

Learning through lawyer jokes: Innovation and Entrepreneurship at MSU

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### MISSISSIPPI STATE

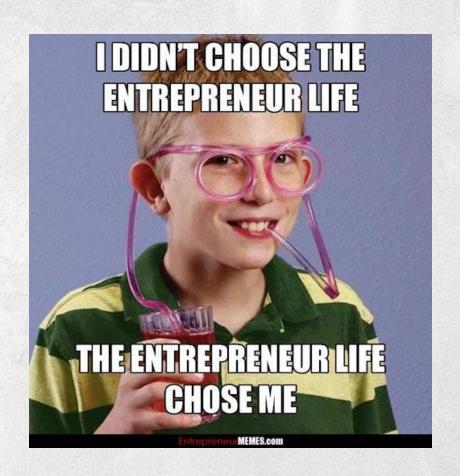
### Overview

- Introductions
- Services
- LawyerJokes/Questions



By: Brian Jackson

# Introductions- Eric, E-Center





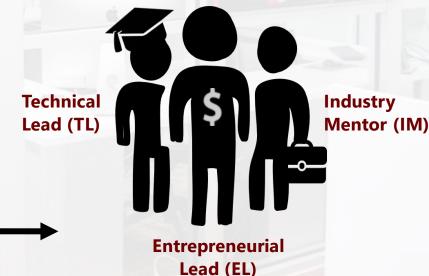


### **NSF I-Corps at MSU**



### **Specialized Program for Faculty & Grad Students**

- \$3k micro-grant to determine if technology has market potential
- Pathway to up to \$2M in 0% equity funding for exploring market potential for advanced technology
- Entire team gains NSF grant lineage







CTATI

### MSU VentureCatalyst™

Structured program from idea to funded company.



#### **FUND**

Up to \$7,500 in capital to identify customers and build prototypes



Three training courses on business essentials taught by entrepreneurs



Meet with executives one-on-one and learn from successful alumni





CTATI

### MSU VentureCatalyst™ Fund

Up to \$7,500 in startup capital at 0% equity.

(1)

\$500

2

Up to **\$2,000** 

3

Up to **\$5,000** 

#### **PREP**

- Students and recent grads
- Founded a company that has:
   a) Revenue exceeding \$25k
   or b) Raised more than \$75k

#### **ECAB**

Mix of execs and researchers

 a) Founder or exec of a
 company with more than
 \$1M in sales or investment
 or b) Active researcher in
 entrepreneurship

#### IRC

- Experienced entrepreneurs who founded venture-backed companies
  - a) \$5M+ sales or capital raised

Rev 4.2



### Funding vs. TRL

Res. Grants	NSF ICorps	NSF PFI	SBIR/ STTR	Friend / Fam	MSU Ven. Cat	Crowd fundin g	Angel	VC	TRL
									9. Actual system proven through successful mission operations.
									8. Actual system completed and qualified through test and demonstration.
									7. System prototype demonstration in an operational environment.
			Phase 2						6. System/subsystem model or prototype de monstration in a relevant environment
			Phase 2						5. Component and/or breadboard validation in relevant environment
			Phase 2						4. Component and/or breadboard validation in laboratory environment
			Phase 1						3. Analytical and experimental critical function and/or characteristic proof of concept
			Phase 1						2. Technology concept and/or application formulated
									1. Basic principles observed and reported
	\$50k	\$200- 750k	< \$1.5M	< \$100k	\$7.5k	< \$1M	< \$1M	> \$10M	

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### A note about angel deals

- <\$1M Investment, (typical \$100-300k)</li>
- Goal: 10x returns in 3-5 years
  - E.g. \$100k in, want \$1M out.
- They need an exit out of your deal
- Typical deal is 3-8x earnings
- Invests in companies, not inventions.

# What goes into an investment?



	Round Up/Down	Way Up
COMPANY	Founders Ownership	High
Team	Intelligence	Very High
	Attracts Capital	Extreme
	Attracts Talent	Extreme
	Energy & Drive	Extreme
	Team Completeness	Two Founders
Track Record	Prior Startup	Low
	Prior Exit	Low
	Vision	Very High
	Focus	Very High
Location	Proximity to Tech Centers	Very High
PRODUCT	Level of Autonomy	High
	IP Ownership	Strong IP + More in the works
	State of Technology	Live 1.0
	Mobility	Extreme
	Design Focus	High
PROFIT	Market Type	New
	Market Size	100B+
	Global Application	Extreme
	Market Growth Pace	Very High
	Competition	Low
Traction & Growth	Traction	Very High
	Growth	Very High
	Organic	Very High
Revenue Drivers	Sales Process	Mostly offline / Some online
	Transaction Volume	High
	Revenue Upside	Very High
	Gross Margin	60%+
Macroeconomic Risks	Macro Risk	None
Other Risks	Legal/Reg. Risk	None
Monopoly Potential	Leadership	High
	Commoditization Risk	Low

# So, which do you choose?

- License to Existing Co.
  - Lower risk

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- Less uncertainty
- Minimum to no time commitment
- "Mailbox money"
- Often can open a longterm relationship for future inventions

- Start a Company
  - Much higher risk
  - Extreme uncertainty
  - 20-40+ hours of uncompensated time sweat equity
  - If successful, far more lucrative financial reward



## About that reward...

Let's say you patent an invention that results in a new product that could retail for \$200 and costs \$100 to make. The market is approximately 50,000 units per year.

- License to Existing Co.
  - OTM licenses it for 4% gross sales royalty.
  - You sign some papers and sit back.

- Start a Company
  - OTM licenses it to your startup for 4% gross sales
  - You:
    - Research the market
    - Write a business plan
    - Pitch and raise money
    - Hire a team
    - · Build a brand
    - Try to make it... fail.
    - Repeat. Get to 50k units per year in 3 years



### About that reward...

Let's say you patent an invention that results in a new product that could retail for \$200 and costs \$100 to make. The market is approximately 50,000 units per year.

### License to Existing Co.

- Revenue: \$200 x 50,000
  = \$10M
- COGS: \$100 x 50,000 = \$5M
- Gross Sales = \$5M
- MSU gets \$200k
  - Your share: \$92,500

### Start a Company

- Revenue: \$200 x 50,000 = \$10M
- COGS: \$100 x 50,000 = \$5M
- Gross Sales: \$5M
- MSU gets \$200k
  - So, you still get: \$92,500
- But your company gets \$4.8M
   for op. expenses & profit!
- Net margin ~20%
- You split another \$960,000
   with other shareholders.



# Scorecard?...

Let's say you patent an invention that results in a new product that could retail for \$200 and costs \$100 to make. The market is approximately 50,000 units per year.

- License to Existing Co.
  - If there's a licensee ready out there...
  - You made \$92,500/yr doing nothing.

### Start a Company

- If you're successful and still own 50% of the business...
- You made \$572,500/yr
  (6x) but did a ton of work.

MSU may not pay the highest salaries, but commercialization can enable you to <u>easily</u> outpace your peers!

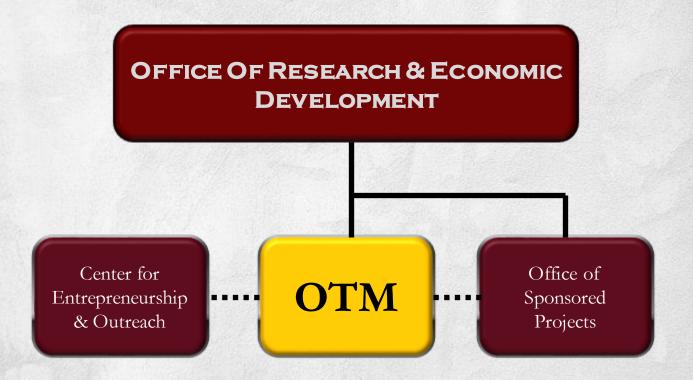
# Introductions- Jeremy, OTM





### MISSISSIPPI STATE UNIVERSITY...

### About OTM





### MISSISSIPPI STATE

UNIVERSIT

Services

Technology transfer



**Economic development** 



#### Services:

- 1. Reporting IP to Fed/State Sponsors
  - Bayh Dohl compliance
  - MSU IP Policy compliance
- 2. Assist with IP Protection
  - Patents
  - Copyrights
  - Trademarks
- 3. Assist with Collaborations
  - Material Transfer
  - Sharing Confidential IP
- 4. Assist with Commercialization
  - Licensing
  - Start-ups
- 5. Presentations on Intellectual Property
  - Senior design classes
  - Faculty/Staff



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#### About OTM

#### <u>Inventors</u>:

Student
Faculty
Staff
External Inventors

**OTM** 

#### <u>Licensees/</u>

**Collaborators:** 

Companies in Industry Academic Institutions And more

Policy makers/ Technology Owners:

Federal Agencies

State Agencies

#### Resource Support:

Departments
Colleges
Technology Centers
E-Center
SBA
Companies

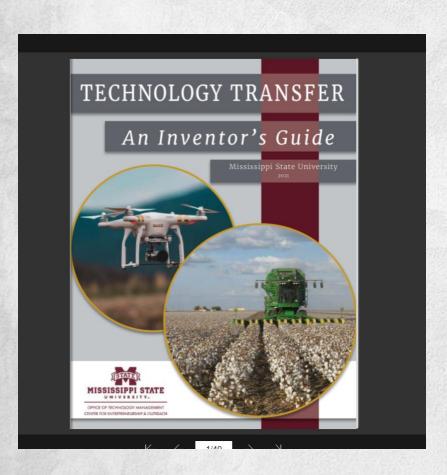
Administrators:

ORED office
Departments
Colleges
Sponsored projects
MSU Counsel

**Contractors:** 

Legal Firms Tech Transfer Firms

# OTM/E-Center Inventor's Guide

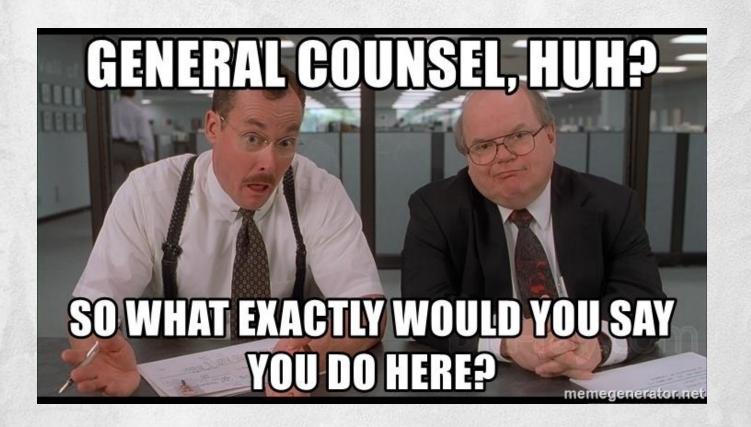


www.otm.msstate.edu

Under the Inventors tab



# Introductions- Dylan, GC



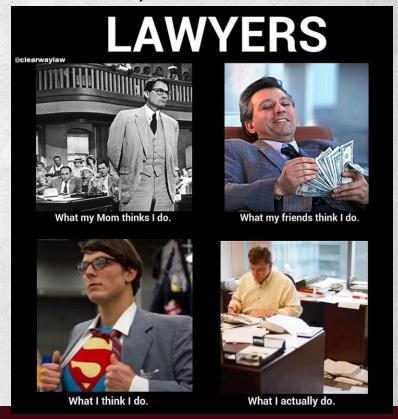


# About General Counsel

CONTRACTS, CONTRACTS,

**CONTRACTS!** 

- Waivers
- Problem Solving





Can I just call general counsel, before I screw something up?





"Do you know the difference between a research rat or mouse and a lawyer,....there are some things a rodent will not do."

Who should I talk to if I want to start a company related to my work at MSU?



Copyrighted Materia

ARGUING WITH A LAWYER IS LIKE WRESTING A PIG ITI MUD SOOMER OR LATER YOU REALIZE THAT THEY LIKE IT.

 How can faculty benefit from participating in I&E?

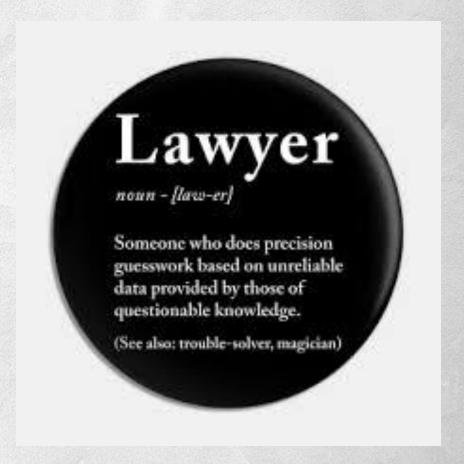




- "On a hot West Texas summer day, two old Texas Cowboys had just finished attending the burial of a dear departed friend. As they walked about the cemetery looking at inscriptions on tombstones, they happened upon one that caused them both to stop and ponder. The epitaph read "Here lies an honest man and a lawyer." After standing there a few moments, one of the old wranglers took his red bandana from around his neck, wiped his sweating weather beaten brow and said, "Isn't that something...all this open land out here in west Texas and they put two men in the same grave."
- Are there resources/training at MSU to help me start a business?

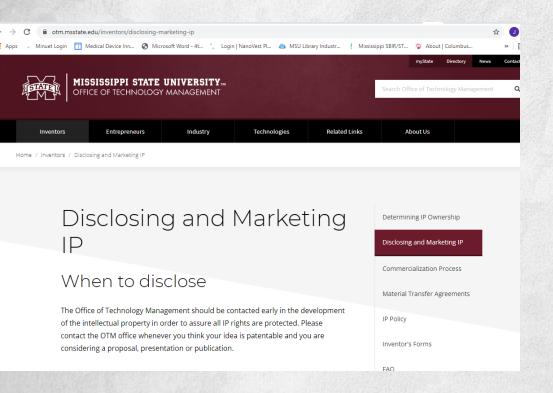


What happens when an agreement gets sent to general counsel for review?





How do I disclose a new invention?







- As a boy growing up in a small southern Mississippi town, people used to ask me if I was going to practice law like my father and brother. I always told them no, I was going to be a scientist, because someone in the family had to make an honest living. Hart Bailey
- Can the E-Center connect me to investors?

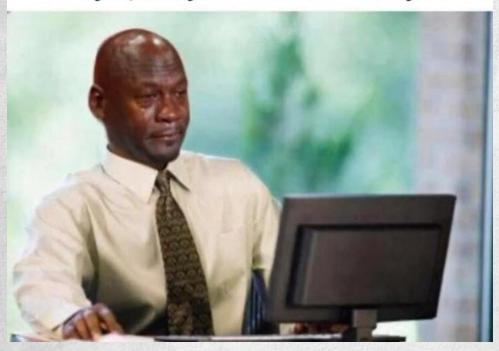








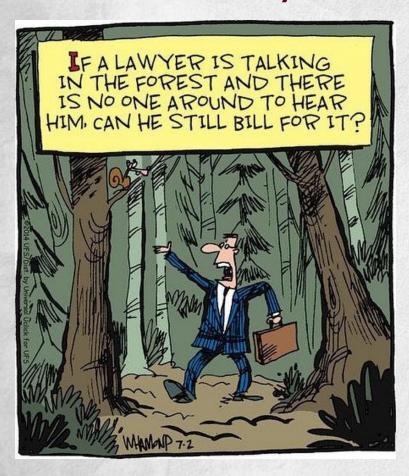
Google articles telling you to hire a tax lawyer, but you are the tax lawyer.





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### Lawyer Jokes/Questions





### Follow-up Questions?

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