

Local growth could be achieved using local innovation

In a recent column I mentioned that sometimes the solutions to economic growth for our area — and even the nation — are closer than we might think.

At the latest Tri-Cities Research District speaker series event, this message was reinforced by two commercialization managers at Pacific Northwest National Laboratory.

Peter Christensen and Eric Lund are two in a team of seven experts who help connect companies with technologies developed at PNNL. Sometimes they license those technologies to established companies with existing product lines, and sometimes they see entirely new companies form around the newly acquired technology's product potential.

Whatever the case may be, the process doesn't come with a geographic constraint. So I ask: Why shouldn't locally derived innovations be put to use by local companies? We

are in a unique little corner of the country with capabilities, resources, expertise and intellectual property waiting to be positively exploited. Why not push to do more of that?



Ali Madison

Economic
Development

"In many ways, PNNL looks like a university," said Lund, who manages the lab's chemistry and physical sciences portfolios. "There is a lot of intellectual activity going on in several mission areas," he added, "and to rule

out any one of them, such as chemistry, in terms of technology transfer is to limit an opportunity."

For instance, the ability to convert corn to ethanol has been and continues to be well-explored by chemists

worldwide. But researchers at PNNL have been looking ahead to what other chemicals could be produced using this and other eco-friendly feedstocks, exploration that is already beginning to pay off.

A few years ago, chemical giant Archer Daniels Midland Co. licensed an innovative process for converting renewable feedstocks to propylene glycol from PNNL. The chemical is found in everyday consumer goods from printer cartridges to makeup, and until now required huge quantities of petroleum for its production. ADM recently completed construction of a full-scale manufacturing facility to bring PNNL's biorenewable process to market.

While not every bit of research can reasonably aspire to such a commercialization success, Lund believes ongoing work in other areas such as hydrogen storage and fungal biotechnology have a lot of potential

moving forward.

Christensen manages PNNL's ever-expanding portfolio of energy technologies. "Our energy research is primarily focused on a few hot areas at the moment," he said. "These include grid-scale storage, electricity delivery ("smart grid"), building energy efficiency and carbon capture."

He reiterated that the Tri-Cities area is an ideal location for developing, demonstrating and launching technologies such as grid-scale storage solutions.

"In this part of the country, we have the wide-open space, ample transmission capacity and plenty of renewable resources to exploit for this purpose. There is really no reason why we couldn't be a hub for important energy-related technology development and commercialization moving forward," he said.

We also have the unique opportunity in the Tri-Cities to use the peo-

ple, facilities and other resources resident in the Research District to help showcase technologies and R&D capabilities available at PNNL. With such local coordination, we could help more local businesses end up with local technologies and attract outside companies and investors to the area.

This would strengthen our local economy with nationally relevant technological solutions. At the same time, it would allow the licensees of those solutions convenient access to world-class science and technology expertise, in addition to valuable business relationships to support their continued viability in the marketplace.

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