Summary and Policy Levers

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Summary of Challenges

• Corporate R declining
  – pressures of global competition
  – “short-termism” in key industries, e.g. materials science

• Startups *not* picking up slack

• R still critical
  – foundation for innovation
  – corporate patents cite to R
What To Do?

• Government support of R
  – Especially physical sciences, engineering

• Public-private partnerships to bridge Valley of Death

• Public-private partnerships on industry-wide challenges (e.g. University of Delaware and NIIMBL)
What About IP?

• Historically, Congress has often looked to IP
  – e.g. Bayh-Dole Act of 1980; creation of CAFC in 1982

• Recent “hot topics” in IP
  – Patent Trial and Appeals Board (PTAB)
  – Section 101 patentable subject matter
Proceed With Caution

• Obviously not *cause* of “business R share” decline, which has been occurring since 1980s
• Patents have complex relationship to R
  – incentive (first innovator or exclusive licensee) vs. transaction cost/tax (subsequent innovators)
• Evidence that PTAB is *(as intended)* a substitute for litigation
PTAB (substitution plus other goals)

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<th>Chem</th>
<th>Cmp&amp;Cmm</th>
<th>Drgs&amp;Mmed</th>
<th>Elec</th>
<th>Mech</th>
<th>Others</th>
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<tbody>
<tr>
<td>Petitioners</td>
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<td>77.9%</td>
<td>76.3%</td>
<td>48.5%</td>
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<td>Defendants</td>
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<td>68.8%</td>
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Strategic Decisionmaking in Dual PTAB and District Court Proceedings, Berkeley Technology Law Journal 31: 45-116 (2016) (with Vishnubhakat and Kesan)
Section 101

- May be issue for medical diagnostics
- But IPO, AIPLA proposals sweep too broadly
Key Policy Conclusions

• Strengthen public funding of foundational/translational research
  – Including through public-private partnerships