

OCPM

RESEARCH UPDATE

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WELCOME FIRST YEAR STUDENTS!

I would like to take this opportunity to welcome this year's incoming class. At OCPM, we encourage student participation in research conducted by the faculty. Proposals are submitted to companies for support in various areas of research. In addition, the Research Department is actively submitting applications to the NIH for grant support. Dr. Carroll is submitting a proposal to evaluate the biological fixation of pyrolytic carbon that has been textured by exposure to atomic oxygen. Dr. Yavuz is submitting one proposal to investigate plantar shear stresses in diabetic patients, and their relevance to foot ulcers, and another proposal to investigate plantar loading pressures in diabetic patients over time. Please refer to future editions of the OCPM Research Update for reports on the status of funding for these and other faculty projects that interested students may participate in.

COLLABORATIVE PROPOSAL BETWEEN OCPM, CWRU AND OTHERS SUBMITTED TO NEI

Dr. Carroll assisted Dr. Ann Williams from the CWRU School of Nursing with the development, preparation and submission of a proposal, entitled "Nonvisual Foot Care for People with Diabetes and Visual Impairment", to the National Eye Institute (NEI) for funding through the Healthy Vision 2010 community award. The proposal involves collaboration between OCPM, CWRU, the Diabetes Association of Greater Cleveland (DAGC) and the Cleveland Sight Center (CSC). The objectives of this study are to: 1) create recorded patient education materials about nonvisual foot care for people with diabetes and visual impairment, 2) pilot test the nonvisual foot care materials, 3) update a complete set of diabetes self-management education materials for DAGC, 4) teach a seminar about diabetes and visual impairment to third-year OCPM students, 5) successfully refer at least 30 people with diabetes and visual impairment who are clients of CSC for diabetes self-management education materials from DAGC, and for foot care from an OCPM clinic, and 6) distribute recorded DAGC materials to at least 100 additional people with diabetes and visual impairment. Dr. Caldwell is the designated Project Podiatrist, and if the proposal is funded, he will consult on the development of the recorded material on nonvisual foot care and assist with the focus groups that will test the foot care recordings. OCPM will also benefit from the project by educating third-year students about foot care for visually-impaired diabetic patients and by increasing the patient load at the CFAI clinics.

DRS. HAYWOOD AND CARROLL SUBMIT PROPOSAL TO REALM LABS FOR PERIPHERAL NEUROPATHY STUDY

Drs. Haywood and Carroll have submitted a proposal to Realm Labs to evaluate the effectiveness of Neuremedy, a medical food, on relieving symptoms of peripheral neuropathy, such as burning, tingling, numbness and shooting pains. The company is pleased with the proposal and Drs. Haywood and Carroll are in the process of trying to negotiate a budget with Realm Labs.

DR. YAVUZ SUBMITS GRANT APPLICATIONS TO NIH

Dr. Yavuz submitted another NIH Academic Research Enhancement Award (AREA) grant application entitled "Investigation of Plantar Loading Patterns in Diabetic Patients Over Time". The application will be reviewed by NIH in November. The first grant application submitted by Dr. Yavuz, "Investigation of Plantar Shear Stresses in Diabetic Patients: Relevance to Foot Ulcers", was reviewed by the NIH in June and placed in the top 50% of all applications. The proposal received a priority score of 288, which is close to the tentative funding margin of 150. Dr. Yavuz will resubmit this proposal after addressing the concerns raised by the reviewers.

DR. CARROLL TO RESUBMIT GRANT APPLICATION TO NIH

Dr. Carroll is planning to address the concerns of reviewers and resubmit a second revision of an NIH AREA grant application, entitled "Properties of Pyrolytic Carbon Textured by Exposure to Atomic Oxygen". The first revision of the proposal was reviewed in February, and received a priority score of 245.

DRS. CARROLL AND HETHERINGTON TO REVISIT EPIFLO WOUND HEALING STUDY

Drs. Carroll and Hetherington met with Dr. Steve Berlin (a member of the OCPM Board of Trustees and Senior VP of Professional Relations at Ogenix Corporation) and Dr. Sarang Sarangapani (President of Ogenix Corporation) to discuss participating in a research study to evaluate the effectiveness of EPIFLO sustained delivery O₂ therapy on wound healing. The proposal for the study was initially revised and finalized by Dr. Carroll in 2006, however the study was canceled at that time. Ogenix Corporation, who manufactures EPIFLO, is ready to revisit the study, and OCPM will participate in the research as a clinical site.

MEMORY STAPLES TO BE ADDED TO LAPIDUS PROCEDURE FIXATION STUDY

The OCPM student chapter of ACFAS is continuing its research on fixation of the Lapidus procedure. The initial study evaluated the following fixation techniques: 1) one screw (3.5mm x 30mm), 2) two screws (one 3.5mm x 30mm, one 3.0mm x 28mm), and 3) one screw (3.5mm x 30mm) and one 0.062" K-wire. The student organization received subsequent funding from APMSA to study the following fixations: 1) one screw (3.5mm x 30mm) and one 0.045" K-wire, and 2) one screw (3.5mm x 30mm) and one 2.0mm Steinman pin. The BioPro Memory Staple has now been added for evaluation as well. The memory staple is manufactured from Nitinol memory alloy. The staple is activated at body temperature, upon which the legs of the staple pull inward to secure the fixation. Dr. Chiunda will work with the ACFAS student group to test the following fixations: 1) one dorsal staple, 2) one dorsal staple and one medial staple, and 3) one dorsal staple and one medial-plantar staple.

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

American College of Foot and Ankle Surgeons (ACFAS)

Clinical and Scientific Research Grant Program

This program provides financial assistance to researchers within the podiatric surgical arena. The purpose of this grant is to fund research with either direct or indirect impact on issues of interest to podiatric foot and ankle surgeons. This research may be clinical or laboratory based, with clearly defined research goals. NOTE: At least one of the investigators must be a member of ACFAS in good standing.

Amount of funding available: Maximum of \$20,000 for one year.

Website: http://www.acfas.org/pubresearch/Research_Grant/default.htm

Deadline for application: October 15, 2008

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

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