

# Maximizing Licensing Opportunities in Research Tools

Welcoming remarks will begin at  
11:55 a.m. Eastern Time.

The formal presentation will begin at Noon Eastern

**For audio, dial in by phone:**

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For a list of **international** toll-free numbers check your confirmation email for the direct link.

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# Maximizing Licensing Opportunities in Research Tools

## Speakers:

James Hoberg, Ph.D., *EMD Millipore Corporation*

David Silva, Ph.D., *Albert Einstein College of Medicine*

August 12, 2014



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# Questions?

**We look forward to answering your questions today.**

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**Thank You!**



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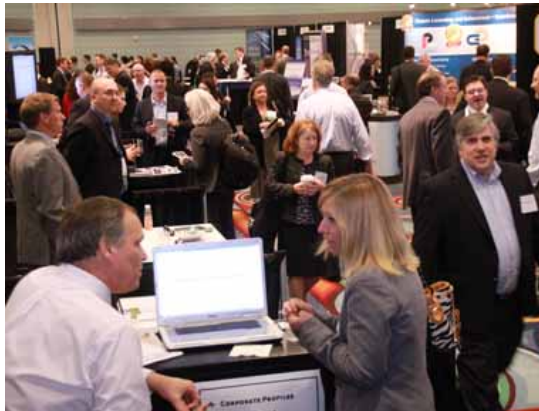
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- AUTM Technology Transfer Practice Manual
- AUTM Licensing Activity Survey (currently for United States and Canada)
- AUTM Update

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# Member Benefits

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## Introducing AUTM's newest member benefit

### AUTM Education Library

#### Seeded content:

- 23 Annual Meeting workshop recordings
- 10 relevant links to the TTP Manual
- 5 educational webinar recordings
- Additional content added annually by committee



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### The AUTM Global Technology Portal (GTP)

The screenshot shows the AUTM Global Technology Portal (GTP) website. The header includes navigation links: Home, Organizations, Technologies, Needs, Capabilities, Startups, Success stories, and People. There are also Login and Sign Up options. The main content area features the AUTM logo and tagline, a search bar, and a welcome message. A large image of two hands shaking is prominent, with a 'Read more' button. Below this is a carousel of technology-related images. On the right, there is a 'Technologies' section with two featured items, each dated Jan 17.

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Welcome to the AUTM Global Technology Portal, where you can easily find the latest university technologies available for licensing worldwide.

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**Technologies**

**Jan 17**

- Low-Temperature, Corrosion-Resistant Integrated Metal Coatings to Improve Efficiency of Coal Plants

In 2008, coal-fired power plants generated 49 percent of electricity consumed in the U.S., more than twice that any other energy resource. Coal is an important fossil fuel because world coal reserves are expected to last about 200 years, much longer fuels. However, also a major ...

**Jan 17**

- Controlling and Predicting the Stability of a Protein Against Degradation by Proteases

The pathogen *Mycobacterium tuberculosis* causes tuberculosis, one of the world's deadliest diseases. Because desaturase DesA3 is essential for survival M. this enzyme a potential drug target treatment although little known about its function. To study mycobacterial ...

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**David Silva, Ph.D**

*Albert Einstein College of  
Medicine*



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**James Hoberg, Ph.D.**

*EMD Millipore, Corporation*



# **Maximizing Opportunities in Research Tool Licensing**

**David Silva, Ph.D.**  
**Assistant Director**  
**Office of Business Development**  
**Albert Einstein College of Medicine**

# Experience:

- Ten years of life science BD and licensing experience.
- Industry and academia.
- Seven years at Einstein.
- Research tools, licensing/startups and industry collaborations/seed fund activities.

# Overview

- Definition of a research tool.
- NIH principles and guidelines.
- Licensing issues/considerations.
- Success stories.

## What Is a Research Tool (NIH definition)?

Research Tools encompass “the full range of tools that scientists use in the laboratory, including cell lines, monoclonal antibodies, reagents, animal models, growth factors, combinatorial chemistry, DNA libraries, clones, cloning tools, methods, laboratory equipment and machinery.” - *NIH*

# NIH Principles

- *Maximize* use of research findings.
- Promote utilization, commercialization and public availability of these inventions.
- Avoid inappropriate licensing practices.

# NIH Guidelines

- Determine if the material/technology is a research tool or product.
- Limit encumbrances for “internal research use” agreements.

# Research Tool or Product?

- Tool for discovery or FDA-approved product?
- Broad, enabling invention or project/product-specific resource?
- Readily useable or distributable, or requires investment to develop/distribute?

## To Patent or Not?

- Is it unique chattelle (e.g., an antibody)?
- Will it have value in the absence of a patent (i.e., method)?
- Potential ROI.
- Title must be elected for unpatented research tools.\*

\*<https://public.era.nih.gov/iedison/public/biological-materials.jsp>)



## Exclusive vs. Non-Exclusive Licensing

“Exclusive licenses should be avoided except in cases where licensee makes the tool widely available through unrestricted sales or licensor retains rights to make the tool widely available.”

“Ordinarily, exclusive licenses should be limited to the commercial field of use.”

# Benefits of Research Tools Licensing:

- Fulfills public access obligation
- Facilitates research
- Reduces burden on faculty
- Additional revenue source

# Commercial Licensee vs. Repository

- Number of diverse repositories (Addgene, Jackson Labs, ATCC, etc.).
- Reduce burden on faculty and fulfills public access.
- *Potentially reduces value of deposited technologies.*

## Research Tool Licensees:

- Internal research agreements (e.g., Merck, Sanofi, etc.).
- Non-exclusive (e.g., EMD Millipore, Santa Cruz, etc.).
- Exclusive (e.g., Life Technologies/ThermoFisher, etc.).

# Examples of Attractive Research Tool Technologies:

- PCR (Cetus Corporation)
- GFP (Columbia, UCSD, etc)
- GST (WEHI)
- 4G10 (Dana Farber)
- Leukemia Inhibitory Factor (WEHI)

# Ones That Got Away:

- Chromatin Immunoprecipitation Assay
- Immunoblot
- ELISA assay

# Einstein Success Stories

- Antibodies
- Mouse Models
- Neurological Tests
- SLICE

# Experience

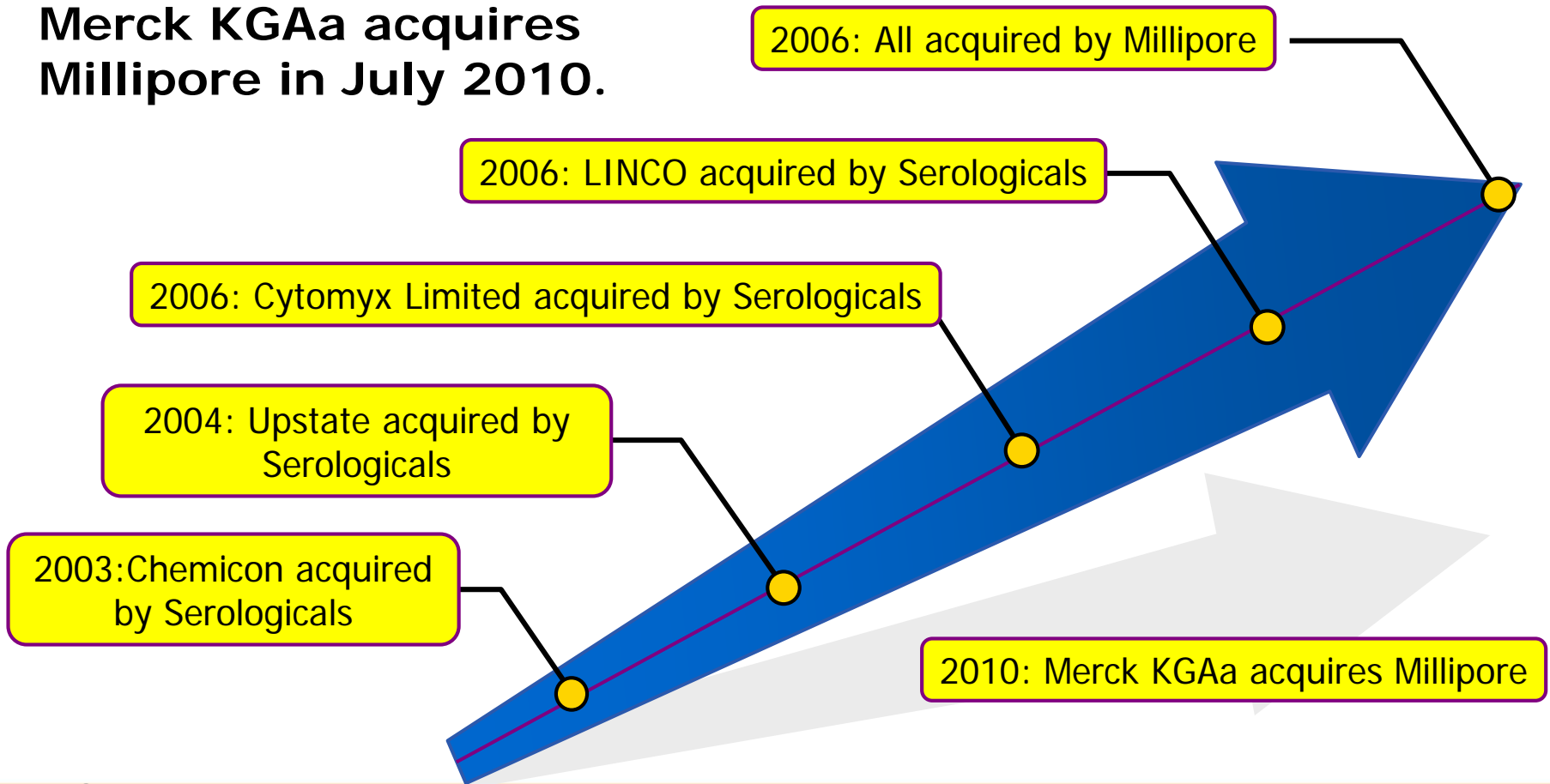
- 2005-2007 Harvard OTD
- Howard Bremer Scholarship Winner
- 6+ Years Reagent Licensing
- >250 Licenses
- >500 products



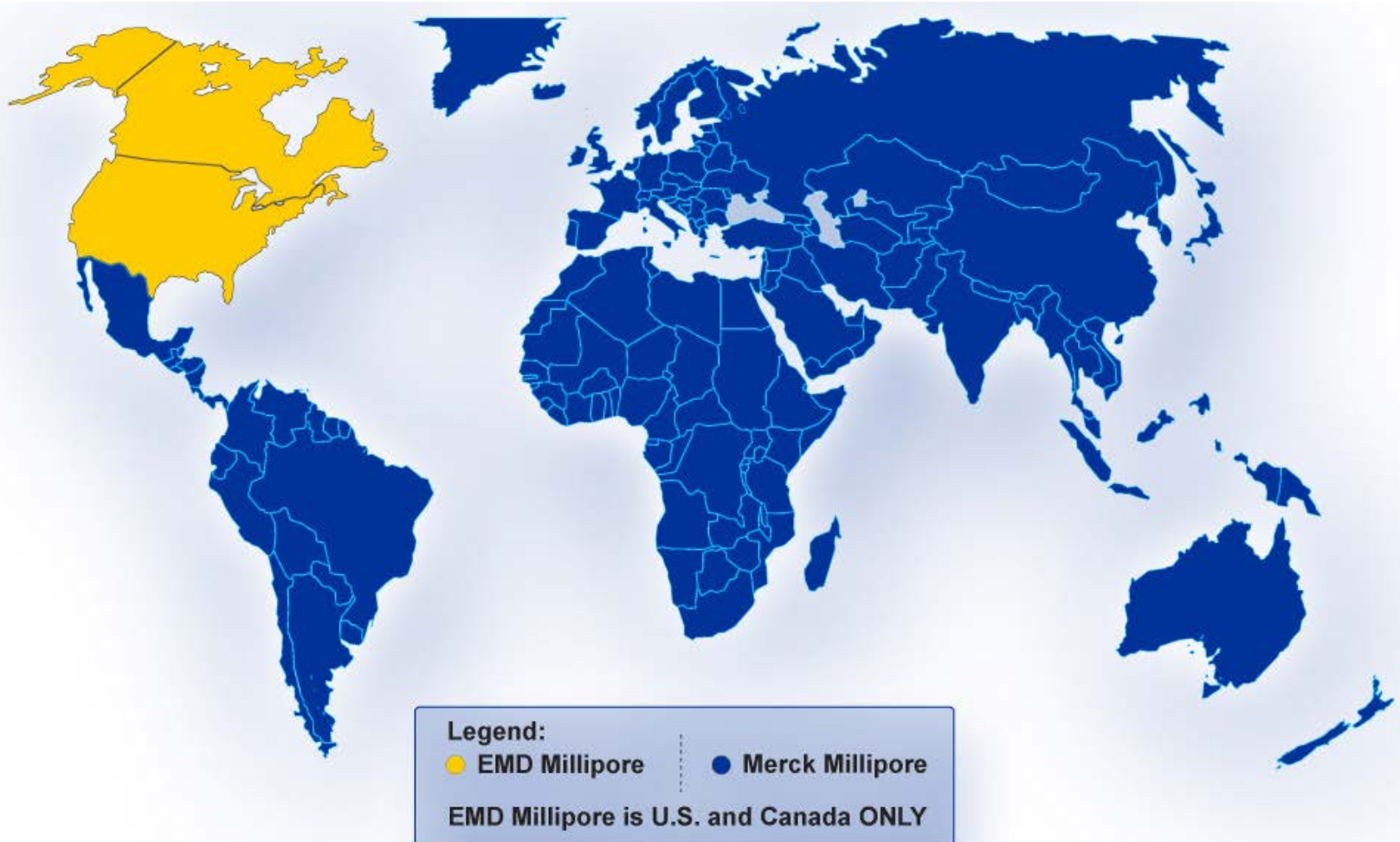
Top reagent companies brought together by Serologicals Corp and acquired by Millipore in July 2006.

## Genesis of EMD Millipore's Reagent Business

**Merck KGaA acquires Millipore in July 2010.**



## Merck Millipore vs. EMD Millipore: what's in a name



# Overview of Topics

- About EMD Millipore Reagent Licensing
- Methods for Selecting New Reagents
- Criteria for Selection
- Challenges
- EMD Millipore Licenses
- Marketing to EMD Millipore
- Best Practices Suggestions

# About EMD Millipore Reagent Licensing

- Model Upstate/Chemicon
- Relationship Model
- Primary Source of Ideas from Academia
- Highest Selling Products
- Worldwide Partners

# Methods for Sourcing New Reagents

- Literature Sourcing
- Thought Leaders
- Networking
- Conferences
- Additional Questions
- Google
- Technology Transfer Offices

# Criteria for Selecting New Reagents

- Published
- Publication Trends
- Applications
- Requests
- Competition
- Literature References
- Novel Target

# Challenges

- Unpredictable Market
- Reluctant Inventors
- Financial Terms
- Polyclonal Antibodies
- Validation
- Resupply

# EMD Millipore Tool Licenses

- Non-Exclusive
- Balance of Licensing Fees and Royalties
- Hybridomas preferred but not required
- Polyclonal Antibody/Volumes
- No Patent
- Validation Clauses
- Master Agreements Preferred



# Marketing Research Tools to EMD Millipore

- Published
- New and Unique
- Requests
- Identify Key Applications
- Data
- Comparisons to other commercial antibodies
- Direct contact rather than website listing
- Ideal before they are published

# Benefits to University

- Alleviate Investigator Requests
- Less MTAs
- Improve Relationships with Investigators
- Distribution of Licensing Revenue to labs
- Investigator Pride
- Increase Metrics

## If I was part of a Licensing Office.....

- Increase Revenue Share with Faculty
- Licensing Royalty to Lab “Slush” Fund

# Professional Development with Tool Licenses

- Volume of opportunities
- Build confidence
- Prepare for larger and more complex licenses
- Look great for deal sheets

# Questions

- [James.Hoberg@emdmillipore.com](mailto:James.Hoberg@emdmillipore.com)
- 978 810 0745

# Questions? Comments?



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# Webinar Recordings

**Creating Value**

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**Policymakers and Technology Transfer**

**Life Science Licenses: The Good, the Bad, and the Ugly**

**Clean up on Aisle 3!**

**Demystifying Government Use Rights**

**Royalty Monetization – Primer, Current Trends, and Best Practices**

**Royalties and Relationships – Keeping Current, Complete and Congenial**

**Taming the MTA Beast: Tips for Successfully Negotiating**

**Post-grant Proceedings under the AIA- How Do They Affect My University?**

**(More Added Monthly)**

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# Register now for AUTM's next webinar

- **Stakeholder Identification and Management**  
- August 19
- **Managing Your Agreement: What to Do When Things Don't Go According to Plan!**  
- Sept 10

## Watch the AUTM Website for upcoming webinars

- **Innovation Funds**  
- September 24
- **Export Controls, MTA's, CDA's and LA's**  
- October 1

**Many more to come!**





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## AUTM Region Meetings



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### **AUTM Eastern Region Meeting**

Sept. 18 – 19, 2014

Baltimore Marriott Inner Harbor  
Baltimore, MD USA

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### **AUTM Western Region Meeting**

Date: Oct. 2 – 3, 2014

Seattle Marriott Waterfront  
Seattle, WA USA

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## AUTM Courses

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### **AUTM TOOLS & Essentials Course**

Oct. 13 – 15  
Westin Denver Downtown  
Denver, CO USA



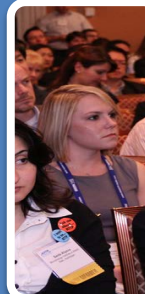
Register Today!

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### **AUTM Successful Practices in Small Technology Transfer Offices**

Oct. 13 – 14  
Westin Denver Downtown  
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**NEW!**

### **AUTM Partnering Forum (Neuro/Ortho Medical Device Technology)**

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Sept. 23 – 24

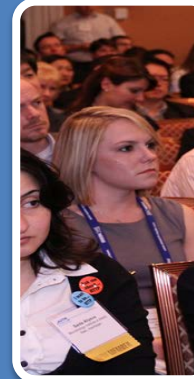
Hosted by Wake Forest Innovations  
Winston-Salem, NC USA

### **AUTM Business Development Course**

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Nov. 12 – 13

The Westin O'Hare  
Rosemont, IL USA



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## AUTM Annual Meeting



# AUTM 2015 Annual Meeting

Feb. 22 – 25

New Orleans, LA USA



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