HEADLINES

Medical School Unveils New Biorepository for UMHS Research Community

The Medical School is pleased to announce a new biorepository for UM researchers in need of a controlled storage environment for biological samples. Under the leadership of Dean Woolliscroft, the biorepository will be hosted and operated by the Michigan Institute for Clinical & Health Research (MICHR).

“A significant hurdle to truly translational research studies is the ready availability of reliable, standardized resources to obtain, process, securely store, and disburse high-quality samples, and associated clinical information to various members of the study teams,” said Ken Pienta, MD and Director, MICHR. “Even for smaller studies, the availability of appropriate storage facilities can be a significant issue. MICHR is thrilled to be able to provide a biorepository, in addition to our many other programs and services, to help accommodate the needs of scientists and their teams.”

Many scientists at the University of Michigan have their own laboratories, where they may store biological samples for their research, but that space is often very limited and common standard protocols and tracking systems are most often not used. Other research investigators don’t have access to wet labs, and need a facility that can prepare high-quality samples for them. MICHR is pleased to be able to add to its many services for the research community a centralized biological repository for controlled storage of biological samples, and related services (including DNA, RNA, and other downstream preparation) within the UM campus.

Also leading the biorepository are Ram Iyer, Laboratory Director and Javed Siddiqui, Technical Director. Sample collection services will be provided by MICHR’s Michigan Clinical Research Unit (MCRU), which can also coordinate MICHR Biorepository specimen pick-up and delivery for investigators’ convenience.

Please visit the biorepository page on the MICHR website (http://www.michr.umich.edu/biorepository) for request forms and more information. You may also contact Ram Iyer, PhD at 734-615-2028 or (riyer@med.umich.edu) or Javed Siddiqui, MS, MT(ASCP), CLSp (MB) at 734-232-0829 or (siddiqui@med.umich.edu).

New Faculty Orientation to Clinical Research Practices

Monday, August 24, 2009
8:00 AM - 12:30 PM
MCHC Auditorium

New faculty to the University of Michigan Department of Internal Medicine, as well as existing faculty who are new to the field of clinical research, are invited to attend an orientation workshop on Monday, August 24, 2009. Faculty from the Michigan Institute for Clinical and Health Research (MICHR), IRBMED, Clinical Research Billing Unit (CRBU), DRDA, and the Medical School Regulatory Affairs Office will present and facilitate discussion on the topics relevant to the practice, policies, and procedures of clinical research at the University of Michigan. In addition to presentation of various learning modules, numerous resource materials will be distributed to facilitate compliance and continued education on clinical research best practices and UM regulatory requirements. Registration is required at (http://cgi.research.umich.edu/training/cacr/cacr_training.lasso). Please visit (http://www.med.umich.edu/medschool/research/orientation.pdf) to see a detailed agenda. The next orientation workshop is scheduled for Tuesday, October 27, 2009 from 10:00 AM - 2:30 PM (location to be announced).

New Clinical and Research Resources!

The Health Sciences Libraries at the University of Michigan are excited to offer the following new or returning databases for researchers, students, and health care professionals.

- **DynaMed** (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI06355) is a clinical reference tool created by physicians for physicians and other health care professionals for use primarily at the “point-of-care.” It contains clinically organized summaries for more than 3,000 topics using evidence-based medicine. Unlike UpToDate, remote access (i.e., off-campus) is available.

- **PediatricCareOnline** (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI06353) is another point-of-care resource which integrates multiple pediatric resources including the new AAP Textbook of Pediatric Care, Bright Futures (comprehensive health supervision guidelines), AAP Red Book information on over 200 childhood infectious diseases, a Signs & Symptoms Search, and hundreds of patient handouts with easy to read explanations for many conditions and procedures.

- **Dentistry & Oral Science Sources** (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI06357) covers all facets relating to the areas of dentistry including dental public health, endodontics, facial pain & surgery, odontology, oral & maxillofacial pathology/surgery/radiology, orthodontology, pediatric dentistry, periodontology, and prosthetics. This database includes full-text.

- **EMBASE** (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI02345) is a biomedical and pharmacological bibliographic database, which provides access to citations and abstracts from biomedical and drug literature via EMBASE and Medline. It contains over 19 million indexed records from 7,000+ peer-reviewed journals, covering 1947 to date, with more than 600,000 additions annually.
• The ProQuest Nursing & Allied Health Source (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI06141) database provides full text journals, evidence based resources, and dissertations to support the study of the many aspects of nursing or the allied health professions, including physical therapy, radiography, dietetics, dental hygiene, and the clinical laboratory sciences.

• Scopus (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI02035) is an abstract and citation database that provides access to nearly 18,000 peer-reviewed journals, 435 million scientific web pages, 23 million patent records, and “Articles-in-Press” from over 3,000 journals.

• JAMAevidence (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI05794) integrates available evidence with clinical experience. It includes Users’ Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice (2nd edition) and The Rational Clinical Examination: Evidence-Based Clinical Diagnosis. This resource is jointly offered with financial support from the University of Michigan’s Office of Graduate Medical Education.

• R2 Digital Library (http://searchtools.lib.umich.edu/V?func=native-link&resource=UMI06354) offers full-text access to over 120 premier health science ebooks in medicine, nursing, and dentistry.

For more information or assistance with using these databases, please contact the Health Sciences Libraries at (hslibraries@umich.edu) or 734-763-3071.

**BMRC Bridging Support Program for Basic Science Research**

**Deadline: September 15, 2009**

The Medical School’s Biomedical Research Council (BMRC) is accepting applications for a competitive Bridging Support Program for Basic Science Research. This program provides support to bridge federally funded basic science research grants with a very strong demonstrated likelihood of continued federal funding pending resubmission. Up to $40,000 is available to maintain projects for up to one year.

Matching funds from the PI’s department are required. Eligibility is limited to full-time, on-campus instructional and research faculty with primary appointments in the Medical School. Grants to be bridged must reside in the Medical School. Visit (http://www.med.umich.edu/medschool/research/support/funding/bridging.htm) for complete details. For questions, call 734-615-8802 or email (BMRCsubmit@umich.edu).

**Office of Research Welcomes Connie Chang, M.B.A.**

Connie Chang has joined the Office of Research as Director of Corporate Business Development and Communications. In her role, Connie will lead efforts in business development between faculty and external partners as well as strategies and implementation of high-level communications related to the research enterprise.

A native Michigander, Connie comes to the University from Boston where she most recently worked at Sepracor as the team leader for the prescription pharmaceutical product Lunesta, leading the business and marketing strategies for the brand. Prior to Sepracor, Connie was with Pfizer in New York working on brands such as Zyrtec, Lipitor, Zoloft and Caduet. Previously, she also worked at Mercer Management Consulting in New York on projects such as market strategies for consumer products and performance management for healthcare companies. Connie has a Bachelor of Arts degree in psychobiology from Harvard University and a Master in Business Administration from Harvard Business School.

Please join us in welcoming Connie to the Office of Research. She can be contacted at (changco@umich.edu) or 734-936-1531.

**Lynda Welage Named Associate Director of MICHR’s Education Programs**

The Michigan Institute for Clinical & Health Research (MICHR) is pleased to announce that Lynda Welage, Pharm.D., F.C.C.P., has been named to the newly-created faculty post of Associate Director, Education, Career Development, and Mentoring, effective July 13, 2009.

Lynda is a Professor in the Department of Clinical, Social and Administrative Sciences, and Associate Dean for Academic Affairs in the College of Pharmacy. She earned her Postdoctoral Fellowship at the Clinical Pharmacokinetics Laboratory Millard Fillmore Hospital in Buffalo, New York, a Pharm.D. from State University of New York at Buffalo, and a B.S. in Pharmacy from the UM College of Pharmacy. She is an active researcher-educator whose career has focused on enhancing pharmacotherapy for critically ill patients. She has published extensively and received several national awards for her work.

Serving as co-director of MICHR’s Education program along with David Schteingart, M.D., since MICHR received its Clinical and Translational Sciences Award (CTSA) in 2007, Lynda was instrumental in writing the education and career development section of the CTSA grant proposal, as well as in implementing the program after the award.

In her new duties as Associate Director, Lynda will support MICHR’s aims of training the next generation of research teams, creating an academic home for clinical and translational research, providing integrated research infrastructure, catalyzing new translational discoveries, and partnering with the national CTSA consortium. She will serve as a member of MICHR’s Executive Leadership Council, and provide substantive input to the direction and strategic planning for MICHR as a whole, and carry broad authority over the scope, governance structure, and priorities of the Education and Career Development activities of MICHR, including the CTSA Scholars, Postdoctoral Translational Scholars, MCRIT, Allied Health Professionals, Research Staff Training, and Research Development programs.

MICHR offers a variety of education, career development, and mentoring programs aimed at increasing the number of high-quality clinical and translational researchers across a broad career continuum. An expansive portfolio of training programs and courses are offered to train individuals who will comprise the translational research teams of the future. Degree and Certificate Programs in Clinical and Translational...
Research, summer internships, courses, workshops, and seminars on research specialty topics are available to students, faculty, and staff.

Undergraduate Research Opportunity Program Seeks Research Partners for 2009/2010
Deadline: August 15, 2009 – However we will accept projects through mid-September. You will have a larger applicant pool to select from if you list your project by the earlier deadline.

Would you like help getting a new project started or expediting a project currently in progress? Do you have a project you put on hold because you needed a research assistant to do some background research? Would you like to introduce and recruit new students to your field?

The Undergraduate Research Opportunity Program (UROP) is actively recruiting research partners for the upcoming academic year. Research sponsors can be faculty, research scientists or postdoctoral scholars. We have received over 1400 applications from bright and enthusiastic undergraduate students interested in working on a research project. If you are interested in involving a student in an existing or new research project, we encourage you to read more about the program and complete our one-page online application which can be found at (http://www.lsa.umich.edu/urop/sponsors/listing). The website also lists examples of UROP Projects in every discipline so you can see how other researchers have engaged UROP students.

Program Features:
1. UROP is open primarily to first and second year students. While younger students require training, many of our UROP students work on the same project throughout their academic careers making this a long term investment. In September you will have the opportunity to interview and select the students you wish to invite into your project after reviewing a copy of the student’s resume.
2. Students participate in the program the entire academic year from late September-May so you benefit from the initial training you must provide.
3. UROP provides research skill building workshops including Matlab, Invivo, GIS, Endnote, SPSS, STATA, Refworks, Research Integrity and Responsibility, Keeping a Lab Notebook, Advanced Excel, Animal Handling, Keeping a Laboratory Notebook, OSEH Safety, etc.
4. Supplementary research funding of $500 - $800 per student is available to cover research related costs.
5. UROP students participate in the program for academic credit or work-study support. If the student participates for work-study, UROP pays student wages, if applicable, and manages all paperwork.
6. UROP students are assigned a peer advisor who is a former UROP participant. Our peer advisors help orient the students regarding faculty expectations for research assistants and also provide an important link between you and your student if problems arise.
7. You provide 6-12 hours of work per week, supervise the student’s progress and assign a grade each term.
8. Daily supervision can be provided by graduate students and other members of your research team.

Please contact Sandy Gregerman at (sgreger@umich.edu) or 734-615-9000 if you have questions about the program or would like to speak to a UROP research sponsor from your department.

RESEARCH COMPLIANCE TRAINING AND EDUCATION

Human Research

Children in Research: Considerations When a Subject is a Ward of the State

A “ward” is a child who has been placed under the care or protection of a guardian, court, or an agency that is legally responsible for the child. Foster children are wards; their care may be provided by a foster parent or a governmental agency such as Children’s Social Services. Children who live in an orphanage or penal institution may be wards.

Both state and federal laws regulate what is allowed and what must be done when a ward participates in a research study. Legal guardianship in Michigan ranges in the level of authority granted to a guardian. If a child who is a prospective subject in a research study is determined to be a ward, the study team must request to see a copy of the guardianship papers to assure the guardian has legal authority to consent to the child’s participation in research. If needed, contact the Health System Legal Office at 734-764-2178 for assistance in assessing if a child is a ward or the guardian’s authority.

On studies that lack the potential of direct benefit to the child, federal regulations require appointment of an advocate for each child who is a ward. The IRBMED has specific instructions on our website for the steps such studies must follow before a ward of the state can participate in research. Principal Investigators should ensure all study team members involved in recruitment are aware of these regulations and the IRBMED steps for appointment of an advocate. Visit (http://med.umich.edu/irbmed/guidance/wards.htm) for details.

Animal Research

New UCUCA Regulatory Compliance Associate

The University Committee on Use and Care of Animals (UCUCA) would like to welcome its newest regulatory compliance associate, Patrick Kehres. Patrick started in the UCUCA office on August 10, 2009 and came from the Unit for Laboratory Animal Medicine where he was a husbandry supervisor for five years.

Four compliance associates handle administrative review of protocols by PI last name. Feel free to contact your compliance associate directly when working to complete your protocol.

First Letter of PI’s Last Name Compliance Associate

| A-F | Astrid Haakonstad (astridh@umich.edu) |
| G-L | Marie Cornell (mhaeussl@umich.edu) |
| M-R | Pat Kehres (kehres@umich.edu) |
| S-Z | Matthew Taylor (matttayl@umich.edu) |
Records Requirement Reminder
The University Committee on Use and Care of Animals approved the “UCUCA Policy on Animal Procedure Records” this spring which requires records be kept post procedurally for all animals. Please remember to post-post-surgical records in the animal housing rooms during the post-operative period. Additionally, if you use United States Department of Agriculture (USDA) covered non-rodent species, you are now required to submit any medical records to ULAM via the email address (ULAM-medicalrecords@umich.edu). For further details, please see either the “UCUCA Policy on Animal Procedure Records” or the document entitled “Guidelines for Animal Medical Records,” both available on the UCUCA website at (http://www.ucuca.umich.edu).
If you have any questions or concerns related to animal care at the University, please do not hesitate to contact us at 734-936-8028 or (ucuca.office@umich.edu).

FREQUENTLY ASKED QUESTIONS
The frequently asked questions (FAQs) highlighted here come from a list of FAQs for research maintained by the Office of Research. To see the complete list, visit (http://www.med.umich.edu/medschool/research/faq.htm).

Q) What kind of bridging programs are available to me? A) Start by reviewing your bridging needs with your department Chair. Determine and consider the following:
- What is needed to cover your lab and personnel funded by your lab (minimum needed to cover during the bridging period) animal cost, salaries, supplies to gather data to apply for next grant in bridge?
- Define how long of a bridge is needed.
- Consider cost sharing required by funding programs / resources of the department available.
- Work with your Chair to select programs to apply for and timing of when to apply
Specific Programs in the Medical School:
- Biomedical Research Council (BMRC) Bridging Program – $40,000 up to one year. Must support a federal grant bridge. PI’s grants must reside in the Medical School. (http://www.med.umich.edu/medschool/research/support/funding/bridging.htm)
- Medical School Extended Research Bridging Program for Instructional Track Faculty (http://www.med.umich.edu/medschool/research/support/funding/extendedbridging.htm)
Specific Programs in the Office of the Vice President for Research (OVPR):
The OVPR offers two programs for Interim Support for Sponsored Projects:(http://www.drda.umich.edu/funding/um_sources/ovpr.html)
- Bridging Support for Research Faculty
- Research Maintenance for Sponsored Projects

EDUCATIONAL OPPORTUNITIES
Open House - Center for Integrative Genomics (CIG)
CIG offers a variety of phenotyping instrumentation for mice and rats including ultrasound imaging, rota-rod, calimetric cages, behavior screening and more. Come to our open house for a tour, meet the staff and learn about what we have to offer. No pre-registration necessary. For more information, contact Janet Hoff at (jhlvt@umich.edu) or 734-615-6906.
Dates: (All Thursdays)
August 27, 2009
September 24, 2009
October 29, 2009
Time: 10:00 - 11:00 AM
Location: 7623 Med Sci II

GRADUATE AND POSTDOC STUDIES
Graduate Student Awards Ceremony and Ice Cream Social
Thursday, September 24, 2009
3:00 - 4:30 PM
MSRB III / Med Sci II Courtyard (In case of rain: 2955 Taubman Medical Library-GAPS Conference Room/Lounge)
The Graduate Student Council (GSC) cordially invites you to the Graduate Student Awards Ceremony and Ice Cream Social. The Graduate Student Awards for Excellence in (1) Research and (2) Teaching and Service will be presented. Please contact PIBS at 734-647-7005 for further information.

FUNDING/AWARD OPPORTUNITIES
Funding opportunities listed below are for external limited submissions and/or opportunities within the University of Michigan only. To search for other funding and recognition opportunities, visit (http://www.med.umich.edu/medschool/research/support/funding.htm). This webpage contains a link to M-Quest (a database of opportunities for grants, honors, prizes and fellowships created and maintained by the Office of Research) as well as information on email alert groups.

External Limited Submissions
These are opportunities in which the sponsor has limited the number of proposals allowed from an institution. These competitions require an internal review to select the proposals to submit to the sponsor from the University of Michigan.

Abstracts listed here are general information about these funding programs. We strongly urge interested applicants to visit the listed website to verify complete eligibility, program information, and application procedures before submitting an application.

Hartwell Foundation Postdoctoral Fellowship Internal Deadline: September 10, 2009
Each year The Hartwell Foundation announces its selection of the Top Ten Centers of Biomedical Research in the United States, inviting each center to participate in nominating individuals for a Hartwell Individual Biomedical Research Award. The University of Michigan is one of the 10 invitees.

Research institutions that fully participate in The Hartwell Foundation nomination process will receive a
Hartwell Fellowship for two years at $50,000 direct cost per year to fund one postdoctoral candidate of their choice in areas of biomedical science, consistent with Fundable Projects as described for the Individual Biomedical Research Award (see below). It is the intent of The Hartwell Foundation to support scientists in the early stages of biomedical research careers by enabling them to pursue further specialized training as part of their career development.

**Fundable Projects:**
Participating institutions agree to utilize an effective means to call for proposals from appropriate areas of basic and applied life sciences, principally limited to medicine and biomedical engineering, and consistent with the values of The Hartwell Foundation. Proposals should reflect relevance in terms of potential benefits to children. The Foundation will only consider proposals in biomedical research. The Foundation will not consider for example, research in social science, psychology, ecology, environmental impacts, anthropology, or botany.

The following rules apply to the Hartwell Fellowship:
- Hartwell Fellows must be citizens of the United States.
- Funds may be used for salary, health insurance, or travel related to a scientific meeting, but not for the purchase of supplies or equipment or other fringe benefits.
- No part of the Fellowship may cover institutional overhead or other indirect costs, nor should the recipient or the sponsoring research laboratory be obligated or penalized to pay by substitution such indirect costs by any other means.
- At the conclusion of funding, the Hartwell Fellow should submit a summary of the impact that the award had on their career goals.

UM is allowed to put forth one nominee for the postdoctoral fellowship. The name of the nominee is due to the Foundation by November 2, 2009. For consideration as the institutional nominee, submit the following electronically in a single PDF document by **September 10, 2009** to (limitedsubmissions@umich.edu): a 3-page research plan, a NIH formatted biosketch, and a nominating letter from the current mentor. Consistent with the spirit of the Hartwell Foundation, the research plan should describe how the work will benefit children, have translational impacts, and make a difference in the field. We acknowledge receipt of all electronic submissions. If you do not receive a response from us by the end of the next business day, please call us at 734-763-4086. Contact Kathryn Ridner at 734-763-4086 or (kridner@umich.edu) with any questions.

**Internal Submissions**

**MICHR Pilot and Collaborative Grant Program in Clinical and Translational Research**

**Letter of Intent Deadline: August 17, 2009 (5:00 PM)**

**Application Deadline: September 1, 2009**

As part of the Clinical and Translational Sciences Award (CTSA), the Medical School, Faculty Group Practice, Health System, and many University departments, Schools, Centers, and Institutes, have partnered with MICHR to announce Round Seven of the Pilot Grant Program. The goal of this RFA is to facilitate and support clinical translational research in its many forms and to encourage interdisciplinary collaboration.

Proposals are sought from basic, clinical and social scientists for bench to bedside, bedside to practice, practice to interventions, and dissemination to policy research, to promote development of transformative solutions for improving patient outcomes. All faculty and post-doctoral trainees at UM are eligible to apply as Principal Investigators. Basic scientists are encouraged to submit their application with a clinical scientist collaborator.

- Special Focus RFAs supporting the CTSA vision requested for this round include “Community-University Research Partnerships,” “Research Ethics” and “Research Into Practice.”

**New Requirement** – A letter of intent to submit a proposal is required for this round of the Pilot Grant Program. An email containing the following information should be sent to (ctsaPilot@umich.edu) by 5:00 PM on Monday, August 17, 2009:

- Principal Investigator
- Pls Department (School or College)
- Co-PIs and Co-Is
- Co-PIs and Co-Is Departments (School or College)
- Title of proposal
- Dollar amount requested
- Brief summary of the project

For more details regarding the Pilot Grant Program, descriptions of grant mechanisms and application instructions, visit (http://www.michr.umich.edu/programs/pilot-grant.html). For questions, contact Carol Van Huysen, MICHR Pilot Program Manager (734-998-6885 or cvanh@umich.edu).

**UM Genetics and Genomics Pilot Feasibility Program**

**Deadline: September 9, 2009**

The purpose of this Pilot Feasibility Program, co-sponsored by the Endowment for the Basic Sciences and the Center for Genetics in Health and Medicine, is to encourage proposals that foster new collaborations on campus between members of the UM faculty from distinct disciplines to focus their combined research strengths on cutting-edge questions in genetics and genomics. In addition, we seek to provide supporting funds for new research projects that utilize high throughput genetic analysis tools including DNA sequencing, an Illumina Bead Station 500GX, an Illumina 1G Genome Analyzer (formerly Solexa), a Roche 454-FLX Genome Sequencer and array scanning technology. Awards are for one year and will not exceed $30,000. For more information, visit (http://www.cghm.med.umich.edu/pilot).

**Deadline Watch**
UMMS AWARDED GRANTS

The list of UMMS awarded grants will continue in the next issue of Biomedical News.

UMMS RESEARCH PUBLICATIONS

Biological Chemistry


Düser MG, Zarraibi N, Cipriano DJ, Ernst S, Glick GD, Dunn SD, Börsch M. 36 degrees step size of proton-driven c-ring rotation in F(o)F(1)-ATP synthase. EMBO J. 2009 Jul 30 (Epub ahead of print).


Family Medicine


Human Genetics


Internal Medicine

Infectious Diseases:


Microbiology and Immunology


Molecular & Integrative Physiology


Pediadtrics & Communicable Diseases


Biomedi...