

COMMERCIALIZATION OF LIFE SCIENCE INNOVATIONS

DAY/TIME:	Spring 2017, Mondays 3:30-6:00 pm
LOCATION:	School of Medicine M253
INSTRUCTORS:	Cynthia Helpingstine, PhD, MBA, helpingstinec@missouri.edu Jaya Ghosh, PhD, ghoshj@missouri.edu
OFFICE HOURS:	By appointment
READING:	<i>Biodesign: The Process of Innovating New Medical Technologies, 1st edition</i>

MANGMT 8200: COMMERCIALIZATION OF LIFE SCIENCE INNOVATIONS

is a 3-credit, semester long course designed to provide specialized frameworks and essential tools to project teams interested in successful translation of biomedical innovations from lab to market, and competing for MU Coulter Program Awards. By the end of the course, participants will be able to:

- Succinctly describe the unmet clinical need, stakeholder requirements, business opportunities and risks (market, intellectual property, regulatory, reimbursement, etc.) for their envisioned technology.
- Package and pitch the idea to best position it for partnership and follow-on investment.

The primary objective of the **UNIVERSITY OF MISSOURI COULTER TRANSLATIONAL PARTNERSHIP BIOMEDICAL INNOVATION COMMERCIALIZATION BOOT CAMP**, being offered in conjunction with the MANGMT 8200: Commercialization of Life Science Innovations course, is to help MU Coulter Program applicants answer two fundamental questions about their translational research projects:

What is the unmet need?

- Is there a true and compelling unmet need? What are the current solutions and product gaps? Who are the stakeholders? What do stakeholders want/need? How does the envisioned solution satisfy stakeholder needs?

Is there a business opportunity?

- What is the value proposition? What is the competitive market landscape? What are IP strategy, regulatory roadmap, and reimbursement considerations?
- How can you prove that your product is viable and that there is an opportunity before significant resources are put into developing and perfecting the technology? How will risk be substantially removed in order to leave no doubt that the product will be an improvement over the status quo?
- How can you best position the technology for partnership and follow-on investment? How will you hone your pitch and present the data package?

COURSE FORMAT

Each session is made up of a lecture and team presentations, and features practical exercises and group feedback supplemented with content on topics applicable to accelerating commercialization success.

Project teams work systematically through the iteration and refinements necessary to create a plan for market readiness, while being supported by a peer learning environment and a coaching network of functional and domain experts.

At the end of the course, project teams will pitch their technology to the MU Coulter Oversight Committee for potential funding.

UNIVERSITY OF MISSOURI COULTER TRANSLATIONAL PARTNERSHIP (MU COULTER) PROGRAM

The University of Missouri Coulter Translational Research Partnership (www.coulter.missouri.edu) is an interdisciplinary, cross-departmental program aimed at catalyzing biomedical technologies by providing funding, education, and mentorship to clinician-engineer team, with the ultimate goal of bringing cutting-edge research out of the lab to benefit society. Projects are vetted by an independent Oversight Committee made up of clinicians, engineers, and industry and investor representatives, and selected for their commercialization potential and capacity to improve health.

COMMERCIALIZATION OF LIFE SCIENCE INNOVATIONS

BUSINESS ADVISORS

To help further accelerate the path towards market success, teams will be paired with seasoned business advisors who can provide advice, feedback and guidance on the issues teams will face as they seek to develop a path to market and commercialize their technologies.

STUDENTS WILL

- Partner with innovative and experienced engineer-clinician teams in the development of a commercialization plan for their cutting-edge technologies.
- Play an active role in identifying the clinical need, stakeholder requirements, and business case in order to increase commercial potential.
- Gain exposure to the technical, economic, social and public policy issues involved in the commercialization of medical technologies.
- Receive mentorship and guidance from seasoned business advisors, guest lecturers and instructors.
- Make a mock investment pitch to the MU Coulter Program Executive Committee.

INTELLECTUAL PROPERTY

Note that since all of the projects in this class relate to the University of Missouri Coulter Translational Research Partnership and arise from University of Missouri Intellectual Property, any inventions that emerge from this class will be treated as University of Missouri IP per the [Collected Rules and Regulations of the University of Missouri](#).

GRADING

Weekly HW Slides	65%
Final Students' Presentation	25%
Marketing Flyer Submission	10%

Note: The MU Graduate School has implemented a policy under which faculty may use a plus/minus grading scale. Grade point averages are calculated as: A+ (4.0), A (4.0), A- (3.7), B+ (3.3), B (3.0), B- (2.7), C+ (2.3), C (2.0), and C- (1.7).

We are using the +/- grading scale for this course.

DATES | LECTURE/CLASS TOPICS

1. **Jan 18 (Wed):** Introduction to MU Coulter Program, MU Coulter Boot Camp, Syllabus
2. **Jan 23:** Unmet Clinical Need Clarification
3. **Jan 30:** Health System & Value Proposition
4. **Feb 06:** Stakeholder Analysis
5. **Feb 13:** Market Analysis
6. **Feb 20:** Regulatory Pathway, Intellectual Property & Technology Transfer
7. **Feb 27:** Regulatory One-on-one
8. **Mar 06:** Reimbursement
9. **Mar 13:** Business Models & Commercialization
10. **Mar 20:** The Drug Development Pathway

Spring Break

11. **Apr 03:** The Killer Experiment
12. **Apr 10:** Legal 101 for Entrepreneurs
13. **Apr 17:** Pitch Craft
14. **Apr 24:** Students' Final Presentations
15. **May 01:** Teams' Final Presentations

CONTACT

Please email ghoshj@missouri.edu and helpingstinec@missouri.edu if you have any questions or comments