

Careers In Technology Transfer & Business Development

Steven M. Ferguson

Deputy Director,

Licensing & Entrepreneurship

NIH Office of Technology Transfer

DHHS Email: sf8h@nih.gov

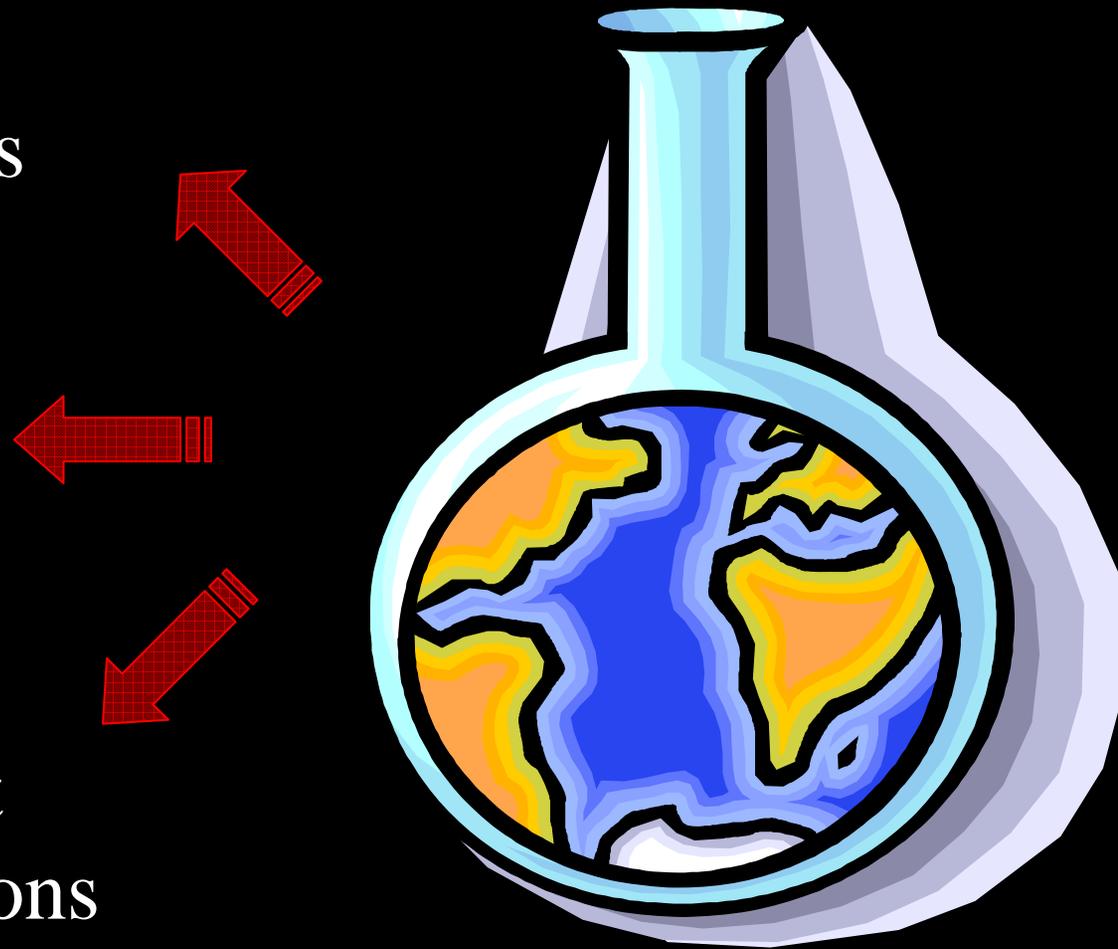


In Health Research – Where Does Technology Transfer Fit?

Humanitarian Objectives

Globalization of
Health Problems
and their Relevance
to Domestic Health

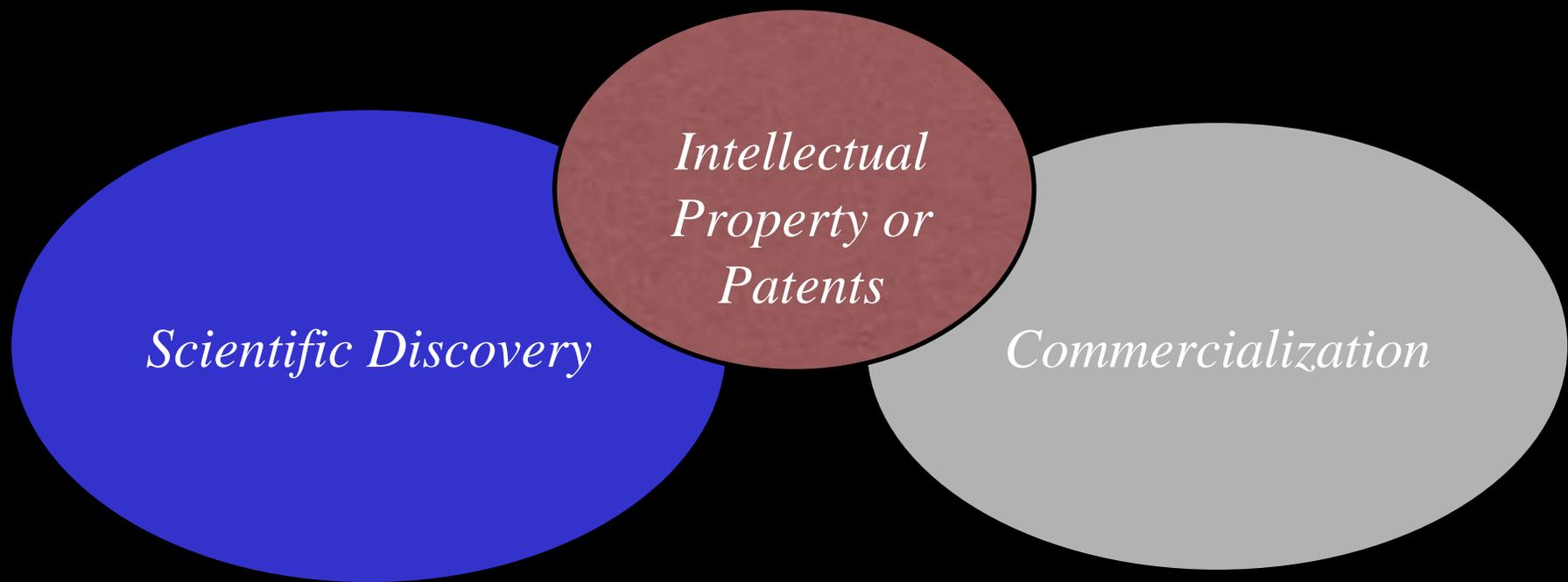
Economic Development
and International Relations



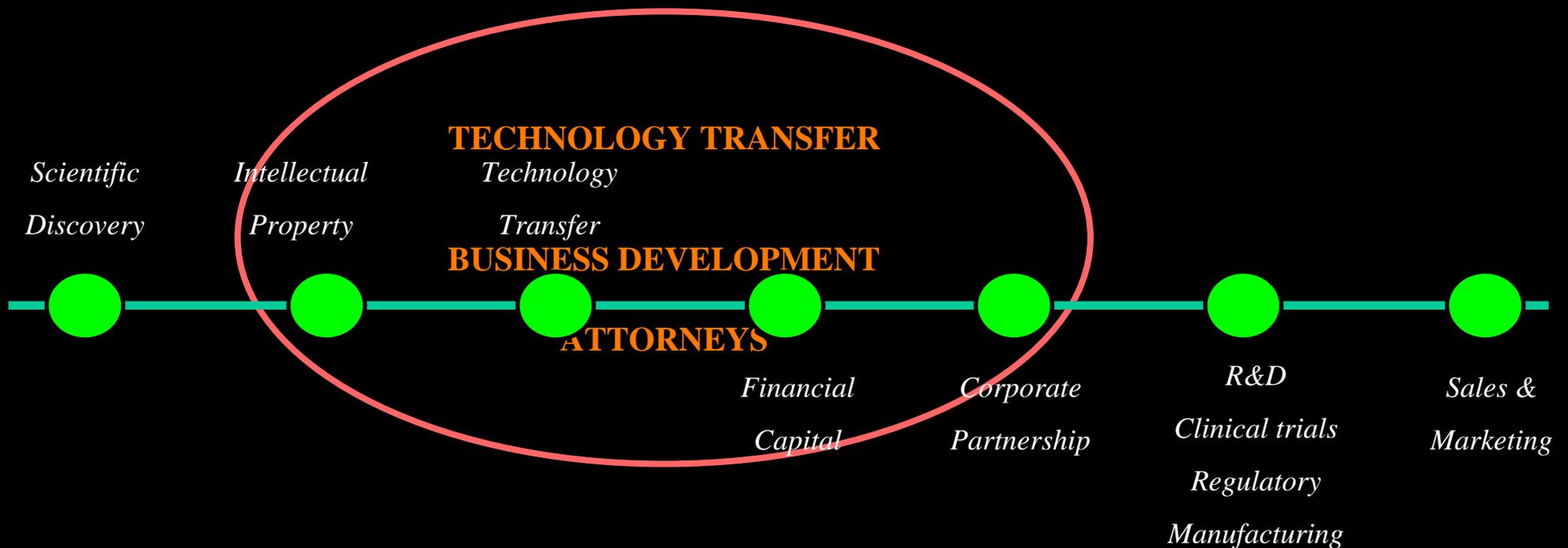
Technology Transfer / Business Development: A Possible New Career For You?

- Yes, there is life possible after research!
- How can I consider technology transfer/business development as a career?
- How do I best make the transition?

Technology Transfer: An *Interdisciplinary Field*



Drug Development: From Lab Bench to Patient



Critical Elements of New Career Development – Transition from Research to Business

- Scientific
- Business
 - *Set a realistic career goal as early as possible and make progress toward the goal continuously*
 - *It is a marathon but not a sprint*

Technology Transfer at Universities and Federal Labs

- Evaluate inventions for patenting
- Closely work with inventors
- Work with law firms and management of patents
- Identify and negotiate with a commercial partner for license or collaboration agreements
- Managing relationship with corporate partners

Business Development at Small Biotech Companies

- Management of intellectual properties
- In-license technologies from universities and research institutes
- Out-license to large pharmaceutical companies
- Corporate management
- Entrepreneurship possibilities

Business Development at Large Pharmaceutical Companies

- Member of a group
- Specialized in one area
- More in-licensing than out-licensing deals
- More stable (historically) but at slower pace

Typical Education Background Mix May Include:

- Ph.D. or M.S. in biological sciences
- Registered patent agent
- M.B.A.
- J.D.

Required Attributes For Career Transition

- Skill sets
- Work ethic
- Potential for development

Your Algorithm For Success

$$C = (A + P) * V * L$$

- C: career success
- A: achievement
- P: potential
- V: visibility
- L: luck

How to Conduct Your Job Search

- Networking
- Right self -image
- Communication skills
- Know your self
- Circulate your resume

How Can I Get Additional Training In Technology Transfer?

- Tech Transfer fellowships & internships
- Courses offered from Association of University Technology Managers (AUTM) and Licensing Executives Society (LES)
- University Programs, including Activate / Innovate
- NIH FAES Graduate School Certificate Program in Tech Transfer

Business & Entrepreneurial Education Programs At NIH



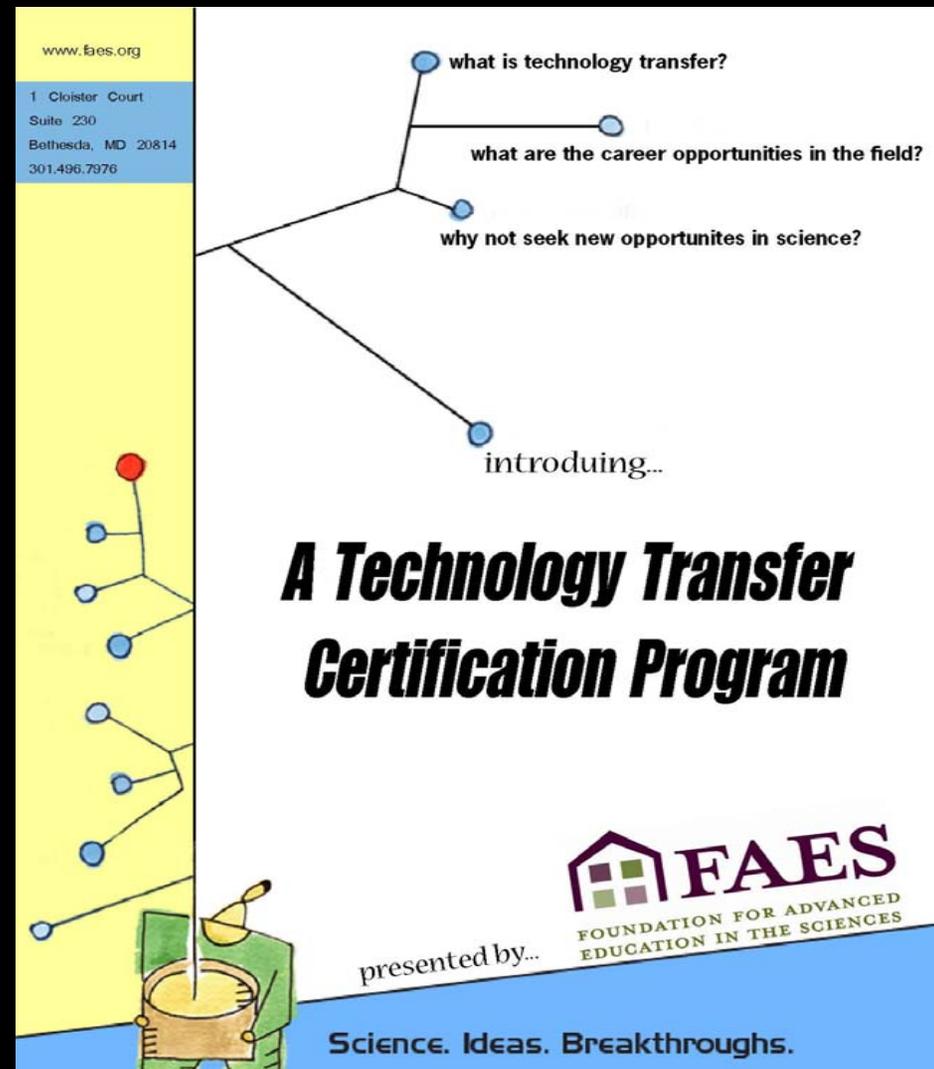
48th year



FAES GRADUATE SCHOOL AT NIH
2007 - 2008 Catalog of Graduate
and Undergraduate Courses

www.faes.org

1 Cloister Court
Suite 230
Bethesda, MD 20814
301.496.7976



what is technology transfer?

what are the career opportunities in the field?

why not seek new opportunities in science?

introducing...

A Technology Transfer Certification Program



presented by...

Science. Ideas. Breakthroughs.

Business & Entrepreneurial Education Courses At NIH

- Technology Transfer
- Biomedical Business Development For Scientists
- Tools For Technology Transfer
- Biotechnology Business Leadership
- International Strategic Partnering
- Marketing Strategies
- Business Finance & Accounting For Scientists

Business & Entrepreneurial Education Courses At NIH

- Negotiation Workshop
- Medical Product Development
- Art of Drug Design and Discovery
- Current Concepts in Therapeutics
- Demystifying Medicine For Ph.D. Students
- Capstone Course In Technology Transfer



Tania Fernandez
Associate

Dr. Fernandez joined Burrill & Company in October 2004 as an analyst and is involved in evaluating new investment opportunities across the life sciences spectrum. Dr. Fernandez secured her doctorate at the Cancer Research Institute in Bombay, India while on an Indo-US scholarship from the National Institutes of Health. Dr. Fernandez joined the College of Medicine, Texas A&M University as a Research Associate working in the fields of protein chemistry and genetic engineering with a special emphasis on light activated proteins and protein delivery systems. In 1999 she joined the National Cancer Institute and in 2000 was appointed Staff Scientist. Her research work revolved around models for hematopoietic cancers. Dr. Fernandez was also a member of the NIH BioScience Business Interest group. She completed courses in Biotech startups for Scientists and in Technology Transfer while at the NIH. Dr. Fernandez is also a free-lance journalist and writes on a wide variety of subjects, primarily focusing on biotech related issues.

- Example of NIH post-doc who took NIH Training Programs
- Now working at VC/Merchant Banking Firm

Source: Burrill & Co.

Technology Transfer: Exciting and Growing Field

- Challenging but fun daily activities
- Demand for skilled people
- Employment in:
 - University tech transfer offices
 - NIH and other government labs
 - Not-for-profit research institutes
 - Corporations
 - Patent laws firms

Sources Of Information On Technology Transfer Training and Careers

- NIH Technology Transfer – ott.nih.gov
- NIH FAES Graduate School – faes.org
- Association of University Technology Managers (AUTM) – autm.net
- Technology Transfer Society - t2society.org
- Licensing Executive Society (LES) – lesi.org
- Kaufmann Foundation – kauffman.org
- Federal Lab Consortium – federallabs.org
- Techno-L Listserv – techno-l.org

Acknowledgements

- A very special thanks to Kai Chen, Ph.D., M.B.A.