Purdue Partners

…making academic connections at the speed of business

E. Dan Hirleman

Chief Corporate and Global Partnerships Officer

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The Goal

Substantially and strategically grow our corporate and
foundation partnerships

via

philanthropy, research funding, student experiences, preferred recruiting, personnel exchange, advise and advocacy

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THE PARTNERSHIP IMPERATIVE

- Fierce Competition for Federal Funding

- Affordability a Big Move

- Global Engagement Imperative

- Economic Dev. Integral to Land Grant Mission

- ~$400M/yr Research Awards, incl. ~$100M from Corp/Private Sources

- Challenges/Opportunities are Grand
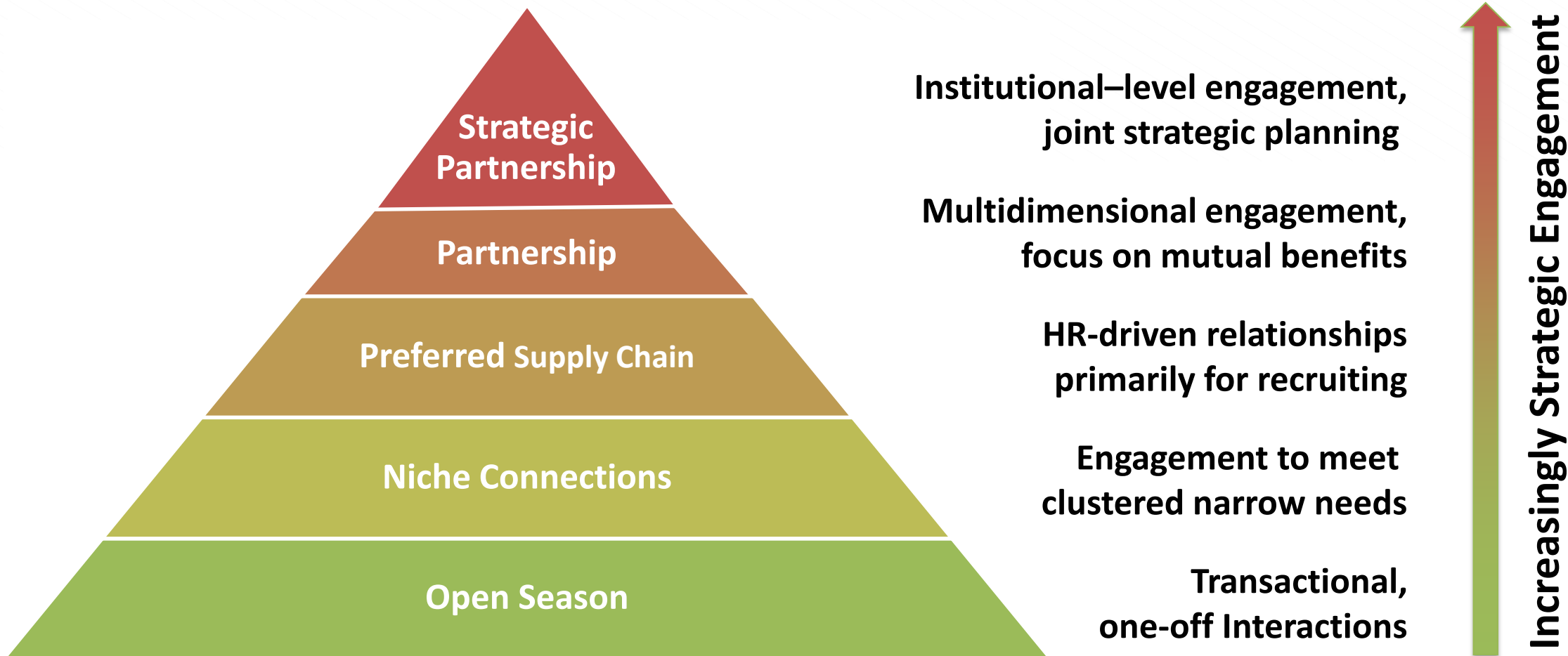
The Opportunity

Complex System 1 (Purdue)

Complex System 2 (corporation, foundation)

$O(10^3)$ faculty

each with

$O(10^1)$ students and

$O(10^1)$ fundable ideas per stdt

=

$O(10^5)$ connection nodes

$O(10^3)$ scientists

each with

$O(10^1)$ staff

and

$O(10^1)$ fundable ideas per staff

=

$O(10^5)$ connection nodes

Convergence
- Organization
- Value to Faculty
- Communications
- Collaboration
- Portfolio Strategy
- Partnership Metrics

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The Premises

- Strategic partnerships (quality over quantity) should be Purdue's institutional-level focus

- We can (& must) significantly grow our annual corp/foundation research funding

- Broadening faculty involvement is imperative to success

- Better structure that simultaneously enhances entrepreneurial spirit is needed
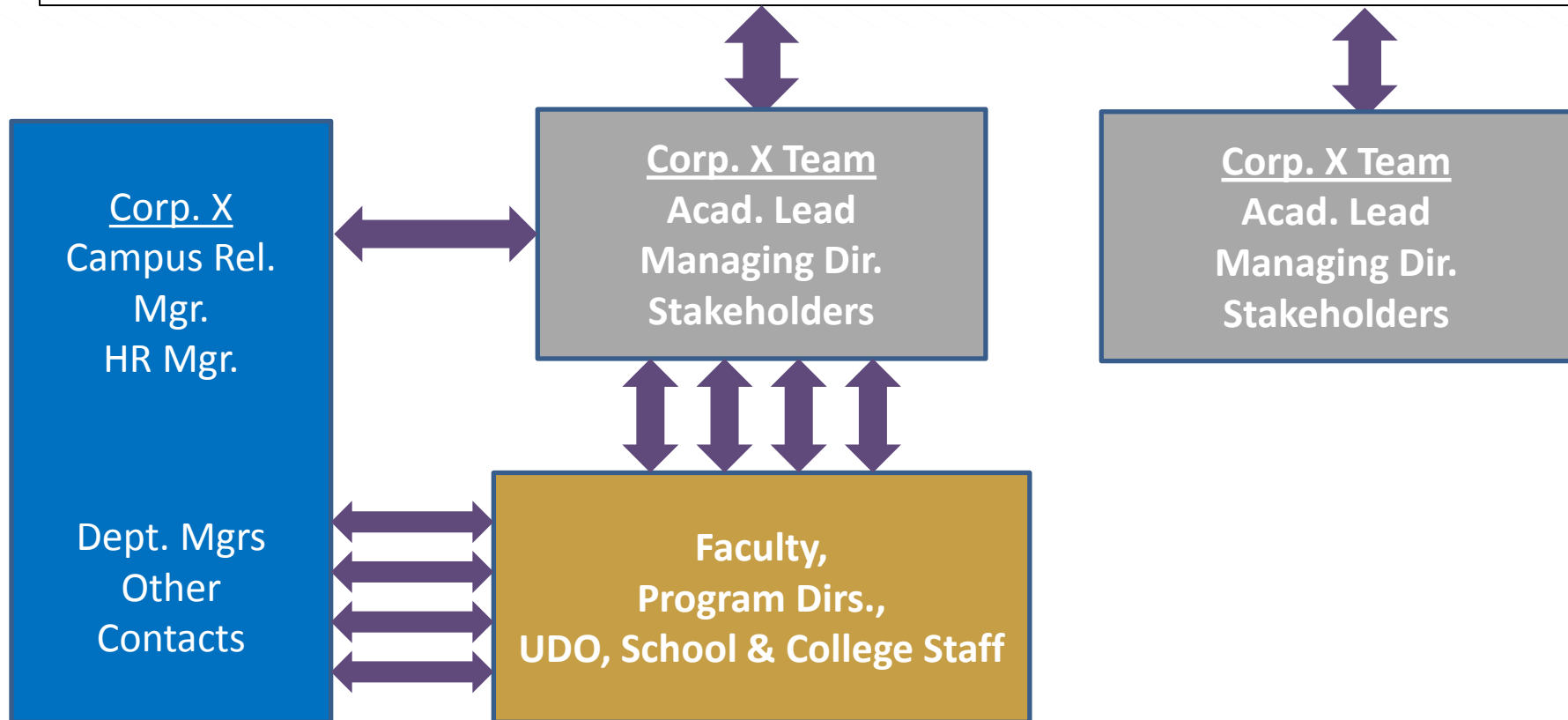
Partnership Continuum

Strategic Partnership — Institutional–level engagement, joint strategic planning

Partnership — Multidimensional engagement, focus on mutual benefits

Preferred Supply Chain — HR-driven relationships primarily for recruiting

Niche Connections — Engagement to meet clustered narrow needs

Open Season — Transactional, one-off Interactions

Increasingly Strategic Engagement

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Purdue Partners

- Purdue Partners Focus Committee (campus-wide representation, portfolio philosophy)
- PU-level Team for each strategic partner (w/ Academic Lead & Managing Director)
- Integrated communications strategy & plan, both internal & external
- Overall Partnership Metrics
  - Guide PU-level commitment
  - Incentivize collaboration

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Purdue Partners Focus Committee
(PU-level, broad stakeholder representation)

Corp. X
Campus Rel. Mgr.
HR Mgr.

Dept. Mgrs
Other Contacts

Corp. X Team
Acad. Lead
Managing Dir.
Stakeholders

Corp. X Team
Acad. Lead
Managing Dir.
Stakeholders

...

**Faculty,
Program Dirs.,
UDO, School & College Staff**

What's in it for New Faculty?

- Alignment with Strategic Partnership (commitment for the long term from both PU and partner)

- Better intelligence w.r.t. marketplace needs

- Opportunity to help define corporate direction

- Resilience to loss of corporate champion

- Visibility for activities

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Pitfalls, Problems, and Possibilities: How to Work Successfully with Industry

OFFICE OF THE VICE PRESIDENT FOR RESEARCH and PARTNERSHIPS

GEANIE UMBERGER, PHD, ASST. VICE PRESIDENT for RESEARCH
DAN HIRLEMAN, CHIEF CORPORATE AND GLOBAL PARTNERSHIPS OFFICER

Achieve Three Objectives:

❖ Learn how to work with a company

❖ Learn about Purdue's new industry model

❖ Overview of new contracting options

Faculty Perspective: Why Work with Industry?

❖ Ever-changing funding landscape – decreasing government funding

❖ Feedback on your work – applicability and direction

❖ Student training and employment opportunities

❖ Moving your technology to market

❖ Opportunities for future sabbaticals, consulting, speaking engagements, co-author papers, summits, awards, etc.

❖ No RFPs! Avoid competitive submissions

Faculty "Criticisms" Regarding Working with Companies

"I don't want to waste my time meeting the company unless they have funding to give me right now."

"I met them a year ago and nothing happened. Why bother meeting with them again?"

Would you say this to a (federal agency) Program Officer?
Would you not apply/re-apply for a grant just because the previous time you did not get funding?

Advice: Maintaining the Relationship

- It requires constant work to maintain
- Much like dating – it works if there is a good match

  in company needs, your abilities & interests, and personalities on both sides
- Relationships: start small and build over time
- Need to listen to *their needs* and see if you can find a mutual area for collaboration (win-win for both)
- Strong element of trust – on both sides – essential for success
- Treat company deadlines like federal agency grant deadlines

Advice: How to Work with a Company

- Keep in mind that a company will work with the best in the world

- When they visit and state a problem they are having - they want "shovel-ready" solutions – fix it now

  "If I have to wait for a solution to be developed, it is too late and the company will be behind their competitors and might end up closing their doors."

  Avoid saying*: "Tell me your problem(s) and I will develop a solution."*

  Instead say*: "Tell me your problems and let's see if what I am currently doing will quickly solve it."*

  Also ideal: *"Let me help you develop future products. Where do you see the market going and how might we collaborate?"*

- Much like dating – it will work if there is a good match

- Relationships: start small and build over time

Important to Keep in Mind

❖ The days of companies just giving money are gone

❖ Companies expect deliverables for their money:
  ❖ Set milestones and deliverables – understand how they will measure successful projects
  ❖ MUST follow-through when you agree to something (be action-oriented and not all-talk)
  ❖ MUST follow-up with them if you have questions and stick to any agreed work (avoid project creep), and get any mutually agreed-upon changes in writing, including how this will change the deliverables, milestones, and budget (let SPS know as well)
  ❖ Deliver on-time, on-budget, and as promised
  ❖ Do not overpromise on your capabilities and deliverables
  ❖ Communicate often with the company during the project
  ❖ Communicate as soon as you encounter problems with the project and have a solution in mind as a "fix"

Company Money and Internal Competition

❖ Any work proposed must compete with internal projects on-going

  – Must compete for funding

  – Must compete for "band-width" so need a champion internally

Important to Industry

- Confidentiality – *critical* to successful relationship!!
    - SPS Contracting Office handles putting CDA/NDA/PIA in place
    - **Do not** sign a CDA/NDA/PIA until SPS has reviewed it for *YOUR* protection

- Intellectual Property (IP) ownership

    - Be sure to work with OTC regarding your disclosures

- Overhead (Facilities & Administration, a.k.a. F&A)
    - Not a tax that Purdue adds to projects (common industry misperception)
    - How to explain to a company?

- Before sending materials to a company, make sure you have a MTA in place!

- Projects are more complex

    - Often multidisciplinary

Types of Funding from Industry

- Gifts (research funding, equipment, student projects)

  – handled by UDO

- Research grants (contracts)

- Consortia

- Affiliate programs

- Teaming on federal grants and projects

- Flow-through (DOD-type funding)

Frequency

- One time event

- Now and then

- Ongoing relationship

- Strategic relationship

- New and changing models

Types of Agreements

* Research Agreements (Standard plus new Purdue options)

* Master Agreements – some are strategic; different from MOU

* Mutual Non-disclosure Agreements (a.k.a. NDA; same as CDA or PIA or secrecy agreement)

* Material Transfer Agreement (MTA)

* Testing Agreement (now referred to "option 4" under new model)

* Miscellaneous Agreements

Once a Company Has Agreed to Fund Your Work: What's Next?

Step 1 – Company asks for a proposal (Scope of Work)

Step 2 – Work with your Pre-award Office to develop the budget BEFORE you send it to
the company

Step 3 – Pre-award will start the internal process if the company agrees to sponsor the
project within SPS

Step 4 – The company will communicate with SPS Contracting Office

Step 5 – SPS will notify you once all is completed and request any signatures from you and
your Department/School/College

***NOTE** – Some companies fall under a Master Research Agreement – different process for these*

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Sponsored Program Services

INDUSTRY-SPONSORED RESEARCH

NEW OPPORTUNITIES

Jeff Kanable, Director Industrial Contracting

WHY THE CHANGE?

- Purdue will maintain its position as a leader in industry-funded research

- Provide faculty flexibility in selecting contract terms which fit the project

- Enhance Purdue relationships with industry

- New Models for University-Industry Collaboration – go to

  http://sites.nationalacademies.org/PGA/uidp/index.htm

THE KEY DIFFERENCES

- Purdue faculty choose which option fits the scope of work

- Faculty-led decision *may* allow Sponsor:
  - ✓ Pre-paid, exclusive license to Purdue- owned IP
  - ✓ Ownership of project IP

- SPS, EVPRP, and OTC to provide consultative assistance to help faculty select the best option

- Faculty advisory committee will serve as a resource in making key management decisions

INDUSTRY CONTRACT OPTIONS

Contract Options:

Option #1 – Project IP owned by Purdue. Sponsor receives a non-exclusive royalty-free (NERF) license w/first option to a royalty bearing exclusive license
(Traditional Fundamental Industry Sponsored Research)

Option #2 – Project IP owned by Purdue. Sponsor receives a royalty-free exclusive license for five (5) years in exchange for Sponsor paying a fee of 5% of project cost

Option #3 – Project IP owned by Sponsor and Sponsor must approve publications.
Sponsor pays an IP Fee of 10% of project costs.

Option #4 – Sponsor owns project generated data. No IP is contemplated.
(Traditional Industry Sponsored Testing)

OPTION #1

IP owned by Purdue. Sponsor receives a non-exclusive royalty- free (NERF) w/option to a royalty bearing exclusive license (Traditional Fundamental Industry Sponsored Research)

- Title to any project intellectual property (IP) shall remain with Purdue or Purdue's assignee, Purdue Research Foundation (PRF)

- Sponsor receives a non-exclusive royalty-free (NERF) license to Project IP and may direct the protection of the Project IP in exchange for payment of all costs associated with protecting the IP

- Sponsor receives first option to exclusively license project IP

- No publication restrictions beyond a 30-day prior review by Sponsor

- Negotiated F&A rate applies – 55%

- used to be the only type of agreement we offered -

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OPTION #1

Purpose	• Explore potential solutions in a broad technical area — Scientific and engineering inquiry
When to use this agreement	• Early stage research • PI-initiated research • Trainee's (grad students, post-docs) may be involved • Ownership of IP by Sponsor not acceptable to Purdue faculty • Sponsor does not want to pay the up-front IP fee
Restrictions	• Essence of Basic Research agreement has not changed — Language has been standardized, but no major revisions
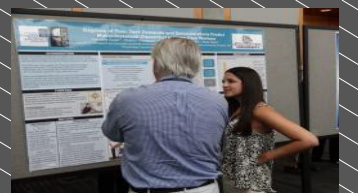
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OPTION #2

IP owned by Purdue. Sponsor receives a royalty-free exclusive license for five (5) years in exchange for a fee of 5% of project cost

- Research is directed toward improvement and/or proof of concept of one or more known technologies (could be Purdue-owned BIP or Sponsor-owned BIP)
  - If Purdue-owned, Sponsor is already licensee of Purdue BIP

- Sponsor receives a non-exclusive royalty-free (NERF) license to Project IP and may direct the protection of the Project IP in exchange for payment of all costs associated with protecting the IP

  Exclusive license to new project IP

-
  - Add new IP to existing sponsor license with no additional fees (if BIP is already licensed to sponsor by PRF)
  - If no license in place with PRF, Sponsor receives a royalty-free, exclusive license (within a defined field) for a period of five (5) years – 5% IP fee applies (per field)

- Exclusive license to all other project (outside of defined field) IP will be market-based Publications are not
- restricted beyond 30-day prior review by Sponsor
- Fully-costed F&A rate applies – 64.75%

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OPTION #2

Purpose	• Develop incremental improvements for an existing technology
	   — Translational research
	   — Scalability

When to use this agreement	• To further develop company-owned IP or licensed PRF IP • Trainee's may be involved
Restrictions	• Not meant to be a template for other projects with same sponsor that are not appropriate for this agreement type • Cannot co-mingle funds

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OPTION #3

Project IP owned by Sponsor and Sponsor approves publications. Sponsor pays an IP fee of 10% of project costs

- Title to Project IP (includes research data and materials) is owned by Sponsor
- Must not include any Purdue BIP
- Subject to Export Controls
- Complete confidentiality
- No publications without sponsor approval
  - Special considerations required for trainee participation
- Work must be segregated from other projects
- No follow-on research opportunities with other sponsors
- Requires documented project close-out (destruction of all materials)
- IP fee = 10% of project budget
- Fully-costed F&A rate applies – 64.75%

- a.k.a. "turbo-lockdown" or "work-for-hire" option -

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OPTION #3

Purpose	• Identify solutions to targeted problems — Solution to company proprietary problems
When to use this agreement	• Purdue faculty have no interest in area for future research • For companies in the later stages of product development • When a company wants to explore the viability of a technology and solve practical challenges • An alternative to the Basic/Fundamental Research agreement
Restrictions	• Cannot co-mingle funds • Not meant to be a template for other projects that are not appropriate for this type of agreement • Not intended to include trainee's without special approval • No Federal funding involved (SBIR/STTR) • No publication without Sponsor approval • All regulatory requirements apply

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OPTION #4

Testing Services (Traditional Industry Sponsored Testing)

- Protocol specified by Sponsor

- Deliverable data is owned by the Sponsor

- Negotiated F&A rate applies – 38%

OPTION #4

EXAMPLE

Purpose	• Evaluate sponsor's new and existing materials or technology — Testing and measurement
When to use this agreement	• Purdue faculty are following sponsor-provider instructions • Can be used to evaluate company-owned IP or IP licensed from PRF
Restrictions	• Expectation is that no additional IP will be developed • No publication of sponsor confidential information

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IP TERM SUMMARY

TYPE OF INDUSTRIAL PROJECT	PUBLICATION	INTELLECTUAL PROPERTY	F&A Rate	IP Fee
Option #1	30 day review by sponsor for proprietary or patentable information	Sponsor receives a non-exclusive royalty-free (NERF) license Sponsor has first option to a royalty bearing license	55%	N/A
Option #2	30 day review by sponsor for proprietary or patentable information	New Project IP dominated by either sponsor BIP or PRF BIP If technology is licensed to sponsor by PRF, sponsor receives an exclusive license to new IP by amending existing license agreement. No additional fees are charged.	64.75%	0%
		If technology is not connected to Purdue or PRF, sponsor will receive a 5 year royalty free exclusive license to new IP. After 5 years the license would be extended on mutually agreeable royalty bearing terms.	64.75%	5% per field
Option #3	No publication without approval by sponsor	Purdue assigns ownership of new IP to the sponsor	64.75%	10%
Option #4	Deliverable data is sponsor confidential information	No IP should be created	38%	N/A

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RESTRICTED PROJECT APPROVAL FORM

Restricted Project Approval Form

- Special approval is required when either Option #2 or Option #3 are used.
- Contact Pre-award or Jeff Kanable's office for assistance or questions related to this form

Example:

STATEMENT OF WORK

- SOW should be carefully crafted so that scope of research and related IP are clear
  - Now plays a role in the selection of the appropriate agreement

- SOW needs to reflect the research nature of proposed work to be performed

- Modifications to the SOW must be made with care because they may:
  - May require an amendment to the agreement
  - Impact the field of use
  - Evolve into activities outside the scope of the original agreement
  - Impact the IP fee and the timing of the IP fee distribution

IP FEE DISBURSEMENT

- Applies to all Option #2 or Option #3 projects

- Is billed upon execution of agreement and distributed upon receipt

- Distribution is in accordance with the following:
    — 33% to University Department
    — 33% to University Trask Fund
    — 33% to PI(s) for use in University activities

- IP Fee is non-refundable and <u>not</u> credited towards project budget

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