

OCPM

RESEARCH UPDATE

Jill S. Carroll, Ph.D.
Director of Research
jcarroll@ocpm.edu
x7549

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OGENIX STUDY IS EXPECTED TO BEGIN SOON

Drs. Carroll and Hetherington are working with Dr. Berlin, member of the OCPM Board of Trustees and a senior VP at Ogenix, to finalize the details for a randomized, controlled multi-center study to evaluate the EPIFLO sustained delivery O₂ therapy on wound healing. The three CFAI sites (Euclid Avenue, Huron Hospital, and OCPM) will be involved in the study, as well as two other locations. Dr. Carroll will serve as Study Director and will coordinate the multi-center study. Currently, Dr. Berlin is working to finalize the proposal, so that it can be submitted to the IRBs at the participating sites, while Dr. Carroll is working on the budget for final approval between the two parties. It is expected that the proposal and informed consent form will be submitted to the IRBs in January 2009, and the studies will begin immediately following approval at each site.

DRS. YAVUZ AND OSBOURNE OBTAIN APPROVAL FOR INTRAMURAL GRANT APPLICATION

An intramural grant application submitted by Drs. Yavuz and Osbourne has recently been approved by the OCPM Research Committee and IRB. The project will investigate a potential association between increased plantar temperatures and thinned fat pads in diabetic patients. The study is expected to start in mid-December. The investigators are aiming to present the preliminary findings at the Diabetic Foot Global Conference, which will take place in Los Angeles in March 2009.

DRS. CARROLL AND HETHERINGTON EXPLORE RESEARCH IN TISSUE ENGINEERING

Drs. Carroll and Hetherington met with Dr. Bill Landis of NEOUCOM in November to discuss collaborating on research involving tissue-engineered phalanges. Dr. Landis has successfully been working on creating phalanges for the fingers. The process involves wrapping bovine (cow) periosteum around a resorbable polymer that is the same shape and size of a phalanx. In addition, bovine cartilage cells are seeded onto strips of resorbable polymer, and these strips are attached to the articulating ends of the phalanx. The constructs are then implanted subcutaneously into athymic mice for up to 40 weeks. Results have shown that, after this time period, the polymer has almost entirely resorbed and is replaced with bone. In addition, mature cartilage has formed at the ends of the bone. Research continues on these engineered phalanges, with the focus currently on developing tendon and muscle, using seeded cells, to produce a functional interphalangeal joint. Drs. Carroll, Hetherington and Landis have discussed collaborating on mechanical testing of the tissue-engineered constructs, to determine strength, modulus of elasticity, fatigue behavior, and other properties. This work would be conducted by Dr. Carroll at OCPM. Discussions between both parties will continue after the holiday break, and Dr. Landis plans to visit the College.

DR. YAVUZ TO RESUBMIT NIH AREA GRANT APPLICATION

Dr. Yavuz has received the results from the review of his NIH proposal entitled "Investigation of Plantar Loading Patterns over Time". The proposal received a priority score of 258. Dr. Yavuz will be submitting a revised version after addressing the concerns raised by the reviewers. Approximately half of all grant applications reviewed by the NIH are streamlined and do not receive a priority score. The top 50% of the applications are scored in a range of 100 to 500, with 100 being the best score. The tentative funding margin for AREA grant proposals is 150.

OCPM LEASES PRESSURE-SHEAR DISTRIBUTION PLATFORM FROM CLEVELAND CLINIC

A custom-built pressure-shear distribution platform, recently leased from the Cleveland Clinic, has been installed in the Biomechanics Lab and is ready to use. The device is the first and only equipment that can measure plantar shear force distribution. Preliminary data obtained by this device has shown the clinical significance of plantar shear stresses in the etiology of diabetic ulcers. Researchers at OCPM are planning to conduct future studies utilizing the shear platform.

REMINDER ABOUT OCPM RESEARCH POLICIES

All faculty members at OCPM are reminded that if they plan to do **ANY** research either here on the College campus or at the CFAI sites, regardless of how small or simple the project may seem, it **MUST** be approved by the **OCPM Research Committee** prior to initiation of the study. Furthermore, **ANY** and **ALL** studies involving human subjects (including x-rays, toenail samples, etc) **MUST** also be approved by the **OCPM IRB**, prior to initiation of the study. There are **NO EXCEPTIONS** to these rules! Studies involving human subjects are federally regulated, in order to protect the patient.

If it is discovered that an unapproved research study is being conducted, the study will be suspended **immediately** until all of the paperwork is completed and approved.

Dr. Carroll will meet with Tom Barstow shortly to get a Research Department site up on the OCPM website. All forms that need to be submitted to the Research Committee and the IRB for review will be able to be downloaded from that site. In the meantime, if you need this paperwork, please contact Dr. Carroll. Once the forms are completed, please return them to Dr. Carroll, and she will organize the committee reviews of the proposals.

DEADLINES-AT-A-GLANCE: UPCOMING GRANT APPLICATION DEADLINES

American Diabetes Association

Basic Science Award

The ADA Research Awards provide grant support to new and established investigators. Applications will be considered in any area that is relevant to the etiology or pathophysiology of diabetes and its complications.

Amount of funding available: Up to \$115,000 per year for up to three years. Up to 20% of total costs for PI salary support and up to 15% for indirect costs may be requested.

Clinical/Translational Award

The ADA Clinical/Translational Awards are designed to support patient-oriented research in diabetes. For the purpose of this award, clinical research is defined as research directly involving humans, and includes education, psychosocial, behavioral, epidemiologic, and health services research as well as studies of normal physiology and mechanisms of disease.

Amount of funding available: Up to \$200,000 per year for up to three years. Up to 20% of total costs for PI salary support and up to 15% for indirect costs may be requested.

Innovation Award

The ADA Innovation Awards are pilot or feasibility grants designed to support novel hypotheses that may lack preliminary data, but offer considerable promise for the cure, prevention or treatment of diabetes.

Amount of funding available: Maximum of \$50,000 per year for two years. No indirect costs may be requested.

Henry Becton Innovation Award

The ADA Henry Becton Innovation Awards are pilot or feasibility grants designed to support hypotheses in the following areas: medical informatics in direct patient therapy, advanced methods of insulin delivery, and innovative approaches to diabetes education.

Amount of funding available: Maximum of \$50,000 per year for up to two years. No indirect costs may be requested.

Website for all ADA grant opportunities:

http://professional.diabetes.org/Diabetes_Research.aspx?cid=60656

Deadlines for all applications: January 15, July 15

AO Research Fund

www.aofoundation.org

Start Up Grant

The AO Research Fund start up grant is designed to encourage researchers to develop unconventional, novel projects and to expand in a wide range of research fields within the general areas of interest of the AO Foundation. This includes basic scientific, pre-clinical and clinical research in all areas of trauma, surgery of the musculo-skeletal system and related problems. Awards are a maximum of CHF 60,000 per year for up to two years.

Deadline: February 15

Focus Grant

The AO Research Fund focus grant is reserved for projects which are designed to add to our knowledge of key research areas as determined by the AO Academic Council. For the 2008 calls, the clinical focus/priority areas for the focus grant include: fracture fixation in osteoporotic bone, large bone defect healing, imaging and planning of surgery, and degeneration and regeneration of the intervertebral disc. Applications which fall outside these areas will not be considered. Awards are a maximum of CHF 100,000 per year for up to three years.

Deadline: February 15

National Institutes of Health (NIH)

Public Health Service Research Grants (R01)

The NIH is accepting proposals for research in a wide variety of fields, including arthritis, musculoskeletal disorders, diabetes and skin diseases. Funding is available for three to five years, with no restrictions on amount of support. More information on this grant is available in the library and at <http://grants1.nih.gov/grants/>

Deadlines for application: February 5, June 5

Academic Research Enhancement Award (R15)

The NIH AREA program has three objectives: 1) to develop the research environment a "smaller, less prominent, four-year, public and private colleges and universities which provide baccalaureate or advanced training for a significant number of our nation's research scientists but which have not shared adequately in the growth of the NIH extramural program", 2) to expose students at such institutions to the research experience, and 3) to support meritorious research. The AREA program supports small-scale research projects, including feasibility or pilot studies, in health-related topics. More information is available at <http://grants1.nih.gov/grants/funding/area.htm>

Deadlines for application: February 25, June 25