We collaborate with businesses in the following areas:

• Analytical instruments
• Bio-based fuels and products
• Bioinformatics, biomaterials, and biotechnology
• Building efficiency
• Data analytics
• Carbon capture and sequestration
• Catalysts
• Chemistry
• Coatings/film
• Electrical grid
• Energy
• Environmental systems
• Information technology
• Manufacturing
• Materials
• Microtechnologies
• Sensors
• Vehicle technology
• … and more

"PNNL’s impact on the competitive longevity of my company is unmatched."
Benjamin Peng
President, XL Sci-Tech, Inc.
A COMPETITIVE EDGE FOR YOUR TECH-BASED BUSINESS

By coming to Pacific Northwest National Laboratory, businesses of all sizes tap into technology and expertise, much of it already developed through multiyear, government investments. At PNNL, we have been creating and moving technologies into the marketplace for more than 50 years. In fact, making our broad array of intellectual property and expertise available to businesses is part of our mission as a taxpayer-funded laboratory operated for the U.S. Department of Energy.

It’s our job to tackle the most challenging problems in science, energy, the environment, and national security. By partnering with us, businesses gain valuable insights into emerging and new technological developments for solving their problems.

What We Offer Businesses

- New technologies and other intellectual property available for licensing
- Collaborative development to transform technologies into customized products
- Access to nationally and internationally known, entrepreneurial-minded staff who understand the fast-paced, solution-focused culture of industry
- Connections to a vast entrepreneurial ecosystem for specialized expertise
- Access to EMSL, the Environmental Molecular Sciences Laboratory, a DOE scientific user facility at PNNL

Business Partners

From startups to Fortune 100 companies, we’ve partnered with hundreds of businesses, including:

- Alcoa Inc.
- Alstom Grid
- Boeing
- Bruker Daltonics, Inc.
- Cisco Systems, Inc.
- Con-Agra Foods
- Lamb-Weston, Inc.
- Cummins, Inc.
- General Motors
- LLC Genifuel Corporation
- IsoRay Medical
- L-3 Security & Detection Systems
- PepsiCo
- PerkinElmer
- Thermo Fisher Scientific
- TWB Company
- UniEnergy Technologies
- Virgin Atlantic
- Xerox
Options for Working Together

<table>
<thead>
<tr>
<th>COLLABORATION METHOD</th>
<th>JOINT AGREEMENT</th>
<th>FINANCIAL TERMS</th>
<th>INTELLECTUAL PROPERTY (IP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sponsored Research</strong></td>
<td>Strategic Partnership Projects (SPP)</td>
<td>• Company funds all costs &lt;br&gt; • Advance payment required &lt;br&gt; • Company assumes all risk &lt;br&gt; • DOE must approve changes</td>
<td>• Company can own or access IP created by PNNL staff</td>
</tr>
<tr>
<td>PNNL conducts work for company using specialized DOE facilities, services, and technical expertise</td>
<td>Agreement for Commercializing Technology (ACT)</td>
<td>• Terms and conditions are negotiable &lt;br&gt; • Payment terms can be flexible &lt;br&gt; • Risk may be shared &lt;br&gt; • Can use sponsor’s terms as starting position</td>
<td>• Company can own or access IP created by PNNL staff</td>
</tr>
<tr>
<td><strong>Sponsored Research</strong></td>
<td>Cooperative Research and Development Agreement (CRADA)</td>
<td>• Each party to the CRADA funds its own effort and contribution to the joint statement of work</td>
<td>• Company gets option to exclusively license IP from PNNL staff in a pre-negotiated field of use</td>
</tr>
<tr>
<td>PNNL conducts work for company using specialized DOE facilities, services, and technical expertise</td>
<td>License or option to license</td>
<td>• Terms are negotiable &lt;br&gt; • Typically includes a percentage of sales and recovery of PNNL patent costs</td>
<td>• Rights provided on negotiated terms</td>
</tr>
<tr>
<td><strong>Collaborative Research</strong></td>
<td>User agreement</td>
<td>• Use based on application and scientific merit</td>
<td>• Company can own or access IP, non-proprietary users must publish results</td>
</tr>
<tr>
<td>Company and PNNL conduct R&amp;D together under a joint statement of work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Licensing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company obtains rights to PNNL patents and technologies, copyrighted software, or open-source tools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Facility use</strong></td>
<td></td>
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</tr>
<tr>
<td>Company conducts research in EMSL: <a href="http://www.emsl.pnnl.gov">www.emsl.pnnl.gov</a></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In each of the above scenarios:
- Companies must manufacture resulting products substantially in the United States unless waiver re-obtained.
- The government retains nonexclusive rights to IP, software, and data generated.
Industry Sectors

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Learn more about how we can help:

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Deputy Director for Licensing
Peter.Christensen@pnnl.gov | 509.371.6159
www.pnnl.gov/business

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