



**Cedars-Sinai**  
**Foro de INNOVACION**  
**de las Americas**

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 Punta del Este, Uruguay



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**BASIC TOPIC FOR DISCUSSION**

**Bottlenecks And Challenges To Having A Successful  
 Technology Transfer Program.....**



**CEDARS-SINAI MEDICAL CENTER**

**CEDARS-SINAI HEALTH SYSTEM & MEDICAL CENTER**

- Academic Medical Center
- Over 105 years of experience
- 9,526 employees, 1,857 physicians and 2,015 volunteers
- 46,416 admissions and 244,253 outpatient visits
- \$1.7 billion/year-Facility Operation
- Recognized nationally for outstanding physicians, nurses & clinical programs



**KEY ELEMENTS OF CEDARS-SINAI'S MISSION**

- Leadership and excellence in delivering quality healthcare services.
- Expanding the horizons of medical knowledge through biomedical research.
- Educating and training physicians and other healthcare professionals.
- Providing community service.

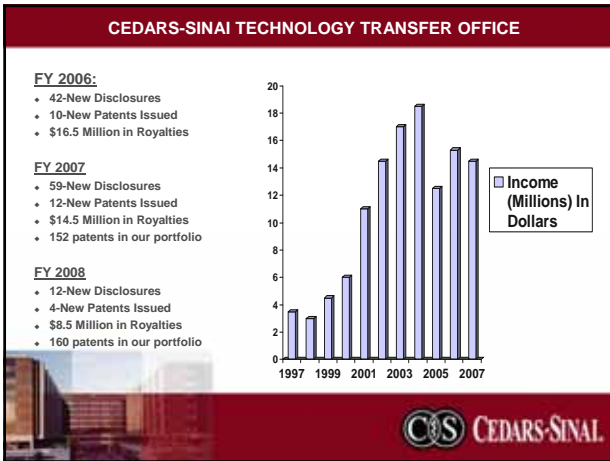
Our Impact: Local, Regional, Global





### BURNS & ALLEN RESEARCH INSTITUTE Research Areas:

<b>Oncology</b> <ul style="list-style-type: none"> <li>• Breast &amp; Gynecologic Cancers</li> <li>• Prostate Cancer</li> <li>• Brain</li> </ul>	<b>Neurosciences/Neurobehavior</b> <ul style="list-style-type: none"> <li>• Neurosurgery</li> <li>• Ophthalmology</li> <li>• Psychiatry</li> </ul>	<b>Cardio-pulmonary</b> <ul style="list-style-type: none"> <li>• Heart Disease</li> <li>• Pulmonary</li> <li>• Electrophysiology</li> <li>• Imaging</li> </ul>		
<b>Metabolic Disorders</b> <ul style="list-style-type: none"> <li>• Inflammatory Bowel Disease</li> <li>• Diabetes</li> <li>• Osteoporosis</li> <li>• Thyroid</li> </ul>	<b>Transplant</b> <ul style="list-style-type: none"> <li>• Liver</li> <li>• Heart/Lung</li> <li>• Infectious Diseases</li> </ul>	<b>Medical Genetics</b> <ul style="list-style-type: none"> <li>• Common Diseases</li> <li>• Rare Diseases</li> </ul>		
<b>Laboratory Core Facilities:</b>				
Immunology & Auto-immune Diseases	Molecular Genetics	Gene Therapy	Molecular Correl.	Medical Physics and Imaging
<b>Support Facilities:</b>				
Animal Research Facilities	Clinical Research Center	Anatomical and Clinical Path	Health Services Research	

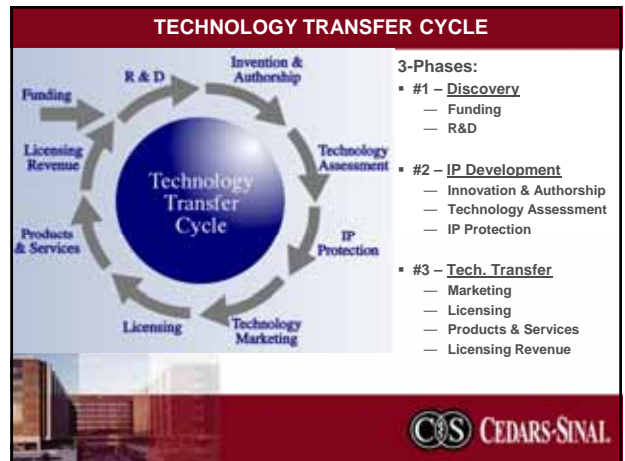
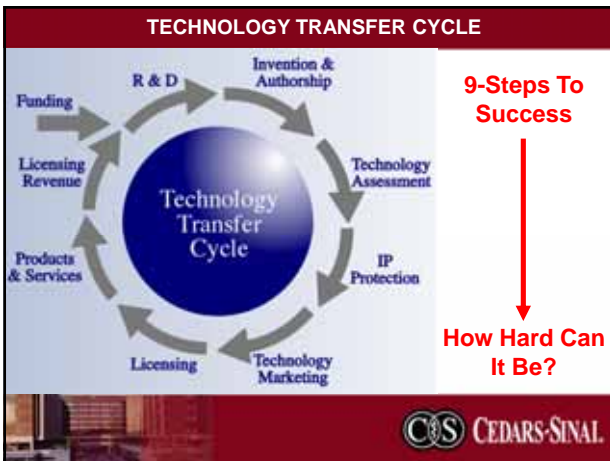


### 2-WAYS TO CONSIDER THE QUESTION – In The End The Answers Are The Same

Bottlenecks & Challenges To Having A  
Successful Technology Transfer Program.....

OR

Requirements  
For A Successful Intellectual Property /  
Technology Transfer Program



**No \$'s = No Research = No Discoveries** Critical Success Factors  
Phase #1 - Discovery

- Institutional commitment to Research & Development
- Protected time for faculty to conduct research
- Infrastructure to support research
  - Facilities / Information Technology / Administrative Support
- Knowledge of research funding
  - Government / Private Foundations / Industry
- Knowledge of how to properly collaborate
  - MTA's / CDA's / Inter-Institutional Agreements




**Commercial Development & Academic Pursuits Are Not Mutually Exclusive** Critical Success Factors  
Phase #2 – IP Development

**Innovation & Authorship**



- Education of researcher and staff is critical
  - Knowing when to publish
  - Knowing what is patentable
  - Keeping proper records (Lab Notebooks)
- Knowledge of the Internal Infrastructure
  - Policies & Procedures
  - How to complete an invention disclosure




**Commercial Development & Academic Pursuits Are Not Mutually Exclusive** Critical Success Factors  
Phase #2 – IP Development

**Technology Assessment**



- Marketability & Patentability
  - Marketing – Will anyone care?
  - Patenting – Can we obtain adequate claims?
  - Assessment up front is key
- Communications between Investigators / Patent Counsel / Potential licensees

**Commercial Development & Academic Pursuits Are Not Mutually Exclusive** Critical Success Factors  
Phase #2 – IP Development

**Intellectual Property Protection**

- Willingness to reassess your position
  - Is the IP still market relevant?
- Key Factors to consider -- Time / Money
  - Beyond 10 Years it gets difficult to license technology
  - If patenting and maintenance expenses get too high few will be willing to cover
- Systems to track patent status
- Follow up and coordination with Marketing

**Good Research + Good Patent Management = \$\$'s (Maybe)** Critical Success Factors  
Phase #3 – Technology Transfer

**Set Realistic Expectations**

**Marketing/Development**

- Need to be pro-active and well organized
- Utilize good contact management system
- Relationship Development
  - Develop and maintain an active sales process
  - Identify and build a network of contacts and be in regular contact
- IP bundling can provide a competitive advantage




**Good Research + Good Patent Management = \$\$'s (Maybe)** Critical Success Factors  
Phase #3 – Technology Transfer

**Set Realistic Expectations**

**Licensing**

- Determining true market value is critical
- Need to understand the market space of the technology which you are trying to license (Drug vs. Device, etc.)
- Understanding the competitive situation in the market is also critical




### Set Realistic Expectations

#### Products And Services

- Patience is a key requirement – Product development and delivery to the market takes time
  - Patenting – 2 to 4 years (Sometimes Longer)
  - Product development & delivery – Varies depending upon the science

#### Licensing Revenue

- Royalty Sharing Agreements should be clearly defined
- Payment tracking system is required to ensure precision



- It is not enough to just do **research** or just produce **disclosures** or have staff in the Technology Transfer Office

- **It takes an entire system that cooperates and functions together as an informed unit**

- Institutional commitment
- Faculty awareness
- Market relevant portfolio
  - Invention disclosures
  - Systems that work for identifying quality IP
- Being Proactive – Not waiting for success
- Patience + Focus

Thank You