

An Overview of Tech Transfer

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Overview

- Overview of Tech Transfer
- Disclosing Inventions and Patents
- Types of Corporate Relationships
 - *Sponsored Research*
 - *Subcontract to Rutgers from Federal Award*
 - *License*
 - *Equity and Licenses*
- How to work with companies
- Faculty in start up companies

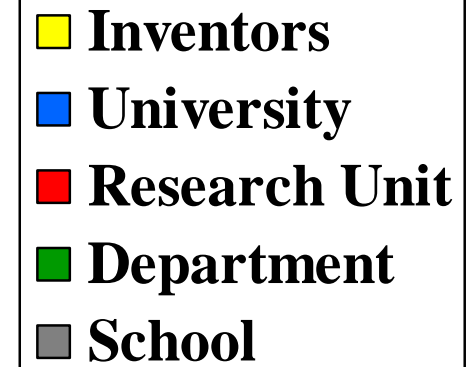
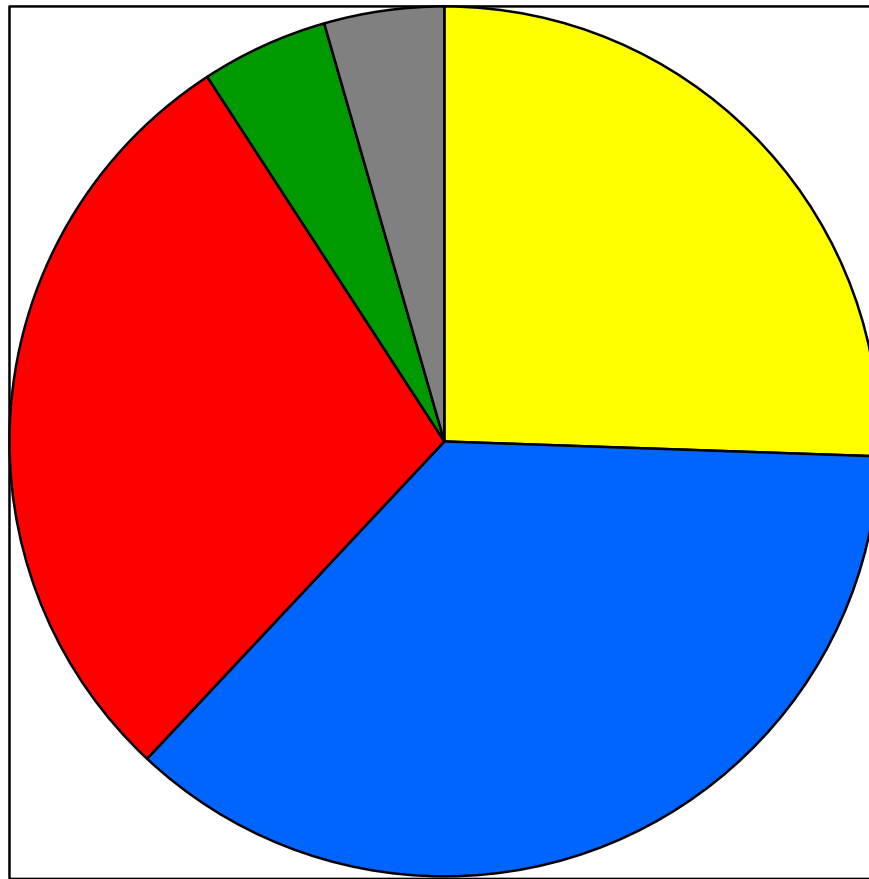
Tech Transfer: Key Players

1. Inventors: Faculty, (and postdocs, research scientists, students)
2. OCLTT: Office of Corporate Liaison and Technology Transfer
3. Companies

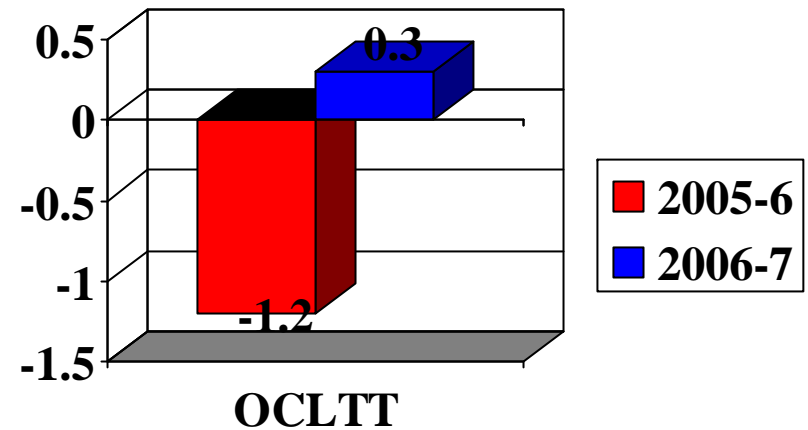
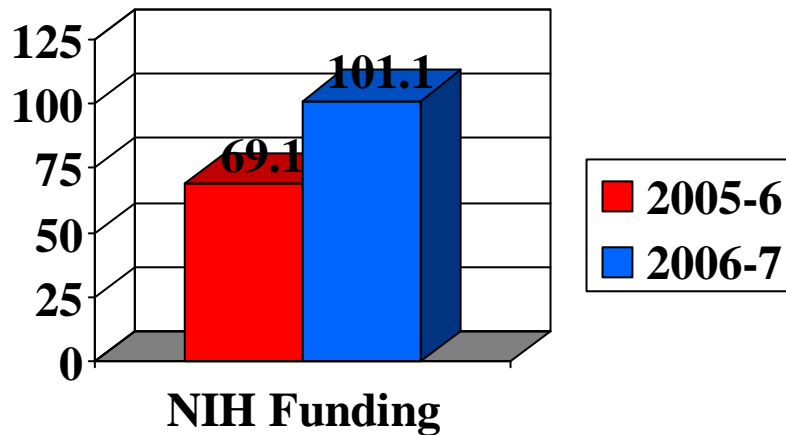
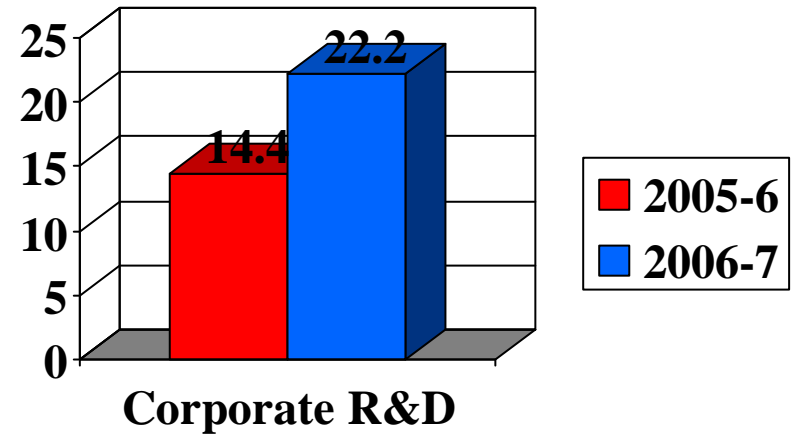
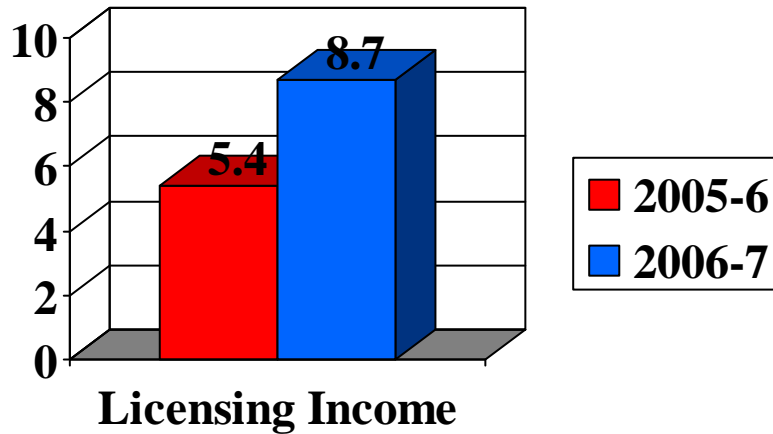
OCLTT

- Protection and marketing of Rutgers intellectual property
- Negotiation of industrial agreements (such as licenses and research contracts).
- Spin-off company activities.

Distribution of Royalties

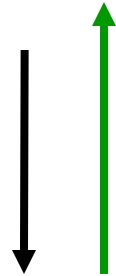


Comparison of 2005-6 and 2006-7

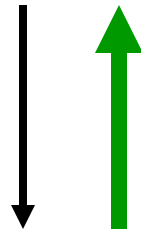


This rarely happens in practice

1. Inventors

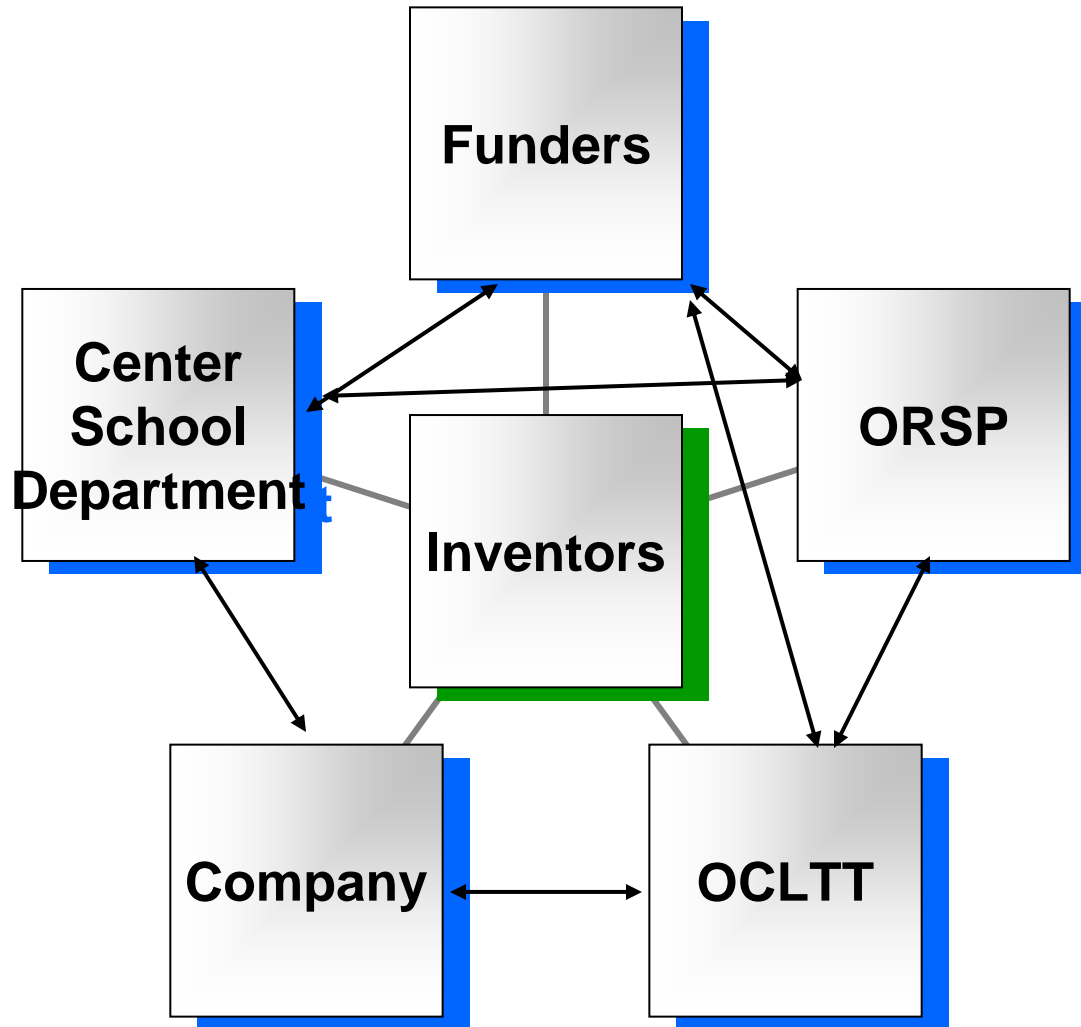


2. OCLTT



3. Company

Corporate Agreements in Practice



Tech Transfer

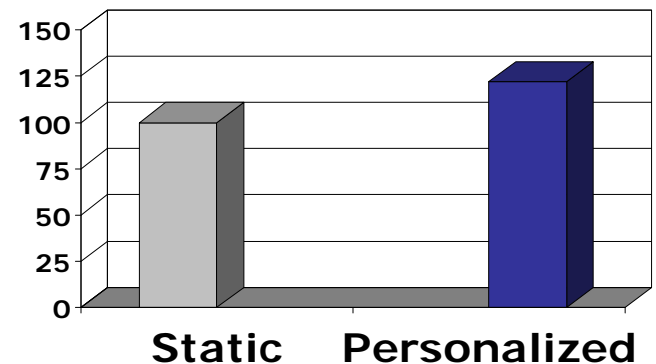
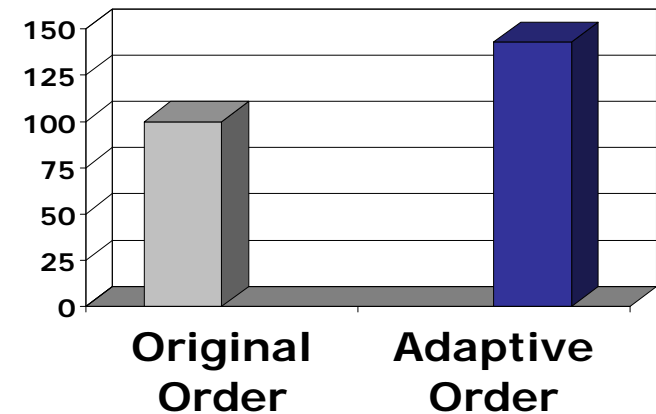
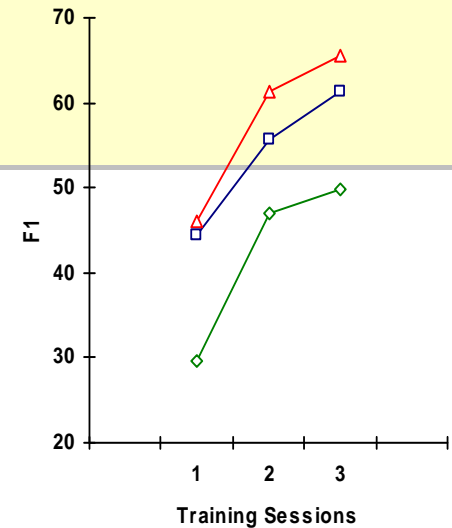
- Goals
 - *Maximize Benefit of Invention to Society*
 - *Protect Inventor and University*
 - *Publication*
 - *Liability*
 - *Revenue to University and Inventor*
- Philosophy
 - *“Many singles” vs. homeruns (1/2500 disclosures results in over \$1M in licensing)*
 - *Low Transaction Costs*
 - *Simple deals where everyone wins*
 - *Standardized deals when possible*

Corporate Research Agreement

- Research on topic mutually agreed to by sponsor, faculty member, and university.
 - *Majority are initiated by faculty*
- University/Faculty receives
 - *Funds (for student/postdocs, summer salary, equipment, travel, etc.)*
 - *Input in problems important to industry*
- Company Receives
 - *Information on results of project*
 - *Some rights to IP*
 - *Ancillary benefits (Relationship with students for recruiting, faculty expertise, access to advanced equipment)*

Interacting with companies

- Understand company's goals and communicate in company's terms
 - Few companies want to fund you to get preliminary data to support NSF or NIH grant
 - More companies interested in working with you on application of the results of your grant to problems of their interest



Interacting with companies II

- Give total cost of project- benefit rate, F&A, (overhead, indirect costs) are not negotiable.
 - *Academic year salary of faculty, existing infrastructure is a subsidy*
 - *Companies pay benefit rates, etc. (~250K a year for a pharma employee)*
- University will not accept product liability.
 - *Expect companies to evaluate results of research for suitability in products*
 - *Difference in mission, benefits*
- Discuss IP terms and your situation with OCLTT
 - *First right to negotiate vs. Right of first refusal*
 - *Exclusive vs. non exclusive- field of use, time*
 - *Internal use, sublicensing*
 - *Royalty free vs. royalty bearing*
- Discuss Milestones with OCLTT

Interacting with companies III

- CDA: confidential **disclosure** agreement and non-**disclosure** agreement (NDA)
- My advice: CDAs slow down company interactions:
 - *Otherwise, we start a relationship by discussing how you think they will cheat you and what court we'll sue each other in. Company may respond by searching for all internal projects so they are excluded from CDA*
 - *Investors with rare exceptions will not sign CDA*
 - *On first interaction, don't discuss info that hasn't been publicly disclosed.*
 - *In initial meeting, companies usually more interested in applications and market than how enabled.*
 - *Most IP "stolen" from university is stolen by an inventor not a company.*
 - *Use CDAs when revealing info that hasn't been protected yet.*
 - *Use CDAs to protect ability to patent in the future*

Do's and Don'ts: Corporate agreements and licensing

- Don't
 - *Sign contracts, MOUs etc on behalf of university*
 - *Negotiate Contractual Terms and Conditions*
 - *Reduce/Waive/Ignore Overhead*
 - *Accept Student Restriction (e.g., nationality)*
 - *Accept publication restrictions except a brief review for patentability or revealing confidential data provided by the sponsor.*
 - *Seek company support for changing Rutgers royalty distribution or other policy*
- Do
 - *Develop Project Budget*
 - *Prepare Technical Statement of Work*
 - *Discuss Report/Deliverable Schedule*

Patents

- Patents are a form of Intellectual Property
- All Property rights are rights to EXCLUDE others from something
 - *A Patent affords the right to exclude others from making, using, selling offering to sell, or importing the invention for the active term of the patent*
 - *A Patent is not the right to make, use or sell your invention. Your right to practice the invention is independent of the patent (i.e., patents of others, governmental regulations, etc. may limit your ability to practice the invention)*
 - *Historically, there has been an exception for academic research purposes. Academic and other research institutions are usually free to build upon patented advances BUT only if there is no clear commercial gain. However, this exception has been narrowly construed by courts and so is very limited.*
- An unlicensed patent is as important to your promotion case as an uncited publication.

Requirements to Obtain a Patent

The Proposed Invention must possess:

- 1. UTILITY-** There must be either a demonstrated utility or an assertion of utility which is believable by one of ordinary skill in the art
- 2. NOVELTY-** Must be different from any single reference (any single piece of prior art)
- 3. NON-OBVIOUSNESS-** Must be different from any justifiable combination of references and general knowledge among the prior art

Interacting with OCLTT: Inventions

- Initial Disclosure
 - *Use Disclosure Form*
 - *Provide Technical Documentation*
 - *Clearly and Concisely Identify What You Propose as the Invention*
 - *Recite Experiments Performed and their Significance*
- Assessment
 - *Patentability*
 - *Novelty Search (Most faculty don't do a patent search before starting a research project)*
 - *Commercial Interest in Technology*
 - *Most faculty don't select research topics based on market size, value, business model*
 - *Need to license background technology*
- Prosecution
 - *Provisional Application*
 - *Regular U.S. / PCT Application*

Triage

- Rutgers receives ~90 to 125 disclosures per year
- Rutgers always files patent applications for licensed technology where patent costs are reimbursed
- Rutgers can afford to file 5-15 patent applications a year on unlicensed technology where there is a good chance of future licensing
- In certain instances Rutgers may return technology to inventor(s) who may file a patent application on his / her / their own

Inventor Do's and Don'ts

Do's

– *Patenting*

- *Work with OCLTT (and OCLTT approved patent attorney) to*
 - *Communicate your invention clearly in a timely fashion*
 - *Use Rutgers Invention Disclosure Form (available at OCLTT website)*
 - *Before disclosure (at least 1 month prior to publication/presentation)*
 - *After data is in possession (work proposals are insufficient in most areas)*
 - *Sign documents necessary for filing and prosecution of application*
 - *Identify the prior art and how your invention differs*
 - *Be truthful*

– *Licensing*

- *Work with OCLTT to*
 - *Identify potential Licensees*
 - *Provide technical information about the invention to a prospective licensee*

Inventor Do's and Don'ts

Don'ts

– *Patenting*

- *Don't File your own application*
- *Don't Publish/Present work you may want to commercialize before disclosing to OCLTT*
- *Don't disclose to OCLTT shortly before (or on the day that) you present or submit a final publication on your work*
- *Don't contact outside counsel used by Rutgers on a prior case*

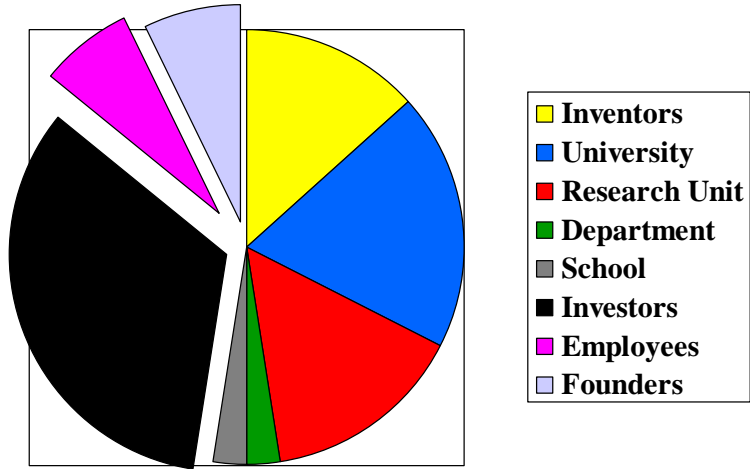
– *Licensing*

- *Don't Sign your own deals*
- *Don't Make an initial disclosure of unprotected proprietary technical information to a company without first obtaining a signed CDA from OCLTT*

Start-up companies

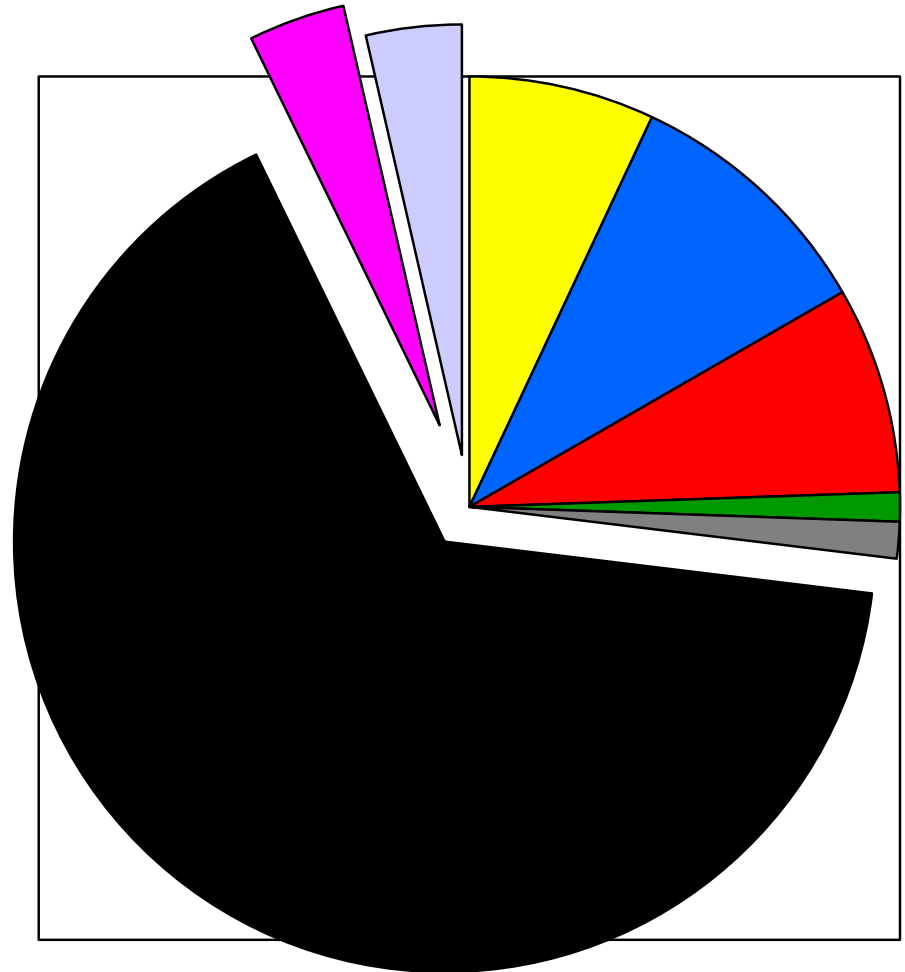
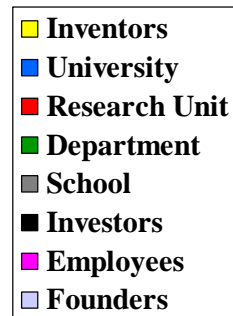
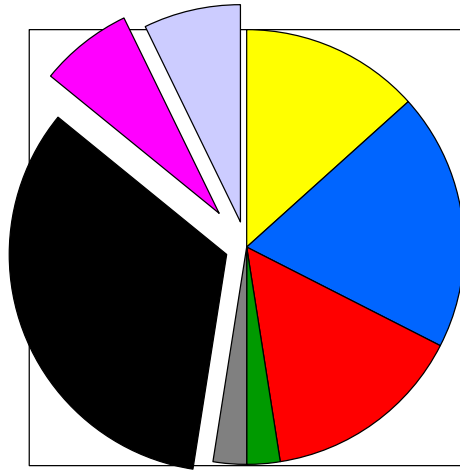
- Rutgers can license technologies to start-up companies, including those founded by faculty
- Rutgers can receive equity instead of cash as part of a licensing agreement.
- Inventors benefit financially when equity is sold by Rutgers.
- Faculty can receive equity in company for role in company (not for licensed IP)
 - *Scientific advisor, consultant, “know how”, reputation*

Equity in start-up companies



Equity in start-up companies:

The size of the pie is much more important than your percentage of the pie.



Cautions

- Restrictions on future IP, particularly that not funded by company.
- Can Rutgers get IP back if company fails?
- Is there an exit strategy?
- Is there a business plan that make sense?
- Are there enough funds to reach significant milestones?

Conflict of Interest Summary

Conflict of Commitment: Rutgers policy on outside activities:
No more than five 8-hour days a month without approval of exception.

– *If you need to spend more time, you can take an unpaid leave of absence.*

- You cannot negotiate with Rutgers on behalf of another company.
- You can't use Rutgers equipment without compensating Rutgers at the same rate available to others.
- While faculty often blur their personal life and professional life, have a clean separation of your academic and corporate activities.
- A conflict of interest review is required when a company owned more than 1% by a faculty member (or family member) enters into a contract with Rutgers (e.g., licensing technology). This is straightforward if you avoid the gray areas.

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