



University of Pittsburgh
Office of Enterprise Development, Health Sciences
presents
“From Benchtop to Bedside
What Every Scientist Needs To Know”

A course for scientists and physicians who want to move basic research discoveries to the patient.

“From Benchtop to Bedside” is a 10-week course designed to give research scientists, clinicians, and other interested parties the basic information necessary to assess the therapeutic or diagnostic potential of basic science research discoveries. The course helps scientists understand the focused development of additional information, including proof of concept and validation experiments that increase the value of the technology and reduce the investment risk. The course gives scientists insights into how intellectual property creates a barrier to entry for the competition, and the fundamentals of investment from the private sector to help finance the climb over regulatory hurdles and meet developmental milestones. The course consists of a series of seminars designed to identify and provide details about the steps necessary to develop a scientific or clinical discovery from the laboratory to the patient. Concepts covered include how to: recognize an opportunity and the commercial potential of a scientific discovery, protect the intellectual property, disclose the invention to the university, initiate the university licensing process, begin early development of a drug candidate or a device for clinical use, and plan for success within the regulatory guidelines. In addition, the course will clarify the scientist’s expected role and responsibilities as the process moves forward through clinical development.

The course is taught by **Marc Malandro, Ph.D.**, the Associate Vice Chancellor of Technology Management and Commercialization and the Director of the Office of Enterprise Development and the Office of Technology Management at the University of Pittsburgh, **Andrew Remes, Ph.D.**, the Assistant Director of the Office of Enterprise Development, and **Babs Carryer**, veteran entrepreneur and President of Carryer Consulting. Guest speakers have included: **Barbara Barnes, M.D.**, Vice President, Contracts, Grants, Intellectual Property, and Continuing Medical Education at UPMC, Associate Dean, Continuing Medical Education at UPMC, and Assistant Vice Chancellor, Continuing Education in the Health Sciences at Pitt; **Theresa Colecchia, J.D.**, the Associate General Counsel at the University of Pittsburgh; **Dottie Clower, Ph.D.**, Vice President of Business Development and Operations at Cohera Medical, Inc.; **Rick Confer**, a consultant with various medical start-up companies; **Jeanne Cunicelli, M.B.A.**, an Investment Partner at Bay City Capital; **Don DeLauder**, Director of Product Innovation and Advanced Development at MEDRAD; **Alexander P. Ducruet, Ph.D.**, the Technology Licensing Manager for the life sciences in the Office of Technology Management at the University of Pittsburgh; **Carolyn Green**, Chief Operating Officer of Logical Therapeutics; **Chiara Orsini, M.B.A. & J.D.**, the Associate Director, Intellectual Property of the University of Pittsburgh's Office of Technology Management; **David Smith, J.D.**, a lawyer with Pepper Hamilton LLP; **David Wehrle**, CPA, director of the University of Pittsburgh’s Conflict of Interest Office and Associate Director of the Office for Investigator-Sponsored IND & IDE Support (O3IS), and others.

The course schedule covers the following topics:

Week One - *Academic Entrepreneurship: Recognizing Opportunity*

Week Two - *How Universities Transfer Technology*

Week Three - *Understanding Intellectual Property*

Week Four - *Assessing Markets and Competition*

Week Five - *Scientist-Entrepreneur: Managing Conflicts of Interest*

Week Six - *Voice From the Trenches: Starting a New Biotech Company*

Week Seven - *When 1+1=4: Building the Value Chain*

Week Eight - *Getting to Market: Regulations and Reimbursement*

Week Nine - *Opportunity Assessment: Differing Perspectives*

Week Ten - *Project Presentations and Graduation*

The course is supplemented by discussions, case studies, background articles and materials, and a series of interviews with scientists and entrepreneurs entitled “The Entrepreneur’s Experience.”