



TECHNOLOGY REVIEW

The UR Ventures Technology Review is your monthly look at innovation and technology commercialization at the University of Rochester. In this issue, you will read about a prestigious award advancing research into a cure for myotonic dystrophy, a potential vaccine against arenaviruses, and the recent fundraising success of a Rochester startup. *Meliora!*

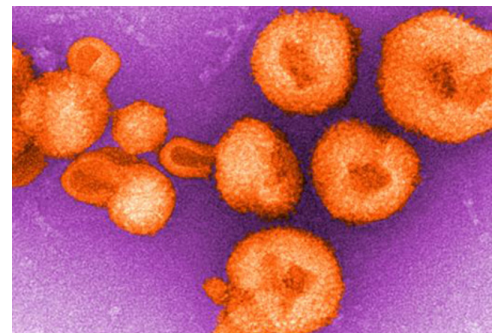
Researchers Close in on Vaccine against Arenaviruses

Arenaviruses have a significant impact on public health and pose a credible threat to biodefense. There are four strains of arenavirus that cause severe hemorrhagic fever in humans (Lassa virus, endemic to western Africa; and Machupo, Junin, and Guanarito viruses, endemic to South America). A fifth arenavirus, lymphocytic choriomeningitis virus (LCMV), is found throughout the world. This strain causes flu-like symptoms that can develop into meningitis or encephalitis. Although less deadly than ebola, arenaviruses are still debilitating and dangerous, and may result in [death](#) if left undiagnosed and untreated. Safe and effective arenavirus vaccines have remained elusive and none are currently

available. Therapy is limited to off-label use of ribavirin, which is only partially effective and carries the potential of many undesirable side effects.

Luis Martinez-Sobrido, Ph.D., Associate Professor in the URM Department of Microbiology & Immunology and Juan Carlos de la Torre, Ph.D., Professor at the Scripps Research Institute have developed a codon deoptimization-based approach as a novel strategy for live-attenuated arenavirus vaccines. In-vivo experiments in an LCMV-infected mouse model have shown that this approach can be successful in conferring complete protection from subsequent exposures to the virus.

UR Ventures is actively seeking a partner to further develop this potential vaccine into clinical applications. For more information, contact [Matan Rapoport](#).



Javits Neuroscience Investigator Award to Fund Muscular Dystrophy Research

Charles Thornton, M.D., the Saunders Family Distinguished Professor in Neuromuscular Research in the Department of Neurology, has received the prestigious Javits Neuroscience Investigator Award from the National Institutes of Health to fund continuing research on muscular dystrophy.

The award was created by Congress in 1983 and is named in honor of U.S. Senator Jacob Javits (NY), who suffered from ALS. Administered by the National Institute of Neurological Disorders and Stroke, the grant is given to exceptional researchers who have "demonstrated exceptional scientific excellence and productivity in their field." It provides \$2.3 million over seven years.

Dr. Thornton specializes in myotonic dystrophy, a form of muscular dystrophy characterized by progressive muscle wasting and weakness. Over time, patients develop difficulty walking, swallowing, and breathing. There is no treatment to stop the progression of this disease.

Dr. Thornton and his team, along with researchers from Ionis Pharmaceuticals, have developed a drug treatment that has reversed muscle degradation in mouse models. Ionis has licensed the University's rights to this discovery, and they are currently testing this treatment in clinical trials. The Javits Award will help the Thornton Lab to improve the benefits of their treatment and reduce the risks to patients.

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Adarza Biosystems Completes a \$5 Million Series-B Closing

[Adarza BioSystems, Inc.](#) recently announced that it has closed a \$5 M Series B financing. Proceeds from the round will be used to expand production capacity in its St. Peters, MO manufacturing facility and launch its first immunoassay product consumable and instrument platform. Proceeds will also be used to accelerate development of highly sensitive assays targeting a variety of biological analytes including cytokines, antigens, and small molecules.

Founded in 2008 based on research out of the University of Rochester laboratories of Lewis Rothberg, Ph.D., Professor of Chemistry and Chemical Engineering, and Benjamin Miller, Ph.D., Professor of Dermatology, Adarza Biosystems is commercializing their Arrayed Im-

aging Reflectometry (AIR™) label-free platform technology that enables the simultaneous detection of hundreds of analytes in a single drop of fluid. Research continues at the University of Rochester in support of Adarza's near-term and longer-term development plans.

Cultivation Capital Life Science Fund, Lewis and Clark Ventures, and the Venture Capital Unit of Siemens lead this round of financing.



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UR Ventures' Lisa Peck Wins 2016 Witmer Award

We at UR Ventures are pleased to announce that our own Lisa Peck has been selected as a recipient of the 2016 Witmer Award for Distinguished Service. The award is given annually to recognize staff members whose careers are characterized by outstanding and sustained contributions to the University of Rochester.

Lisa has been the Department Administrator for UR Ventures (and OTT before that) for 14 years. She joined the University in 1993. Congratulations, Lisa! This recognition is well deserved.



Spring Round of TDF Now Open

The spring 2016 round of the [Technology Development Fund](#) is now open. Pre-proposal applications can be found [here](#). Applications are due by 5:00 pm 1 May 2016. Contact [Omar Bakht](#) for more information.

Info Session on NSF I-Corps Training and Grant Program

Have a technical business idea? Consider applying for the NSF I-Corps Site Program fall 2016 cohort at the University of Rochester. The [Ain Center for Entrepreneurship](#) will be hosting an information session about the program on Tuesday, 5 April 2016 at 12:30 pm in Schlegel Hall room 201. This program, open to students, faculty, staff, and alumni, provides entrepreneurial training (two required workshops and biweekly meetings) and modest funding (up to \$3,000) to enable teams to transition their ideas into the marketplace. Stop by to learn about the program and to enjoy some pizza! [Join the event on Facebook](#). Contact [Matthew Spielmann](#) for more information.