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Focus IP Group, LLC offers a comprehensive range of training programs in:

- Technology transfer
- Technology commercialization
- Technology-based entrepreneurship

based on Dr. Ashley Stevens' 30 years of experience in structuring the transfer of early stage technologies. He has taught approaching 20 graduate level degree courses at Boston University and Osaka University and 100 professional development courses round the world.

Courses are available in various lengths:

- One day
- Two days
- Three days
- Five days
- Ten days.

The courses combine lectures with experiential learning:

- In the 1, 2 and 3 day courses, the experiential learning comes from working in groups on case studies illustrating the key concepts. These case studies are real world cases, anonymized and were written specially for these courses.
- In the 5 and 10 day courses, the case studies are augmented by forming small teams who work on new inventions and analyze their commercial potential, and in the case of the 10 day course, their ability to be the basis a start-up company. These inventions are contributed by the sponsoring organization and the teams' work products will form the basis of commercializing the technologies.

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RESUME OF ASHLEY J. STEVENS, D.PHIL (OXON), CLP, RTTP

President Focus IP Group, LLC

Lecturer
Strategy and Innovation Department
School of Management
Boston University



The Focus IP Group provides a variety of consulting services in intellectual property matters, including serving as an Expert Witness in intellectual property disputes, technology scouting, technology transfer and teaching the commercialization of early stage technologies.

For 15 years, Dr. Stevens led Boston University's Office of Technology Transfer. He then became Special Assistant to the Vice President for Research for two years before retiring from full time employment at BU. He remains a Lecturer in the Strategy and Innovation Department in Boston University's School of Management, where he teaches two graduate-level, inter-disciplinary courses on Technology Commercialization. Before joining Boston University he was Director of the Office of Technology Transfer at the Dana-Farber Cancer Institute, a teaching affiliate of the Harvard Medical School.

During his tenure at Boston University, the Office of Technology Development spun out over 50 companies based on the University's research, a number of which raised substantial amounts of capital, and the University's licensing income climbed steadily.

He is a Guest Professor at Osaka University, Japan, where he teaches G-TEC, an intensive summer course on technology commercialization. He has also taught in Chile, China and India.

Prior to entering the technology transfer profession, Dr. Stevens worked in the biotechnology industry for nearly ten years. He was a co-founder of Kytogenics, Inc., of which he is still a Director, was co-founder of Genmap, Inc., and was Vice President of Business Development for BioTechnica International. He started his career with The Procter & Gamble Company, where he held a number of positions in commercial development, sales, marketing, product management, strategic planning and acquisitions and mergers.

Dr. Stevens publishes and lectures frequently on many aspects of technology transfer, including the Bayh-Dole Act, the economic impact of technology transfer and its role in economic development, the contribution of academia to the discovery of new drugs and vaccines, the role of technology transfer in global health and technology valuation. He was the recipient of the Bayh-Dole Award at the Association of University Technology Managers (AUTM) 2007 Annual Meeting and became President of AUTM in March 2010. He is also active in the Licensing Executives Society and the MassBio.

Dr. Stevens holds a Bachelor of Arts in Natural Sciences, a Master of Arts and a Doctor of Philosophy in Physical Chemistry from Oxford University. He is a Certified Licensing Professional and a Registered Technology Transfer Professional.

ORGANIZATIONS FOR WHOM TEACHING AND TRAINING HAS BEEN PROVIDED

Universities

- Aix-Marseille University
- Boston University
- King Fahd University of Petroleum and Minerals, Saudi Arabia
- National University of Singapore
- Newcastle University, UK
- Osaka University, Japan
- Umm Al-Qura University, Saudi Arabia
- University of Texas Austin
- University of New Hampshire Law School

Technology Transfer Associations

- Alliance for Commercialization of Canadian Technologies
- Alliance of European Science and Technology Professionals
- Association of University Technology Managers
- InnovFest, Singapore
- Knowledge Commercialization Australasia
- PraxisUnico, UK
- Southern African Research & Innovation Managers Association

Governmental and Inter-Governmental Organizations

- Asia-Pacific Economic Co-operation
- CORFO, Chile
- Indian Department of Biotechnology
- iNNpulsa, Colombia
- Slovak Center for Scientific and Technical Information
- Thailand Center of Excellence in Life Sciences
- World Intellectual Property Organization

Industry Associations

- Biotechnology Industry Organization
- National Council for Entrepreneurial Tech Transfer

COUNTRIES / TERRITORIES WHERE TEACHING AND TRAINING HAS BEEN PROVIDED

- Algeria
- Australia
- Canada
- Chile
- China
- Colombia
- Czech Republic
- Egypt
- Estonia
- Germany
- Hong Kong
- India
- Japan
- Malaysia
- Morocco
- Netherlands
- Norway
- Philippines
- Saudi Arabia
- Serbia
- Singapore
- Slovakia
- South Africa
- South Korea
- Sri Lanka
- Switzerland
- Taiwan
- Thailand
- Tunisia
- UK

I. ONE DAY COURSE ON LICENSING AND VALUATION STRATEGIES

The structure of the course will consist of:

- Three lectures on the basics of licensing and valuation strategies
- Three case studies illustrating the key concepts. These case studies are real world cases, anonymized and were written specially for these courses.

Morning	Lecture 1: Licensing and Marketing Strategies
	Licensing strategies
	Marketing documents
	Technology marketing
	Case Study 1: Lithium Ion Batteries
	Lecture 2: Valuation
	Overview
	Valuation principles
	Financial structure of a license
	Cost method
	Comparables
	Rules of Thumb
	Discounted Cash Flow
Afternoon	Case Study 2: A Novel Gene
	Lecture 3: The Capitalization Table of a University Spin-Out Company and its Evolution
	Founders Round
	Seed Round
	Series A Round
	Series B Round
	• IPO
	Acquisition
	Down Rounds
	Anti-dilution
	Case Study 3: Quantum Dots

II. 2 DAY WORKSHOP ON TECHNOLOGY EVALUATION, LICENSING, VALUATION AND NEGOTIATION

The structure of the course will consist of:

- Six lectures on the basics of licensing and valuation strategies
- Two case studies illustrating the key concepts. These case studies are real world cases, anonymized and were written specially for these courses.

Day 1	
Morning	Lecture 1: Overview and Evaluating Early Stage Technologies
	Overview of early stage technology commercialization
	The products that will result from a technology
	Markets for those products
	Intellectual property aspects
	First Look Technology Assessment
	Lecture 2: Licensing and Marketing Strategies
	Licensing strategies
	Marketing documents
	Technology marketing
Afternoon	Lecture 3: Valuation
	Overview
	Valuation principles
	Financial structure of a license
	Cost method
	Comparables
	Rules of Thumb
	Discounted Cash Flow
	Case Study 1 Lithium Ion Battery Case Study

Day 2	
Morning	Lecture 4: Negotiation a License
	The initial connection
	Term sheet
	Option Agreement
	Principles and mechanics of negotiating
	Lecture 5: Completing a License Agreement
	Template agreements
	Sponsored Research Agreements
	License agreements
	Pre-existing rights
	Unique aspects of university licenses
Afternoon	Case Study2: Novel Inherited Cancer Gene Case Study
	Lecture 6: Start-Up Companies
	Cap tables
	Ideal cycle
	The Exit
	Things go wrong

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III. 3 DAY WORKSHOP ON TECHNOLOGY EVALUATION, LICENSING, VALUATION AND NEGOTIATION

The structure of the course will consist of:

- Nine lectures on the basics of licensing and valuation strategies
- Three case studies illustrating the key concepts. These case studies include real world cases, anonymized and were written specially for these courses and a Harvard Business School Case Study.

Day 1	
Morning	Lecture 1: Overview and Evaluating Early Stage Technologies
	Overview of early stage technology commercialization
	The products that will result from a technology
	Markets for those products
	Intellectual property aspects
	First Look Technology Assessment
	Lecture 2: Licensing and Marketing Strategies
	Licensing strategies
	Marketing documents
	Technology marketing
Afternoon	Lecture 3: Valuation
	Overview
	Valuation principles
	Financial structure of a license
	Cost method
	Comparables
	V Rules of Thumb
	VI. Discounted Cash Flow
	Case Study 1 Lithium Ion Battery Case Study

Day 2	
Morning	Lecture 4: Negotiation a License
	The initial connection
	Term sheet
	Option Agreement
	Principles and mechanics of negotiating
	Lecture 5: Completing a License Agreement
	Template agreements
	Sponsored Research Agreements
	License agreements
	Pre-existing rights
	Unique aspects of university licenses
Afternoon	Case Study2: Novel Inherited Cancer Gene Case Study
	Lecture 6: Start-Up Companies
	Cap tables
	Ideal cycle
	The Exit
	IV. Things go wrong

Day 3	
Morning	Lecture 7: Setting Up an Office of Technology Commercialization
	Reporting structure within the Organization
	Database systems
	Budgeting
	Governance
	Policy development
	Working with students
	Lecture 8: Creating the Culture within the Institution
	Why should professors be interested in commercialization
	Translational research funds
Afternoon	Lecture 9: Internal and External Communications – Managing Institutional Expectations
	Setting a Mission Statement
	Financial realities of Technology Transfer
	Drivers of technology transfer
	Tying yourself to the local innovation ecosystems
	Securing local support
	Case Study 3: Massachusetts General Hospital Case Study

IV. FIVE DAY COURSE ON BASICS OF TECHNOLOGY TRANSFER

The structure of the course will consist of:

- Two lectures a day on the basics of technology transfer
- A case study illustrating key concepts
- Evaluating and analyzing a new technology, working in teams of 4-6 people.

The final half day will consist of each team presenting their technology, the results of their evaluation and their recommendations.

Day 1	
Morning	Lecture: Overview and Evaluating Early Stage Technologies
	Overview of early stage technology commercialization
	The products that will result from a technology
	Markets for those products
	Intellectual property aspects
	First Look Technology Assessment Report
	Lecture: Licensing and Marketing Strategies
	Licensing strategies
	Marketing documents
	Technology marketing
Afternoon	Case Study: The Langer Lab at MIT (HBS)
	Team Work: Productization; Quad Chart
Day 2	
Morning	Lecture: Valuation
	Overview
	Valuation principles
	Financial structure of a license
	Cost method
	Comparables
	Rules of Thumb
	Discounted Cash Flow
	Lecture: Negotiation a License

The initial connection Term sheet Option Agreement Principles and mechanics of negotiating Afternoon Case Study: Lithium Ion Battery Team Work: Market Assessment Day 3 Morning Lecture: Completing a License Agreement Template agreements Sponsored Research Agreements License agreements Pre-existing rights Unique aspects of university licenses Lecture: Translational Research and Proof of Concept
Option Agreement Principles and mechanics of negotiating Afternoon Case Study: Lithium Ion Battery Team Work: Market Assessment Day 3 Morning Lecture: Completing a License Agreement Template agreements Sponsored Research Agreements License agreements Pre-existing rights Unique aspects of university licenses
Principles and mechanics of negotiating Afternoon Case Study: Lithium Ion Battery Team Work: Market Assessment Day 3 Morning Lecture: Completing a License Agreement Template agreements Sponsored Research Agreements License agreements Pre-existing rights Unique aspects of university licenses
Afternoon Case Study: Lithium Ion Battery Team Work: Market Assessment Day 3 Morning Lecture: Completing a License Agreement Template agreements Sponsored Research Agreements License agreements Pre-existing rights Unique aspects of university licenses
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 Sponsored Research Agreements License agreements Pre-existing rights Unique aspects of university licenses
 License agreements Pre-existing rights Unique aspects of university licenses
Pre-existing rightsUnique aspects of university licenses
Unique aspects of university licenses
Lecture: Translational Research and Proof of Concept
What is translational research
How to select projects
How to manage projects
Afternoon Case Study: A Novel Cancer Gene
Team Work: Prior Art Analysis
Day 4
Morning Lecture: Licensing to a Start-Up Company
 Why do we license to a start-up company
Types of start-up company
 Incorporating
The management team
Lecture: Financing a Start-Up Company
Cap tables
Ideal cycle
The Exit

Afternoon	Case Study: Licensing at the Massachusetts General Hospital (HBS) Team Work: First Look Technology Assessment
Day 5	
Morning	Lecture: Setting Up and Running a Tech Transfer Office
	Staffing
	• Policies
	Budgeting
	Managing IP
	Managing Service Providers
	Using students
	Lecture: Getting the Institution on Board
	Motivating faculty to be interested in commercialization
	Selling OTT Internally
	Interacting with the ecosystem
Afternoon	Team Presentations

V. <u>TEN DAY COURSE ON BASICS OF TECHNOLOGY TRANSFER AND TECHNOLOGY-BASED</u> <u>ENTREPRENEURSHIP</u>

The structure of the course will consist of two five day modules:

Week 1. Evaluating Early Stage Technologies

Week 2. Starting a Technology-Based New Company.

The structure of each day's work will be as follows:

- Two lectures a day on the basics of technology transfer
- A case study illustrating key concepts
- Evaluating and analyzing a new technology, working in teams of 4-6 people.

The final half day of each week will consist of each team presenting their technology, the results of their evaluation and their recommendations.

WEEK 1	Evaluating Early Stage Technologies
Day 1	
Morning	Lecture: Overview and Evaluating Early Stage Technologies
	Overview of early stage technology commercialization
	The products that will result from a technology
	Markets for those products
	Intellectual property aspects
	First Look Technology Assessment Report
	Lecture: Licensing and Marketing Strategies
	Licensing strategies
	Marketing documents
	Technology marketing
Afternoon	Case Study: The Langer Lab at MIT (HBS)
	Team Work: Productization; Quad Chart
Day 2	
Morning	Lecture: Valuation
	Overview
	Valuation principles

	Financial structure of a license
	Cost method
	Comparables
	Rules of Thumb
	Discounted Cash Flow
	Lecture: Negotiation a License
	The initial connection
	Term sheet
	Option Agreement
	IV. Principles and mechanics of negotiating
Afternoon	Case Study: Lithium Ion Battery
	Team Work: Market Assessment
Day 3	
Morning	Lecture: Completing a License Agreement
	Template agreements
	Sponsored Research Agreements
	License agreements
	Pre-existing rights
	Unique aspects of university licenses
	Lecture: Translational Research and Proof of Concept
	What is translational research
	How to select projects
	How to manage projects
Afternoon	Case Study: A Novel Cancer Gene
	Team Work: Prior Art Analysis
Day 4	
Morning	Lecture: Licensing to a Start-Up Company
	Why do we license to a start-up company
	Types of start-up company
	Incorporating
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	The management team
	Lecture: Financing a Start-Up Company
	Cap tables
	Ideal cycle
	The Exit
	Things go wrong
Afternoon	Case Study: Licensing at the Massachusetts General Hospital (HBS)
	Team Work: First Look Technology Assessment
Day 5	
Morning	Lecture: Setting Up and Running a Tech Transfer Office
	Staffing
	• Policies
	Budgeting
	Managing IP
	Managing Service Providers
	Using students
	Lecture: Getting the Institution on Board
	Motivating faculty to be interested in commercialization
	Selling OTT Internally
	Interacting with the ecosystem
Afternoon	Team Presentations

WEEK 2	Starting a Technology-Based New Company
Day 1	
Morning	Lecture: Overview of Technology-Based Entrepreneurship Is it a company or a product or a project? The founding team Corporate structures Lecture: Business Models What is a business model Common business models Innovative business models Lecture: Elevator Pitch and Corporate Presentation What an Elevator Pitch is Structure of an Elevator Pitch Structure of the Corporate Presentation
	 Structure of the Corporate Presentation The 10/20/30 Rule
Afternoon Day 2	Case Study: Vermeer A Team Work: Business Model for Company
Morning	Lecture: The Business Plan Why write a business plan The business planning process Content Lecture: Entrepreneurial Finance Basic financial statements Fixed vs. variable costs Breakeven
Afternoon	Case Study: Vermeer B Team Work: Elevator Pitches

Day 3	
Morning	Lecture: Financing New Ventures
	Sources of financing for new ventures
	The Exit
	Investor return
	Lecture: Cap Tables
	Start-Up
	Venture financing
	• IPO
	Acquisition – liquidation preferences
	Down rounds
	Anti-dilution protection
Afternoon	Case Study: Vermeer C
	Team Work: Capital Needs
Day 4	
Morning	Lecture: Product Pricing
	Ways to price products
	XXX pricing
	Determination customer value in use
	Pricing ladders
	Lecture: Manufacturing and Product Costing
	Contract manufacturing
	Standard costs
Afternoon	Case Study: Startup.com
	Team Work: Financials

Day 5	
Morning	Lecture: The Management Team
	Building the team
	Transitions in leadership
	The Board
	The Scientific Advisory Board
	Team Work: First Look Venture Analysis
Afternoon	Team Presentations

VI. CUSTOMIZED COURSE DEVELOPMENT

Focus IP Group will be pleased to custom design courses to meet the needs of individual organizations. Lectures are available on the following topics, and we have case studies available – both Harvard Business School case studies as well as case studies written by Dr. Stevens and other technology transfer experts to introduce an experiential component to the courses.

1. Technology Commercialization

- What is Technology Commercialization?
- Translating Science into Products
- Translational Research/Proof of Concept
- Universities as Sources of Technology

2. Intellectual Property

- Patents
- Researching Patents
- Assessing Patent Quality
- Copyrights, Trademarks and Trade Secrets

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3. Technology Transfer

- Licensing
- License Agreements
- Other IP Agreements
- Monetizing Patents
- Partnering with a Large Company
- IP Assessment Methodology and Tools
 - First Look Technology Assessment Methodology
- Technology Valuation
- Technology Marketing
- Career Structures in Technology Management

4. TLO Operations

- Organization and Management
- IP Management
- Budgeting

- Policy Development
- HR Issues
- Negotiating a License
- Standard Forms of Agreement
- Auditing Licensees
- Working with Faculty
- Databases and Tools

5. <u>Technology-Based Entrepreneurship</u>

- Technology Based Entrepreneurship
- Opportunity Assessment Methodology and Tools
- First Look Venture Assessment Methodology
- Business Models
- Business Plans
- Communicating the Company
- Regulatory and Reimbursement
- The Management Team
- Manufacturing
- Social Entrepreneurship
- First Look Venture Assessment

6. Entrepreneurial Finance

- Financial Statements
- Product Pricing
- Product Costing
- Financing New Ventures
- Cap Tables

7. Other Topics

- Principles of Negotiation
- Specific Technologies
 - o Stem cells
 - Medical devices
 - Generic drugs
 - Global Health