**BMS7115 & IBS7115 Special Topics in Biotechnology Commercialization**  
**2017 Winter (1 credit)**

Thursday 4:00 to 5:00PM, Room 2268 Scott Hall  
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<th>Date</th>
<th>Topic - Description</th>
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| Thursday, January 12, 2017  | **Lecture 1** - Class Introduction  
Course Materials, Grading, Expectations, Process  
The Business Pitch/Commercialization Plans Materials  
LinkedIn Connections & Executive Summary Slide |
| Thursday, January 19, 2017  | **Lecture 2** - The Empowered Entrepreneur  
The Essentials of an Oral Business Pitch  
Slides 1-3 |
| Thursday, January 26, 2017  | **Lecture 3** - Define the Problem and the Solution  
Preparation of a Layman description  
Map out Product or Technology Development Plans  
Slides 3-4 |
| Thursday, February 2, 2017  | **Lecture 4** - Define a Business Model  
Business and Technology Development Plans  
Slide 5 |
| Thursday, February 9, 2017  | **Lecture 5** - Define your Competition  
Go-to-Market; Business and Technical Competition  
Slides 6-7 |
| Thursday, February 16, 2017 | **Lecture 6** - Who are your Management Team  
Describe Key Players, Roles, Functions  
Slides 8 |
| Thursday, February 23, 2017 | **Lecture 7** - Define Financial Projections & Metrics  
Defining a Market forecast, long term metrics, fund raising  
Slides 9 |
| Thursday, March 2, 2017     | **Lecture 8** - Traction & History  
Slides 10 |
| **Thursday, March 9, 2017** | **Lecture 9** - Oral Presentations  
Executive Summary Slide; 3-minute Presentation  
Spring Break |
| Thursday, March 16, 2017    | **Lecture 10** - Communicating Business Information  
The written Commercialization Plan, Relevant Information  
Define Key Accomplishments, Timelines, Summary  
Strategic metrics, Exit Strategy |
| Thursday, March 23, 2017    | **Lecture 11** - Writing the Executive Summary  
A compelling and concise story, synopsis of development effort |
| Thursday, March 30, 2017    | **Lecture 12** - Written Analyses  
Technology, Industry analysis, Potential Markets, SWOT analysis |
| Thursday, April 6, 2017     | **Lecture 13** - Written Analyses  
Challenges, Risks, Path to Commercialization, History, |
Description of the Course:

"Special Topics in Biotechnology Commercialization" has been developed in coordination with the Technology Commercialization Office (WSU OVPR office), the "Innovation Fellows Program", and the IBS7110/BMS7100 "Introduction to the Business of Biotechnology". This continuation course is designed serve as a primer for defining company and product development plans for a potential commercial product, using established technology evaluation and decision-making procedures, and describing relevant information describing biotechnology-biomedical research and product/company development efforts to interested professionals and the general public. The course is a mixture of topical lectures (given by WSU faculty) and presentations by external thought-leaders (scientific and business representatives from the regulatory, legal, financial, biotechnology, pharmaceutical, and medical device industries). The Course grade is based upon class attendance-participation, an oral Business Pitch, and a Commercialization Plan. The class attendance-participation is 25% of the course grade, with the Business Pitch and Commercialization Plan accounting for 75% of the final grade. The oral and written assignments provide practical experience in conveying relevant information needed for external individuals to assess the value of a drug, diagnostic, or device. The technology topic will be selected by the student in consultation with the course director. Each student must present an oral Business Pitch (15min formal presentation) and a written Commercialization Plan (~6 pages) prepared in a NIH format.

Learning Outcomes:

(1) Unmet Need - This course is designed to provide practical, "real-world" experience in defining, understanding, and communicating the relationship between academic discovery science and business development. At this time, academic training does not educate students on how to communicate biotechnology information to knowledgeable individuals outside the academic research world. To obtain a non-academic job, work in a university start-up company, or participate in the commercialization of academic inventions, a new skill set must be learned to interact with individuals outside this environment.

(2) Educational Objective - To address this unmet need, the student will learn how to prepare oral and written materials needed to describe basic research and academic commercial products to the general public. In summary, the student will prepare succinct oral and written materials that detail the significant core information needed to define the strengths and weaknesses of a potential Product.

Students will learn how to describe a biotechnology Product (defining the technology, its advantages compared to competing products or services, and how the product will be manufactured), their Company structure (such as size, existing products-services, history of previous Federal and non-Federal funding, technology-business development plans, and staffing expectations), the metrics in a Market analysis (describing the market segments being targeted, plans to gain customer acceptance of the product/service), a putative Intellectual property position (i.e. patent or provisional patent status, or licensed technology), their Finance plan (describing costs, specific steps being taken to secure this financing, potential for licensing or sales), and a short Executive Summary (focusing on how their company will generate a continuing revenue stream using direct sales, distributors, joint ventures, and/or licensing agreements).

(3) Knowledge, Applications, Analysis, and Evaluation - A variety of training experiences will teach the student how to organize and communicate information in non-scientific presentations. The "Business Pitch" is the key oral learning outcome, where a student prepares a short, focused presentation (~15 minutes) on a potential commercial product that is presented in-class. In a second effort, an abbreviated "Commercialization Plan" (~6 pages) will train the student to retrieve information from science-government-business databases or documents and write a description of their biotechnology in the approved NIH format. Each student’s effort will be evaluated on how these presentations reflect an understanding of the examples and materials given in the course lectures.