



URVentures

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TREATMENT AND SUPPORT DO MORE GOOD FOR THE MENTALLY ILL THAN INCARCERATION

Results of a recent three-year, randomized-control study confirm that the [Rochester Forensic Assertive Community Treatment model \(R-FACT\)](#) is effective at reducing criminal recidivism among mentally ill individuals who find themselves – through their own behaviors – entangled in the criminal justice system.

By combining the expertise of mental health and criminal justice professionals, it is possible to provide persons with severe mental illness with the support they need in order to integrate with society, while at the same time reducing the burden imposed on the criminal justice system and overcrowding in jails caused by their recidivism.

[J. Steven Lamberti, M.D.](#), and [Robert L. Weisman, D.O.](#), both **Professors of Psychiatry** at the **University of Rochester Medical Center** spent years studying, implementing, and modifying Assertive Community Treatment practices before arriving at the successful R-FACT model. Lamberti and Weisman formed [Community Forensic Interventions, LLC \(CFI\)](#) to commercialize the R-FACT model from the University of Rochester. CFI provides materials, training, and consulting services to municipalities interested in helping at-risk individuals become contributing members of society. CFI has brought their brand of intervention to legal systems in Minnesota, Pennsylvania, New York, and Missouri.

[Read more](#)

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 a Rochester-based model that uses mental health and behavioral intervention to reduce criminal activity and recidivism rates, a “physical therapy” to reverse certain vision loss due to stroke or brain damage, and where the University of Rochester ranks in issued U.S. patents. *Meliora!*



Intensive Training Provides “Physical Therapy” for Vision

Vision problems following a stroke are common. According to the [National Stroke Association](#), as many as 2/3 of all stroke patients experience some changes to their vision. There are some treatment options, and vision often improves over time. However, partial blindness caused by damage to the primary visual cortex has long been believed to be irreversible. Conventional wisdom teaches that this form of visual impairment stabilizes about six months after a stroke – neither worsening, nor improving. This form of damage prevents the other regions of the brain from interpreting the signals sent by the eyes, and it was felt that the complex and manifold neural connections necessary to restore vision could not be rewired.

Believing that nothing is impossible, however, [Krystal Huxlin, Ph.D.](#), Director of Research and Professor of Ophthalmology, has developed an intensive visual retraining program to help patients overcome vision loss caused by damage to the primary visual cortex. Huxlin and her team have created personalized programs that challenge patients with questions about stationary and moving objects within their blind field. Initially guessing at the proper responses, patients’ brains eventually (after three months of training) rebuild enough connections to shrink the blind field and to restore partial vision – even to the point where the patients with primary visual cortex blindness respond correctly on par with control subjects with normal vision.

The University of Rochester has received a [U.S. patent](#) on the training and evaluation system. Rights to that patent have been licensed to **EnVision, LLC**, which is poised to sponsor a multi-site clinical trial to further validate this method and obtain approval to market it to help patients see again.

[Read more](#)



The National Academy of Inventors Releases List of Top 100 Recipients of U.S. Patents for 2016

Once again, the **University of Rochester** made the [National Academy of Inventors global list](#) of top patenting universities. At 39 issued U.S. patents in 2016, Rochester placed 64th in the world, tied with the University of Arkansas System. It is no surprise that larger universities with bigger research budgets ranked higher on this list. Schools like UNC (33rd), U Penn (17th), Harvard (14th), Michigan (9th), Johns Hopkins (7th), Stanford (3rd), and MIT (2nd) have research enterprises spending two, three, four, and even five times as much as Rochester. Some unfamiliar with Rochester might find it surprising that we ranked higher than Emory (66th), NC State and the University of Arizona (tied at 80th), Georgetown (88th), and Dartmouth (97th). See the complete list [here](#).

When the number of patents earned is normalized across these institutions based on research expenditures, the University of Rochester surges up in the rankings. Traditional research and technology transfer powerhouses, such as Stanford (2.58 pat-

ents earned per \$10M spent in research), MIT (1.7) remain ahead of Rochester, but at (1.14) we surpass Michigan (1.09), Johns Hopkins (1.08), U Penn (1.04), and even the entire State of California system (0.96), which led the NAI list with 505 patents.

An issued patent, on its own, has limited intrinsic value without the technology it covers being developed and marketed. It is the mission of the universities’ technology transfer operations to license the intellectual property contained in those patents to entities capable of bringing the scientific advancement to the public. At UR Ventures, we seek to file patents with commercial potential. Then we spend the vast majority of our resources and efforts in developing the underlying technology to increase our chances of finding and attracting the right business partner(s) (startups and/or established companies) to carry it forward to market. [Click here for a sample of University of Rochester patents currently available for licensing.](#)

