

**Contact:**

Peter Hebert  
Lux Research, Inc.  
646-723-0702  
peter.hebert@luxresearchinc.com

## **CORPORATIONS STRUGGLE WITH NANOTECH ACADEMIC PARTNERSHIPS**

Fundamental disagreements on priorities and values threaten to scuttle industry-academic relationships

New York, NY – May 18, 2006 – After years of throwing corporate cash over the academic transom, companies developing nanotechnology applications have found few commercial successes in their university collaborations. Many corporate planners are putting the pinch on academic partners to show a return on investment in under five years. But universities large and small that supply fundamental research – and are increasingly being used to replace internal R&D divisions – are failing because of misaligned goals and timing, according to a new report from Lux Research entitled “Making Industry/Academic Nanotech Partnerships Productive.”

“Universities are still the best deal in town for access to talent and a fresh perspective, but companies using these collaborations as outsourced research groups can’t bend the professors – or students for that matter – to their commercial will,” said Lux Research Senior Analyst David Lackner, author of the report. “When we scrutinized the collaborations between 20 companies on one side and 20 academic labs on the other, we found that technology transfer, IP issues, timing, and cost of resources could drive a wedge between the two just when opportunities are starting to materialize.”

To assess why industry/academic partnerships succeed – or fail – in nanotech specifically, Lux Research interviewed executives responsible for nanotechnology partnerships at 20 companies ranging from start-ups with no revenue to multinational corporations with annual revenues of more than \$90 billion. The team also talked with individuals responsible for nanotechnology research and technology transfer at 20 universities with an average student body of 24,000 and a per-student endowment of \$300,000. All were actively participating in industry/academic partnerships, usually with multiple collaborators. Among the report’s highlights:

- Companies and universities struggle with opposing goals. Large companies seek a range of outcomes from academic partnerships; start-ups want to meet product and patent milestones; large universities think the point of partnerships is creating jobs for researchers; and small universities prioritize publishing.
- Problems with technology transfer ranked as the number one challenge for industry/academic partnerships, with 71% of companies and 31% of universities interviewed emphasizing that particular struggle.
- 29% of companies complained that unforeseen costs of collaboration – in IP licensing fees, legal fees, and extra work hours – eventually add up to much more than the value of the research that the academics conduct.

The report describes how companies can mitigate these differences by starting with the objective of the partnership and working backward to best practices. Companies should determine their partnerships’ key objective by identifying whether the work aims to solve existing problems or seed totally new lines of business – and identify the time frame over which results are desired. Four partnership strategies, detailed in the report, result: Explore white space, Outsource core R&D, Drive strategic imperatives, and Pool pre-competitive assets.

“As we enter a more manufacturing- and product-oriented era in the development of nanotechnology, industrial partners need to define narrow goals and adjust timing appropriately, depending on the situation,” said Lackner. “Companies should recognize the environment and take appropriate steps to enhance the relationship as well as the output – by structuring partnerships with clear milestones and a certain path to product development.”

“Making Industry/Academic Nanotech Partnerships Productive” contains analysis of the four key types of partnerships as well as comprehensive best practices for each. It also presents data from in-depth interviews with 40 leaders in industry/academic nanotechnology partnerships on both sides of the table. The report and its underlying data set are

available immediately to clients of Lux Research's Nanotechnology Strategies advisory service. For information on how to become a client, contact Rob Burns, Vice President of Sales, at +1 (646) 723-0708.

**About Lux Research:**

Lux Research provides market intelligence and strategic advice on nanotechnology and the physical sciences. We help our clients make better decisions to profit from cutting-edge technologies by tapping into our analysts' unique expertise and unrivaled network. Our clients include top decision makers at large corporations, investment professionals at leading financial institutions, CEOs of the most innovative start-ups, and visionary public policy makers. Visit [www.luxresearchinc.com](http://www.luxresearchinc.com) for more information. For details on Lux Research's recently released The Nanotech Report, 4<sup>th</sup> Edition, please visit [www.luxresearchinc.com/tnr](http://www.luxresearchinc.com/tnr).

###