Biology-Storrs) and dermis (**Dr. Stephen Clark**, Genetics & Developmental Biology).

This core group of investigators in stem cell and regenerative research will play a central role in the institutional goal of developing a Musculoskeletal Institute as a signature program of basic and translational research. It will assist other investigators both in Farmington and Storrs in the next round of grant applications to Connecticut Stem Cell Initiative and well as projects that would use progenitor cells sources acceptable to federal funding agencies. New instrumentation specifically designed for imaging and analyzing the progress of tissue repair models have been obtained that will make researchers in musculoskeletal research the most sophisticated and competitive as any in the nation.



Left to right: Michelle Proper (program coordinator), Eileen Chmura (retiring business services manager) and Joan Williams (new business services manager) all from the Department of Reconstructive Sciences.



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The Compass is written for the dental school. We strongly encourage everyone to participate by submitting articles, events, milestones, etc. If you have any suggestions, please drop us a line.

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