

## WELCOME TO THE UR VENTURES TECHNOLOGY REVIEW

YOUR GUIDE TO WHAT'S HAPPENING AT UR VENTURES AND AT THE UNIVERSITY OF ROCHESTER

The UR Ventures Technology Review is your monthly look at innovation and technology commercialization at the University of Rochester. In this issue, you will learn about the buzz surrounding Koning Corporation's breakthrough breast scanning system, a new method to deliver vaccines without a needle, and happenings around UR Ventures. Meliora!

Every year, [Frost & Sullivan](#) recognizes the best and brightest companies at their [Excellence in Best Practices Awards Gala](#). These awards are presented annually to companies that are predicted to encourage significant growth in their industries, have identified emerging trends before they become the standard in the marketplace, and have created advanced technologies that will catalyze and transform industries in the near future.

Rochester's own [Koning Corporation](#) was selected as the recipient of the 2016 North American Breast Imaging New Product Innovation Award given in Asheville, NC on 13 July 2016.

The [Koning Breast Computed Tomography \(KBCT\)](#) system is a breakthrough in the field of breast imaging. Whereas current mammography requires uncomfortable compression of the breast and only yields 2-D images,

the KBCT delivers robust 3-D images of the entire breast within seconds and in complete comfort. The KBCT is based on the patented research of Ruola Ning, Ph.D., Professor of Imaging Sciences and Electrical & Computer Engineering. UR Ventures has licensed the patent portfolio to the Koning Corporation.

Two weeks later, the [Galien Foundation](#) announced nominees for the [2016 Prix Galien USA](#). Koning Corporation has been nominated in the category of Best Medical Technology. The Prix Galien Award is among the health innovation industry's top honors. To qualify, candidates must be FDA approved for market within the past five years and demonstrate tremendous potential to impact human health. Winners will be announced on 27 October 2016 at the American Museum of Natural History in New York City.

Congratulations, Koning and good luck!

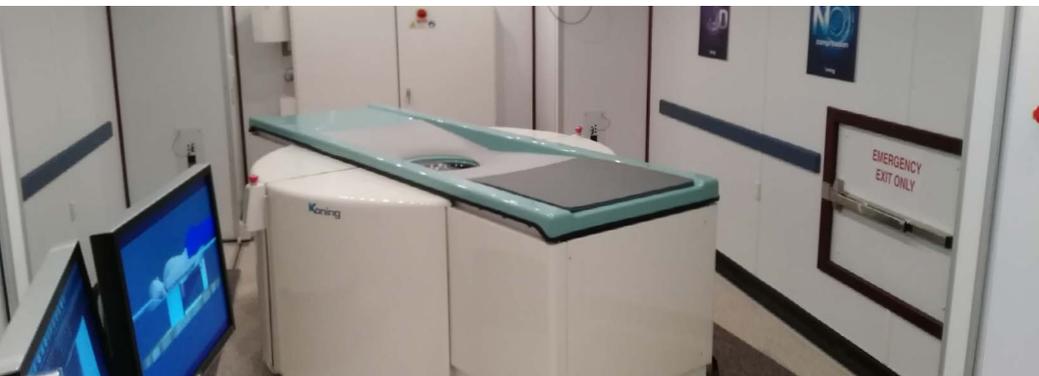
## NEEDLE-FREE DRUG/VACCINE DELIVERY SYSTEM

There are three methods of vaccine and drug delivery in use today: orally, hypodermic injection, and transepithelial. Each method has its own strengths and weaknesses. Oral medicine is relatively easy to administer, but once in the stomach, it is difficult to regulate uptake and to maintain consistent drug levels in the patient's system. Syringes deliver drugs and vaccines quickly and accurately, whether to tissue or directly to the bloodstream, but needles break the skin, leaving the site vulnerable to infection. Some patients also experience emotional trauma at the very sight of a needle. Transdermal, or transepithelial, delivery, as with a patch on the skin, allows for a slow absorption of a drug, which provides steady drug plasma levels while leaving the skin intact, but is only useful for small molecules. Larger molecules, such as most vaccines, cannot be delivered in this manner.

Until now.

Benjamin Miller, Ph.D., Professor of Dermatology, and colleagues have developed synthetic peptides that enable transient and controlled disruption of the skin barrier to allow the efficient delivery of both small and large biologic molecules to the body. This groundbreaking method promises all of the benefits of transdermal drug delivery with none of the drawbacks traditionally associated with it. This can be especially beneficial – and much easier – for providing large numbers of vaccinations, particularly in remote areas.

UR Ventures has filed patent applications on this breakthrough and is actively seeking an industrial partner to bring this technology to the marketplace. For more information, contact [Weimin Kaufman](#).



## Technology Development Fund Opens New Round

In an effort to bring the University of Rochester's world-class research to life, [UR Ventures](#) has created the [Technology Development Fund \(TDF\)](#). Since the University is a basic research institution, our research frequently yields scientific breakthroughs that are far too early-stage to be immediately translated into real-world solutions. The TDF exists to support these projects as they develop, grow, and get ready for the marketplace.

TDF awards are granted twice per year and range from \$40,000 to \$100,000 for approximately one year in duration. TDF funding supports technical and administrative staff salaries, equipment, supplies, prototyping, testing, and screening efforts. Applications are open to all faculty, staff, and students. Traditionally, applicants have been inven-

tors of the subject technology, but this is no longer required. UR Ventures recognizes that commercial development of a discovery may lie outside of a researcher/inventor's interests, time constraints, or skill sets. Therefore, [a mechanism is now in place for a non-inventor to develop a University technology](#).

The latest round of TDF applications is now open, with project [pre-proposals](#) due on 17 October 2016.

If you are interested in helping by donating to the Fund, by serving as a technology development advisor, or by serving on the TDF Screening Committee, contact [Omar Bakht](#).



## Technology Commercialization Expo Celebrates Rochester Innovation

Thousands of alumni, family, and friends will visit the University of Rochester campuses between Thursday, 6 October and Sunday, 9 October 2016 for [Meliora Weekend](#). For the first time in conjunction with this event, [UR Ventures](#) and the [Center for Business Engagement](#) will be hosting a [Technology Commercialization Expo](#) to celebrate innovations arising from Rochester's research enterprise and to highlight efforts and processes to develop and commercialize those innovations.

Join us from 1:00 – 5:00 pm on **Friday, 7 October 2016** in the **Havens Lounge of the Wilson Commons** for a sample of world-altering technologies arising from Rochester research. Learn how URV and CBE are working to get these and other great ideas into the world at large, and – better still – learn how you can help!

[URVentures](#)

[Center for Business Engagement](#)

University of Rochester researchers are making the world *ever better* every day.

**SEE** – tomorrow's cool technologies *today!*

**FEEL** – the excitement!

**HEAR** – how *YOU* can be involved!

**TASTE** – delicious refreshments (from 3:30 – 5:00)

**SMELL** – . . . Okay, it's an imperfect metaphor . . . We're still working on smell.



The University of Rochester's

**TECHNOLOGY COMMERCIALIZATION EXPO**

Today (October 7<sup>th</sup>) only! 1:00 – 5:00 pm

**Wilson Commons – Havens Lounge**

Brought to you by [UR Ventures](#) and the [Center for Business Engagement](#)

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