

MUCI is a collaborative effort to complement and enhance technology transfer activities at Michigan research institutions.

September 2005

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Please feel free to forward or otherwise distribute the *MUCI Newsletter* to interested parties.

Welcome back to the MUCI Newsletter! I am very pleased to be in a position to bring you updates on the Michigan life sciences landscape in general and MUCI Challenge Fund recipients in particular. As you may recall, MUCI was originally scheduled to end in July 2005 following a four-year effort to build collaborative tech transfer efforts around the state. **Thanks to some timely additional funding from MEDC, however, we will continue supporting Michigan research institutions' life science commercialization processes for another year.**

We have further good news to announce. As you may know, MUCI Challenge Fund awards require that the recipient institution repay the grant three-fold if and when the technology in question begins to bring in an income – through license fees, for instance. While that may sound like a heavy burden, keep in mind that repayments to the Challenge Fund only occur once the research institution is earning an income from the technology and even then it's limited to annual payments of 20% of that income. Given the long timeframe for life sciences technology development and the fact that not all funded technologies can be expected to bring in income we can't exactly expect an avalanche of money! However, **we have received our first returns to the MUCI Challenge Fund.** Three University of Michigan licenses have resulted in payments totaling \$17,400 – not a huge sum perhaps, but enough to help another promising technology move forward on the path to commercialization!

Sincerely,

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MUCI Challenge Fund

RFP Deadlines: Note the Change

November 10, 2005

March 10, 2006

MAY 2005 MUCI Challenge Fund Awards

Project Title	Amount	Institution
Business Planning for Conductimetric Biosensor	\$52,200	Michigan State University
Commercialization of MIIPS Box Technology	\$38,000	Michigan State University
Biosensor Array Incorporating Nanostructured Biomimetic Interfaces	\$40,000	Michigan State University
Glucometer-based Detection of Pseudomonas in Fluids Including Blood	\$45,000	University of Michigan
Development of DNA and peptide microarrays, in situ synthesized on open surfaces with chemical focusing and projection lithography	\$40,500	University of Michigan
Phase 2 Advancements of an Embolic Device for the Treatment of Intracranial Aneurysms	\$42,750	University of Michigan
Peer-to-Peer Policy Driven Storage for Medical Records, Imaging, and Data	\$25,000	University of Michigan

FEATURE ARTICLE

What's new in Kalamazoo? Quite a bit!

Kalamazoo figured prominently in the **Michigan Tri-Technology Competition (MTTC)** with awards going to 3 of the Southwest Michigan First Innovation Center's tenants:

- NephRx Corporation (\$665,110 for the Advancement of AMG-18 for treatment of Mucositis)
- ProNAi Therapeutics, Inc. (\$1,735,520, for the development of DNAi, a new cancer therapeutic technology)
- zuSyn, Inc. (\$403,330, for the development of new therapeutic leads through Chemoselective Sugar Ligation to correct vision problems)

A fourth award went to Western Michigan University's Center for Excellence for Simulation Research (\$2.79 million). Southwest Michigan First board chair, William D. Johnston, president of Greenleaf Companies noted: "Individually, these awards speak to the caliber of scientific talent that is based in our community. Collectively, they demonstrate Kalamazoo's capacity for cutting edge scientific discovery on a global scale."

Southwest Michigan First has established a venture capital fund intended to develop biotech, pharmaceutical and medical device companies in the region. Patrick G. Morand brings 15 years of life sciences executive management experience to his position as manager-director of the fund. The fundraising goal is \$50 million. More at www.southwestmichiganfirst.com.

At the **Innovation Center**, the Southwest Michigan First **Venture Tuesday** program continues but it has expanded beyond company presentations to include broader topics of interest such as exit strategies and angel investing. The format is intended to leverage relationships, including university-industry contacts, that will help foster business development. Recent presentations included the Purdue Research Foundation, and the Van Andel Institute expansion plans (plus 2 of VAI's own technologies!). Future plans include such events as "Nanotech Day" and "Medical Device Day." For more information contact Director Gail Lindsey at 269-553-9488 or glindsey@southwestmichiganfirst.com. Ms. Lindsey invites technology transfer personnel and investigators -- including those dealing with very early stage projects -- to consider this forum as "an apprentice program for entrepreneurs to 'cut their teeth' before investors, business development experts, and scientific and management talent..." They will get valuable experience and feedback. Venture Tuesdays -- it's not just for companies ready for venture capital investments!

The next Venture Tuesday program will be October 4, from 9 am to noon, at the Radisson Plaza Hotel, Arcadia Ballroom, 100 West Michigan Avenue, Kalamazoo. Keynote speaker, Bryant Zanko, Vice President of Business Development with Stryker Corporation, will be discussing "The Future of Medical Devices." There will be a panel discussion on "MedTech Investment Strategies" and Accuri Instruments (a University of Michigan start-up company with technology previously supported by a MUCI Challenge Fund grant!) will be presenting.

Also upcoming at the Southwest Michigan First Innovation Center is the **Blue Granite Workshop** series:

- Corporate Metrics (9/29 and again on 12/22)
- Innovation Management (10/27)
- Sales Management (11/22)

Visit the Innovation Center's website for the schedule of events, more details, and a description of their extensive facilities and support services: www.kazoosmic.com.

Over at **Western Michigan University**, technology transfer is major topic! Michael Sharer is the new WMU Director, Technology Transfer and Licensing/Commercialization. He is offering a series of Intellectual Property seminars to various WMU departments during September and October. In addition, the "WMU Research to Commercialization Seminar" will inaugurate a new seminar series sponsored by WMU's Office of the Vice President for Research, the Biosciences Research & Commercialization Center, Legislative Affairs, Innovation Center, Research Foundation and Office of the President. These will focus on examples of research with commercialization potential, and provide networking opportunities for scientists and engineers at WMU and in the region interested in collaborations. Dr. David Humes will talk about *Development of the Bioartificial Kidney* on Wednesday, October 19, 3:30-5:00 pm, at the Fetzer Center.

Last, but not least, there is the Western Michigan University's **Biosciences Research & Commercialization Center (BRCC)** where Jack Luderer has been named Executive Director. BRCC is a commercially focused translational research center that supports new life sciences ventures with its facilities and equipment, research and consulting services, and gap funding. The following is drawn from the BRCC website: www.wmich.edu/brcc/.

- **BioLaunch Pharmaceutical Development Services**
 - Contract research group providing services from discovery to early Phase II clinical trials.
 - Able to leverage the resources of the BRCC, WMU and affiliated scientific and research organizations; staffed by industry-trained pharmaceutical research scientists and commercialization experts.
 - Negotiable fee structure.
- **Startup and Gap Funding Assistance**
 - For promising new ventures or individual scientists.
 - Review process managed by the Western Michigan University Research Foundation, using independent third-party scientific evaluators.
 - Assistance finding additional venture capital funding through Southwest Michigan First.
- **Facilities, Equipment and Consulting**
 - A range of services from scientific assistance, use of laboratory facilities, intellectual property consulting, to the purchase of pharmaceutical services, help with FDA regulatory issues, clinical testing and referrals.

Incubation News

TechTown, Detroit

Contact: 313-586-9501, info@techtownwsu.org, www.techtownwsu.org

TechTown has celebrated its first anniversary! Refurbishment of the 12-block research and technology park continues. TechOne, the first business incubator building, was already housing 10 companies: Academic Computing, Asterand, Bioko, ecuPlan Software, Great Lakes Angels, IC Datacom, Neocutis, Neurorecovery, and USA Skills. Since the anniversary celebrations 5 more tenants have been announced: Alternative Power supply, BioVant Systems, MHR Group, Model D Media, and SimGroup.

West Michigan Science and Technology Initiative (WMSTI), Grand Rapids

Contact: Matt Dugener, 616-331-5848, dugenerm@gvsu.edu, www.wmsti.org

Clients companies include Avalon Laboratories, Elkins Innovations, INFORMD, Inc., and Soy Ultima. WMSTI celebrated the graduation of their first incubator company, Sordal Incorporated, a NASA patent licensee developing non-flammable materials to improve safety.

Innovation Center, Southwest Michigan First, Kalamazoo

Contact Sandra Cochrane at 269-372-4091, www.kazoosmic.com

See the featured article in this edition of the MUCI Newsletter.

BioBusiness Incubator of Michigan (BBIM), Lansing

Contact: Mark Stowers, 517-337-3181, Stowers@mbi.org, www.mbi.org

The Bio-Business Incubator of Michigan is an independent subsidiary of MBI International, and it is the only incubator in the State of Michigan that specializes in serving the biotechnology sector. BBIM offers to its start-up biotech firm tenants access to R&D expertise, access to equipment and offices/laboratory space, links to marketing, and shared support services & resources. The latter include assistance with regulatory approval processes, an interim CEO, business planning, business plan development, grant writing, finance, accounting, human resources, corporate filings, secretarial support, laboratory and technical support.

Member Institution and Affiliate News

Assay Designs, the Ann Arbor-based biotech-company received its first venture round. The \$5 million Series A equity investment from Ampersand Ventures of Wellesley, Mass. They also named a new president and CEO: Gustavo Salem, previously of Bio-Rad Laboratories and PerSeptive Biosystems, among others. Founded in 1992, Assay Designs develops and manufactures immunoassay kits, luminescent reagents, antibodies and proteins for the life sciences research market. Assay Designs co-founder **Russell Hart** serves on the MUCI governing committee, the Intellectual Property Commercialization Committee (IPCC); he will continue as Assay Designs' chief scientific officer.

Central Michigan University is expanding its research and entrepreneurship opportunities. They have seen an increase in research money and patents files, and are a part of U-TEAMED, the collaborative effort between Central, Eastern, Oakland and Michigan Tech Universities to promote patenting and commercialization as well as collaboration with industrial partners. The CMU Research Corporation (CMURC) is adding 17,000 square feet of wet lab space to its incubator facility (the Center for Applied Research and Technology – CART) for use by Dendritic NanoTechnologies, Inc. So dendrimer research continues in Mount Pleasant following the successful International Dendrimer Symposium held there last May.

Core Technology Alliance (CTA), another collaboration by MUCI members Michigan State University, the University of Michigan, Wayne State University and the Van Andel Research Institute, appointed an Executive Director. M. Walid Qorofleh, Ph.D., MBA has extensive experience in the life sciences industry and the drug discovery and development process.

CyberMichigan.org is the new name of cyberState.org, the nonprofit organization dedicated to helping Michigan lead in developing and using technology. **Karen Bantel**, President of cyberMichigan.org, serves on the MUCI Incubation Planning Committee.

MEDC has won a national award for “best practices in regional economic incentives” for its SmartZone initiative from the US Small Business Administration Office of Advocacy. In other MEDC news, following the departure of Ken Paulus, **Cindy Douglas**, Vice President, Business Development, will join the MUCI governing committee, the Intellectual Property Commercialization Committee (IPCC).

Michigan State University is joining with Lansing Community College and the cities of Lansing and East Lansing to form the Lansing Regional SmartZone. They will use MBI International as an initial incubator to support MSU spin-off companies and other area tech ventures. Over a period of three to five years, a new Technology Incubator will be developed in downtown East Lansing.

In April, the **University of Michigan** announced the creation of the Michigan Nanotechnology Institute for Medicine and the Biological Sciences. The institute will be funded by the National Institutes of Health and headed by Dr. James Baker. More recently, the University of Michigan also announced the establishment of an interdisciplinary center for stem cell biology. For more information visit www.lsi.umich.edu/institute/.

The **Van Andel Research Institute** announced 2006-2008 plans for a \$120 to \$140 million expansion that will add 280,000 square feet and create several hundred new research and support jobs. New space in Grand Rapids will house masters and doctoral courses in cellular and molecular biology and allow VARI to expand into new research areas, including Parkinson's and Alzheimer's diseases.

Wayne State University announced at their Entrepreneur Day in April a New Ventures Investors' Circle that will make seed and pre-seen investments in companies associated with Wayne State. The fund will make investments of up to \$250,000.

Western Michigan University announced the appointment of **Jack Luderer** as Executive Director of WMU's Biosciences Research and Commercialization Center. Dr. Luderer will continue to serve on the MUCI Challenge Fund Committee as well as the IPCC. More on WMU and the BRCC in the feature article in this edition of the MUCI Newsletter.

Challenge Fund Recipient Updates

In general university start-ups "hold their own" in terms of commercialization of early-stage inventions relative to established firms – this according to a forthcoming study in the journal *Management Science* by business school researchers at the University of Michigan and Carnegie Mellon University. Here are a few notes on what you might call "MUCI Graduates." These university start-up companies have licensed technologies from MUCI member institutions, technologies that received some early support from the MUCI Challenge Fund. While MUCI gap funding was only part of a larger package of university support put together by hard working tech transfer offices, we like to keep tabs on how these technologies have continued to develop and thrive.

Velcura Therapeutics, Inc.

There are several Velcura items of note. CEO and founder Michael Long presented at the Windhover Information's Start-Up Forum 2005 in Boston last May. He also made a presentation at the Kalamazoo Venture Tuesday last May. Velcura announced that it has a licensing agreement with Nippon Chemiphar Co. Ltd., a Japanese pharmaceutical company. And Velcura received a \$1.3 million Phase II Small Business Innovation Research grant from the National Institute on Aging, part of the National Institutes of Health. This follows a previous Phase I grant of \$224,000 in 2003 for similar work. The Ann Arbor company is developing a drug that can be taken as a pill that both stimulates bone formation and inhibits bone loss aimed at the treatment of osteoporosis and other bone-loss disorders. The drug is expected to enter clinical trials in early 2006.

Xoron Technologies, Inc.

Xoran, which designs and sells compact, high quality CT scanners for on-site use by medical specialists, has been honored by the State of Michigan with the prestigious "Innovator's Award" and named One of the "50 Companies to Watch in Michigan." The award was presented at the Kellogg Center in East Lansing in April as part of the first annual "Michigan Celebrates Small Business" event, sponsored by the Edward Lowe Foundation. Founder and Vice-President, Neil Clinthorne was also a finalist in the Governor's University Awards for Commercialization Excellence (U-ACE). Xoran Technologies, a University of Michigan start-up, has created 31 jobs, seven in Michigan, with an average annual wage of more than \$75,000.

NueroNexus Technologies

NueroNexus, a UM spinout company formed in 2004, develops microelectrode arrays for neural recording, stimulation, and drug delivery. They participated in the poster session of the March 2005 5th Annual Emerging Industry Symposium: *The Business Reality of Micro and Nano Technologies*, presented by the University of Michigan Office of Technology Transfer, the Zell Lurie Institute for Entrepreneurial Studies, and the Michigan Small Tech Association (MISTA).

Accuri Instruments

Accuri, which makes a cytometer used to measure the properties of cells, microbes or other particles by analyzing the light reflected when the objects are illuminated in a fluid by a laser, was the runner-up in the GLEQ 2005 Spring Emerging Company path and won \$12,500 as well as two hours of legal services and two hours of financial, accounting and website consulting. Accuri Instruments was one of 32 companies showcased at the 2005 Michigan Growth Capital Symposium in June 2005 and will present at September's Kalamazoo Venture Tuesday.

Rapid BioSense

East Lansing-based Rapid BioSense will manufacture and market a highly sensitive rapid biosensor to detect bacteria and viruses in a liquid sample; this will have a wide variety of human diagnostic, food safety, bio-defense, and environmental applications. The MSU spin-off company won first place in the GLEQ 2005 Spring New Business Idea path and received \$2,500.

BioPhotonics Solutions Inc.

The Dantus Research Group's MIIPS pulse shaping technology, which received a MUCI grant in May 2005, was chosen by the NSF to be showcased as a Major Scientific Impact development at the 2005 ACS meeting in Washington. BioPhotonics will also be presenting at the Pacificchem conference in Honolulu in December 2005. The group also published "Multidimensional analytical method based on binary phase shaping of femtosecond pulses" in the Journal of Physical Chemistry this year.

GlyTag LLC

GlyTag, a Wayne State spin-off company founded in 2004, focuses on heparin-binding domain targeting technology. They were one of only 16 emerging companies selected to present at the 3rd annual BioPartnering North American conference in Vancouver in February of this year.

Neural Interventions Technologies, Inc.

NIT, founded in 2003 with its acquisition of technology from the University of Michigan and Arizona State University, has also been busy. They presented at two Medtech Insight events: the 14th “Investment in Innovation: A Preview of Early-Stage Medical Technology Companies” in San Francisco and the “In Circulation: Strategic Partnering and Investing in Circulatory Medicine” in Chicago. Also on the calendar were the 3 Rivers Venture Fair and the Windhover’s Convergence: The Drug/Device Summit, both in Pittsburgh. The NIT website now includes some Quicktime videos to explain their ALGETL-I and ALGETL-II treatments for hemorrhagic stroke. NIT was a finalist in the Michigan Tri-Technology Competition (MTTC) winning \$2,533,681.

RiboNovix, Inc.

RiboNovix, another Wayne State spin-off company, has updated its website to show more of their technology and the market for anti-infectives.

SynerEdge, Inc.

Launched this year, SynerEdge is the newest University of Michigan spin-off company to have benefited from a MUCI grant. They deal with large-scale managed data mining.

MUCI’s collaborative efforts benefit greatly from the ongoing contributions of the following organizations and individuals:

Arboretum Ventures

Assay Designs

CyberMichigan.org

MichBio

Michigan Economic Development Corporation

Neogen Corporation

Pfizer Global Research & Development

Proteomic Research Services, Inc.

Regulatory Affairs Associates

Trillium Ventures

Tim Petersen

Russell Hart

Karen Bantel

Michael Witt

Cindy Douglas, Roselyn Zator

Paul Satoh

Abhijit (Jit) Banerjee, Ed Pagani

Mike Pisano

Steve Goldner

Tom Porter

Upcoming Events

Event Calendars

If you would like to suggest an addition, or if there is a specific event you would like to market in greater detail, please contact the MUCI Business Administrator at tbissell@umich.edu.

[Southwest Michigan First Innovation Center Events](#)

[Central Michigan University Research Corporation](#)

[MEDC \(Michigan Economic Development Corporation\)](#)

[TX3, MEDC's Technology Tri-Corridor e-Newsletter](#)

[MichBio Events](#)

[Ann Arbor IT Zone Calendar](#)

[The Glance](#)

Special Events

SBIR/STTR Grants Workshop: From Strategy to Tactical Implementation – offered by Biotechnology Business Consultants (BBC)

- **October 5-6**, 9 am to 4 pm each day
- Kellogg Center, Michigan State University, East Lansing
- To register online visit the BBC website: www.bioconsultants.com
- For more information: info@bioconsultants.com
- Cost for Michigan-based companies: \$125
- Note: attendance at this training session is a prerequisite for Michigan based companies to receive individual SBIR/STTR assistance under the MTTC Consulting Services Program.

A new 2-day Intensive Workshop format covers all aspects of writing SBIR/STTR grants focused on life science technologies. The workshop will cover all agencies (e.g., Department of Defense, National Science Foundation) but emphasize the National Institutes of Health (NIH).

For more information about BBC's Grant Development Assistance services offered under their MTTC Commercialization Consulting Services Program, contact [Julie Nagel](#).

MichBio Expo & Conference

- Friday, **September 29**, 2005; 8 am to 6 pm
- Cobo Exhibition and Conference Center, Detroit
- More information and registration at www.michbio.org/Expo/
- **Online registration ends Monday, September 26** (Member \$125 Non-Member \$175)
- Registration at the Door (MichBio Member \$150 Non-Member \$200)
- For more information email expo@michbio.org

Featuring:

Exhibit area with 50+ top life science companies, universities, organizations, & service providers
Over 40 expert speakers in the life science industry areas of research, manufacturing and finance
Specially designed panels in medical devices and pharmaceutical business

Keynote Presenters Include:

Valde Garcia, State Senator, State of Michigan

Lothar Krinke PhD, Senior Director BioSciences Technology Development, Medtronic, Inc.

Alan R. Saltiel PhD, Director and Research Professor, Life Sciences Institute

John Truscott, President, The John Truscott Group

Robert Ficano, Wayne County Executive, Wayne County Economic Development

Panel and Keynote Topics Include:

Intellectual Property - Issues and Impact on Drug Development

New Business Growth and Development of Life Science Companies

Applying Automotive Industry Technology to the Medical Devices Industry

Future Trends in the Pharmaceutical Industry: Outsourcing and In-licensing

Fundraising and Current State of Entrepreneurial Activities in Michigan

Stem Cell Research: Science, Bioethics and the Political Debate in Michigan

