

Medical Main Street is the road ahead

Oakland County's Medical Main Street, located in Southeast Michigan, is an alliance of world-class hospitals, universities, medical device and biopharma companies that is helping shape the future of the life science industry in the United States.

Oakland County is the seventh wealthiest county in the nation and home to more than 700 foreign-owned firms from 34 countries. Medical Main Street is creating a centre of innovation in healthcare, research and development, education and commercialisation in the life sciences industry. This alliance is leveraging the resources and knowledge of metropolitan Detroit and Southeast Michigan to find the medical solutions of the future.

"We have some of the most innovative life sciences companies and healthcare institutions in the world concentrated in one area," said Oakland County Executive L Brooks Patterson, the top elected official. "Medical Main Street has world-class hospitals, drug development companies, medical device companies and manufacturers and universities, all within an hour's drive of each other. Couple that with over 4000 companies in this industry already working globally in healthcare, pharmaceuticals, biotech and medical devices, you'll see that Oakland County can compete with anywhere in the world."

Taking an early lead

Medical Main Street is less than a year old and is already making an impact. Companies have been awarded over \$500M a year in NIH and NSF funding. There are currently more than 30 academic



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research centres at Michigan universities focused on life sciences topics. Each year, more than 3000 patents are filed by Michigan companies, placing the state in the top ten regarding number of patents.

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Oakland County has a history of engineering some of the most technologically advanced consumer products in the world. Most innovative processes used today – lean manufacturing, product life cycle management and zero defects quality control – were born in the automotive industry. They have been introduced to other industries including aerospace and medical device design and manufacturing.

Patterson said the best practices of the

automobile research, design and manufacturing process are being applied to Medical Main Street. The county works diligently to help companies find new applications for their existing technologies. Linking doctors, engineers and life science companies to find medical solutions is one example. Life science inventions that came from the automotive industry include:

- Lung/breathing machine
- Cone-beam therapy for radiation
- Innovative heart stent coatings
- New composite materials for implants

"We have that high production, high quality, engineering expertise here in Metro Detroit," Patterson said. "Whether you manufacture pharmaceuticals, an antibody, a chemical, a prosthetic arm or a new imaging machine, Oakland County is where it should be developed."

Already home to many

Oakland County is the chosen location for several life science companies, including: *JHP Pharmaceuticals* – its only production facility in the world is in Oakland.

CARACO Pharmaceuticals – producers of generic drugs.

MicroBio Associates – a start-up company that has developed an organic wash to extend the life of fruits and vegetables.

Oxford BioMedical Research – delivers a number of assays and proteins to pharma companies around the world.

Molecular Innovations – makes testing kits and reagents for large pharma companies.

King Pharmaceuticals – has a production facility here.

Lumigen – part of Beckman Coulter, the world's largest supplier of chemiluminescent reagents to the clinical immunodiagnosics market.

Rockwell Medical Technologies – renal products and iron medications.

Somanetics – developer of devices that measure oxygen in the brain.

Delphi Medical Systems – develops home monitoring / telemedicine products.

Housey Pharmaceuticals – working in the area of cancer and diabetes research.

Ferndale Laboratories – developing topical medicines for skin disorders.



Oakland County has the third highest number of high-tech workers in the nation and twice the corporate R&D professionals compared to the national average. In 2006 Michigan colleges and universities granted over 2200 bachelors degrees, 297 masters degrees and 194 PhDs in biotechnology fields

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The Southwest Michigan Innovation Center is a 69,000 sq ft (6400 sq m) wet lab accelerator that provides incubator space to many of the Southwest Michigan First Life Science Fund's portfolio companies.

recent announcement: Redmond, Washington-based Micronics Inc plans to set up its headquarters and production, distribution and customer support operations in Kalamazoo for the medical devices it is developing for genetic testing. Other portfolio companies have spun out of research conducted at the Cleveland Clinic, University of Manitoba, Washington University at St Louis, University of Connecticut and elsewhere.”

The Fund is not bent on populating its

portfolio with one particular science or segment. Rather, it looks for diversity and science with commercial value, from lasers that shrink brain tumours to crop pesticides developed from spider venom, to drugs that help transplant recipients suppress organ rejection.

Kalamazoo counters trend

“Instead of looking for government hand-outs or waiting for the white knight to ride in and save us, Kalamazoo has chosen a

different tactic”, continues Kitchens. “The community has taken to heart the proverb: ‘If you give a man a fish, you feed him for a day. If you teach a man to fish, you feed him for a lifetime.’ But we’ve gone a step further and pledged to invest in the boat and the cannery and then to take the best fisherman and help him with his business plan. Our intent is for that fisherman to feed our entire community for a long time to come.”

More than financial support

Southwest Michigan First and the Fund’s Scientific Advisory Board (SAB) help the invested companies recruit executives, professionals and outside board members and align them with local service providers as they grow and develop. Members of the SAB include the former head of the NIH’s Vaccine Research Center, the head of R&D at Pharmacia, retired senior vice presidents and CSOs from Fortune 500 companies. This committed network offers support services in the areas of industry expertise, regulatory strategy, reimbursement planning, exit strategies and early stage business systems.

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Strategic location

Centrally located between Chicago, Toronto and Cleveland, Oakland County is strategically positioned for the entire Midwest market. The Michigan-Ontario border is the busiest US-Canada crossing in the country, making this area an ideal location to reach both the US and Canadian markets.

Ontario, less than an hour’s drive from Oakland County, generates some 40% of Canada’s total gross domestic product

Oakland County International Airport is one of the busiest corporate airports in the United States, with more than half a million passengers and pilots passing through each year.

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www.medicalmainstreet.org

AIAG and MichBio in collaborative partnership

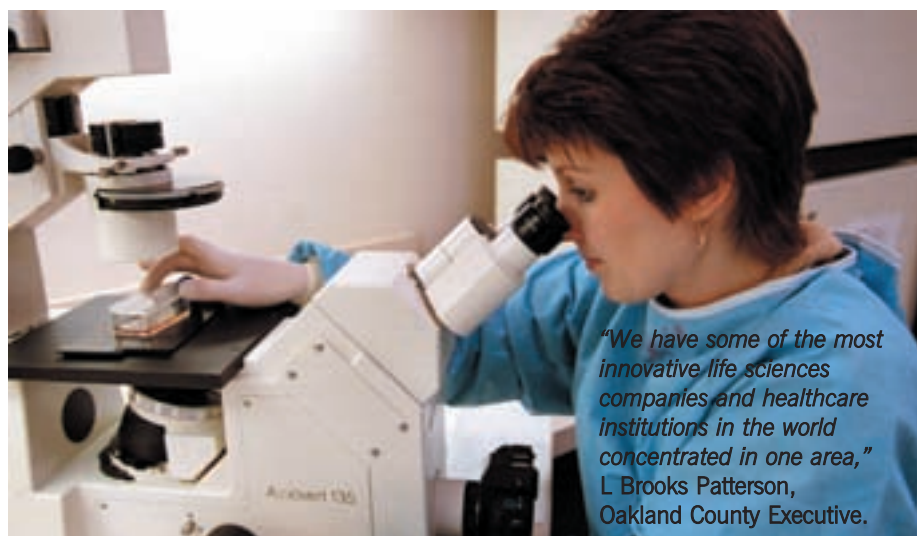
The Automotive Industry Action Group (AIAG) and Michigan Biosciences Industry Association (MichBio) have announced a collaborative partnership aimed at combining AIAG’s expertise in automotive manufacturing with MichBio’s medical device and bioscience industry know-how.

While the automotive market has been on a decline, the medical device industry is seeing growth. Medical device manufacturing is a complementary vertical for suppliers that have mastered strict quality certification systems in the automotive industry which can be readily applied in other manufacturing industries, according to MichBio.

“It is imperative that we collaborate with organisations like MichBio to help our members diversify as well as take best practices for quality improvement and apply them in other industries,” said J Scot Sharland, Executive Director, AIAG.

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