Opposites attract

By Steve Edelson, Executive Editor

Although the **University of Rochester Medical Center** has accumulated a stable of 30 drug targets over the last 4–5 years, it has lacked the chemistry capabilities that are needed to push the assets further along in development. Now, Rochester is looking to change that through a partnership with the chemistry-rich but target-poor Moulder Center for Drug Discovery Research at the **Temple University School of Pharmacy**.

“We always get to a point where it looks like we have a good target and want to take it to a screen and think about drug development, but we just don’t have that capability,” said Michael Rusnak, deputy director of new ventures and technology development and associate director of biological sciences at URM’s technology transfer office.

Stephen Dewhurst, chair of URM’s department of microbiology and immunology, suggested URM could address its chemistry bottleneck by turning to Magid Abou-Gharbia, who had been an executive at Wyeth prior to its acquisition by **Pfizer Inc.**

In 2008, after Abou-Gharbia left his post as SVP of discovery research at Wyeth, he was recruited by Temple to serve as founding director of the Moulder Center. “We’re making the first integrated drug discovery center in the tri-state area,” he told *SciBX*. “Our platform has medicinal chemistry, molecular pharmacology and a GMP facility—we can do solid or liquid formulations and even some packaging.”

The Moulder Center has about 4,500 square feet of lab space dedicated to compound synthesis and purification, including chiral separations. Moulder also has access to solid-phase peptide synthesis under a prior deal with the **Sbarro Health Research Organization**, a not-for-profit that funds basic research.

The deal between URM and Temple will range from fee-for-service projects, in which URM will simply pay for drug discovery, to joint collaborations that would involve cost sharing.

URM’s most advanced targets are in the infectious disease space, including methicillin-resistant *Staphylococcus aureus* (MRSA) and *Acinetobacter baumannii*, as well as fungal targets.

“When we talked with Rochester they said they had creative research and targets,” said Abou-Gharbia. “We have the complementary capabilities that can bring pharmaceutical-friendly compounds to the table.”

Partnering below the radar

Rusnak expects that deals such as the URM-Moulder collaboration will become increasingly common between universities that are not in the top tier of research funding, which he defines as more than \$500 million per year.

“Big pharma is doing deals with universities but not on a small basis,” he said. As an example, he cited Pfizer’s strategy of creating eight Global Centers for Therapeutic Innovation that bring company scientists to large academic medical centers.¹

Pfizer’s first global center, an \$85 million partnership with the **University of California, San Francisco**, was announced late last year.

UCSF’s annual research funding was \$1.028 billion for 2010. By contrast, Rochester’s is \$400 million. For mid-tier universities, said Rusnak, “translation is up to the universities themselves. Nobody else is funding this stuff—these deals are out of necessity.”

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1. Cain, C. *SciBX* 3(46); doi:10.1038/scibx.2010.1371

COMPANIES AND INSTITUTIONS MENTIONED

Pfizer Inc. (NYSE:PFE), New York, N.Y.
Sbarro Health Research Organization, Philadelphia, Pa.
Temple University School of Pharmacy, Philadelphia, Pa.
University of California, San Francisco, Calif.
University of Rochester Medical Center, Rochester, N.Y.

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School of Pharmacy