Support for Biomedical Entrepreneurship in Michigan

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3 short talks

Lucky career decisions
• Unexpected benefits of internships
• Entrepreneurship risks and rewards
• Science research to science entrepreneurship

State resources for your start up company
• Funding routes
• Educational and mentoring programs
• Early early stage vs late early stage

UM internship program?
• Interest?
• Important?
A latecomer to science

Advanced Levels
In arts (English Economics, Sociology)

BSc Biotechnology (University of Westminster)
Ltd lab experience = summer internships
1. St George’s Hospital (London)
   Cancer research
2. Pfizer (Kent)
   Fermentation

MSc Forensic Science (King’s College, London)
• GSK (Herts)
• Mass Spectrometry
At the same time....

After A levels I wrote a business plan to start my own business.

The business plan was then funded by the:
- Princes Youth Business Trust
- London Enterprise Agency
- Bank Loan

Why start a business when starting a university degree?
1 – I could work my own hours.
2 – I could earn more per hour.

WRONG!!

CORRECT!!
Moving back into academia

**Industry glass ceiling**
- Need a PhD to progress in the pharma industry
- Feedback from industry colleagues
- Huntingdon Life Sciences

**GlaxoSmithKline Industrial PhD Studentship (1998-2001)**
- Dame Professor Carol Robinson
- University of Oxford

- Post doc at University of Cambridge (2001-2004)

- Independent researcher with Beit Fellowship (2005)

- Elected as a fellow of Christ’s College Cambridge (2006)
R&D vs Commercialisation

Industry ‘contamination’
- ‘But what is it for?’
- Knowledge gap between discovery and product

MBA in the Translation of Academic Research
- Judge Business School, University of Cambridge
- Center of Cambridge science cluster
- Common challenge in academic research

Move to US
UM – Research Translation Specialist
- MICH/MCRU
- http://www.michr.umich.edu
MI - The Entrepreneurial State

MEDC Entrepreneurship and Innovation
• $25M p/a to de-risk early stage tech companies
• Companies, service providers, funding bodies
• Overview of State funding and resources for early stage start ups

• Ranked #1 for States that recovered most from the Great Recession¹
• Ranked #3 in high tech job growth²
• Ranked #6 for fastest growing economy³
• 10 years: 15x increase in VC deal flow, $1bn in 30 MI VC funds

1. 24/7 Wall Street
2. Site selection (2013)
First port of call – SBDC Tech Team

Small Business Development Centre (SBDC)
www.sbdcmichigan.org

Tech Team
• Advice - Expertise in a range of fields
• Resources – raising capital, entrepreneur workshops, pitch perfection etc
• Will help you to advance your company **efficiently**
• Statewide, can arrange to meet locally for coffee
• Alain Piette (**piettea@gvsu.edu**) and Phil Tepley (**tepleyp@gvsu.edu**)  

Financing for Advanced Tech Companies

Small Business startup guide

Workshops
https://clients.sbdcmichigan.org/events.aspx
Business Accelerator Fund

http://www.sbdcmichigan.org/baf

Up to $50,000 to cover accelerator services

- Grant – legal, marketing, website devt etc.
- Usually multiple engagements as the company grows (<$10,000)
- Competitive review process
- >$15,000 in a single engagement carries a 10% fee

Administered by SBDC on behalf of MEDC

- Local SmartZone is Ann Arbor SPARK – http://www.annarborusa.org
- Ben Harrington (BAF) - Ben@annarborusa.org
- Mike Flanagan (Statewide)- Mike@annarborusa.org
University Commercialization Fund

http://investmichigan.org/investment-funds

Up to $50,000 to develop University Tech for commercialization

- Funding goes to research lab/company
- A 100% cash match is required
- Technology Readiness Level (TRL) 3+
- Application Deadlines are March and Sept
- info@investmichigan.org

- Run by Charlie Moret charlie@investmichigan.org
- Applications submitted through the OTT
- Cos that have been granted an option on a University tech can also apply
Michigan Corporate Relations Network (MCRN)

http://michigancrn.org

SCIP/TCA (Small Co. Innovation Program / Tech. and Commercialization Assistance):

• Funds company related research at any of the MI universities (1 year or less)
• Accelerate product development and growth
• Connections and $40,000 grant (matching funds)
• Universities waive their indirect cost = big savings to the company.
• http://michigancrn.org/scip/index.php

• Small Company Internship Award Program (SCIA)
• Small companies can hire U. student interns
• Targets STEM businesses
• 12 week, matched funding
• http://michigancrn.org/scia/index.php

KristinBurgand (burgardk@umich.edu) and Gionavi Ortiz (giovanio@umich.edu)
Several Incubators/Accelerators

Some Egs

TechArb Student Incubator
- Free support eg legal/design
- Funding and learning opportunities
- Mentoring (here and Bay Area)
- Space in downtown AA
- [http://cfe.umich.edu/2015/09/02/techarb-student-incubator](http://cfe.umich.edu/2015/09/02/techarb-student-incubator)

Desai Accelerator
- Open to anyone with a software business idea
- Space in downtown AA
- Investments of up to $25,000
- Free programs to accelerate the transition from an idea to business
- Run by Kelly LaPierre  [klapierr@umich.edu](mailto:klapierr@umich.edu)
- [desaiaccelerator.umich.edu](http://desaiaccelerator.umich.edu)

• Collaboration btn ZLI Ross BS and UM CfE
Michigan Pre-Seed Fund 2.0

$10M MEDC funding

Business Start Up

- University labs
- Proof of Concept
- Prototype Development
- Product/Process Development
- Business build out

Up to $500,000:
- Loan or equity (no grants)
- Matched $s needed
- Will match investor terms
- Use SBDC to prepare

Just going through this process will strengthen your business plan!

Contact Charlie Moret
charlie@investmichigan.org

Website
www.michiganpreseed.info
Emerging Technologies Fund

http://www.mietf.org

Provides matching $s for Federal awards:
• Small Business Innovation Research (SBIR)
• Small Business Technology Transfer Research (STTR)
• Up to $25,000 for Phase I
• Up to $125,000 for phase II

Increases success rate of SBIR/STTR awards
• Must obtain supporting letter BEFORE submitting SBIR/STTR
• Can be applied to commercialization activity

Support for writing SBIR/STTR
• SBDC – free review and editing service
• BBC http://www.bbcetc.com/capabilities/training

SRI – support for start up clinical research needs
• Clinical research support for start up scientific companies
First Customer Program (FCP)

46%* of startup failures are caused by lack of knowledge in:

- Extensive market report including competitive analyses, identifying new customer markets etc.
- FREE
- Includes a plan to address weaknesses in the sales strategy
- $25,000 matching funds to address weaknesses

Impacts
- Helped raise $5.6M in additional client funding
- Retained 228 jobs
- Created 63 individual IP cases.

Contact Grace Hsai hsgracie@umich.edu  Website www.irlee.umich.edu
Feedback on common pitfalls from these organisations:

• Failing to understand how the potential investor works or their investment field
• Failing to understand what is important for this first pitch
• Not doing homework/not even looking at investor website/ not asking questions
• Lack of concern/respect for partners
• Insufficient customer validation
• Dismissing competition whether direct or indirect
• Failure to articulate a compelling value proposition
• Lacking a clear business model
• Unable to articulate a clear go to market approach
• Pitching one item, technology
MI Entrepreneurship Events

Fall/winter
Annual Collaboration for Entrepreneurship (ACE)
Networking, pitches etc
http://ace-event.org

Entrepalooza Symposium
Premier UM entrepreneurship event
http://entrepalooza.umich.edu/

Accelerate Michigan
• $1M in cash prizes, largest business plan competition in the world.
• http://www.acceleratemichigan.com/#accelerate-michigan

Summer
Mi-QUEST Business Plan Competition and Entrepreneur Connect (GLEQ Business Plan Competition)
• $25,000 top prize
• http://gleq.org/gleq.nsf/index.html

Michigan Growth Capital Symposium
• Venture/funding event
• Pitched from Michigan and now neighbouring states
• Investors from around the world
• http://www.michigan-gcs.com
UM Internship Program???

What is the need (SCIA)?
• Start-ups rarely have the matching $s

Benefits of early stage Internships
• Commercialization of your own/PIs research – need early stage experience
• Strategic networking – employment after graduation
• Widen opportunities – strategic company placement for U. R&D benefits
• Academic career – differentiating factor for applications

Already expressed an interest:
• De Novo Sciences
• Armune BioScience
• PS 2.0
• SBDC
• SPARK
• Endeavour

What is important to you?
• Is there any interest in entrepreneurial internships? PhDs/PDs/UGs?
• Time/money/location/field
• Join a start up/found a start up/ spin out PIs research
• Preferred structure eg semester/vacation/weekend
Thank you!

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