## Innovation at Work

### Oregon

<table>
<thead>
<tr>
<th>Total Direct and Indirect Economic Output of the Biopharmaceutical Sector</th>
<th>Total Employment Supported by the Biopharmaceutical Sector</th>
<th>Total NIH Award Funding (FY16)</th>
</tr>
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<tbody>
<tr>
<td>$3.6 billion</td>
<td>16,101</td>
<td>$274 million</td>
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A majority of Americans agree that even if it brings no immediate benefits, basic scientific research that advances the frontiers of knowledge is necessary and should be supported by the federal government.

### Local Perspective: Springfield, OR

Jennifer Knapp, NORD advocate

"I support research, it is vital to the health and well-being of my daughter and others affected by rare disease. Research leads to innovations, can cure rare diseases and improve quality of life."

### Research in the Beaver State

**Oregon Health & Science University (OHSU) and Beth Israel Deaconess Medical Center**

In a National Institutes of Health (NIH)-funded collaboration, OHSU and BIDMC are working to develop a highly protective vaccine for HIV. The researchers are investigating the mechanisms of leading HIV vaccine candidates in the hopes of combining the effective characteristics and developing a successful vaccine.

**University of Oregon (UO), Eugene, OR**

NIH-funded UO researchers are investigating the signaling pathways involved in the development of heart valves and the issues that can arise during formation. The researchers hope to develop new diagnostic methods targeting the development issues that may lead to heart valve disease, which can lead to heart failure, stroke or death if untreated.

**UbiVac, Portland, OR**

UbiVac is conducting phase II clinical trials to test the safety and efficacy of an immunotherapy treatment for non-small cell lung cancer, which account for 80-85% of lung cancer patients.