

NEW BREAKTHROUGH  
TREATMENT



**HARRIS A.  
"HANDY" GELBARD,  
M.D., PH.D.**

*Director, Center for Neural  
Development and Disease,  
Leader, NeuroAIDS Research  
Group, Center for AIDS Research*

**CENTER FOR AIDS RESEARCH**

The University of Rochester Medical Center (URMC) has been a leader in HIV/AIDS research for nearly 30 years. The URMC received a coveted designation when it was named a Center for AIDS Research (CFAR) by the National Institutes of Health in 2013. This distinguishes us as among the best in the nation for research to improve the prevention, detection, and treatment of HIV/AIDS. The URMC is now one of only 18 CFARs across the country.

The CFAR program emphasizes the importance of interdisciplinary collaboration, especially between basic and clinical investigators as well as behavioral scientists to support translational research.

## Groundbreaking Approach for Neurodegenerative Diseases

Imagine a world where we can cure memory and cognitive problems of people with HIV, Parkinson's disease, multiple sclerosis, post-operative cognitive decline, and perhaps Alzheimer's disease. It could be a reality within the next five years, and eventually allow millions of people to continue to work, live independently, and maintain their quality of life.

The potential groundbreaking treatment is a result of research by Harris A. "Handy" Gelbard, M.D., Ph.D. His research has led to the testing of a new first-in-class drug therapy to treat severe HIV-associated neurocognitive disorders, but could also have a major impact on other neurodegenerative diseases. There is no drug or other therapy currently available that improves memory, attention, learning, language, perception, and social cognition.

Dr. Gelbard—who has worked more than 20 years on associated neurocognitive disorders—hopes to receive FDA approval to begin a first-in-human phase 1 clinical trial of the drug in 2016. If successful in this trial, and in subsequent efficacy trials, it would be the world's first treatment designed specifically to prevent neuroAIDS.

This is a new approach in attacking AIDS and other neurocognitive diseases: stopping the inflammation in the brain that impairs the function of nerve cells and the vast networks they create. The neural networks allow us to store and recall memories, plan and prioritize, focus on particular tasks, and process sensory information. Uncontrolled inflammation can trigger conditions ranging from dementia to heart ailments. Dr. Gelbard discovered a lead compound—called URM-099—which turns off an enzyme called MLK3 (mixed lineage kinase type 3) that sets the neuroinflammatory process in motion.

It is estimated the new treatment could help 600,000 or more people living with some form of neuroAIDS. According to Dr. Gelbard, the new drug could also be effective in fighting inflammation-linked diseases such as heart failure and rheumatoid arthritis.

# Your gift will help us *Give Hope to Patients and Their Families*

Every gift we receive—large or small—is appreciated and impacts our ability to attract and retain world-renowned researchers and faculty, develop new therapies, preventions and cures, and ensure excellence in treating and caring for our patients. Below are some of the ways you can help.

## **ENDOWED PROFESSORSHIPS—\$1,500,000 to \$2,000,000**

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Endowed professorships are permanent funds that honor acclaimed leaders who perform groundbreaking research, mentor junior faculty, and attract and retain talented fellows, residents, and students. Recognizing and fostering excellence, this is one of the most coveted and defining rewards a faculty member can receive. Professorships also serve as a powerful recruitment tool, drawing new faculty of established distinction from around the world.

## **ENDOWED CURRENT USE RESEARCH FUND—\$750,000 to \$1,000,000**

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Clinical trials, like all good research, can be expensive. Your generosity will help us advance the groundbreaking research conducted by Dr. Gelbard, and get his new drug from human clinical trials to patients as quickly as possible. Innovative research can revolutionize medical advances, turning scientific insights into medical breakthroughs. We need support now to develop the world's first treatment designed specifically to prevent neuroAIDS, and perhaps other neurocognitive disorders.

## **ENDOWED FELLOWSHIPS—\$750,000 OR MORE**

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Fellowships provide significant research experiences for early-career scientists who have the imagination and drive to advance biomedical research and translate laboratory findings into the treatment of disease. These fellowships provide permanent support that allows fellows to complete their training without having to devote time to working outside their field, or resorting to additional loans for support.

## **PILOT PROJECTS/SEED FUNDS—\$50,000 to \$250,000 (annually)**

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Gifts for seed funding are “risk capital” for a promising researcher who has the potential to make groundbreaking discoveries that will impact people here and around the world. They allow scientists to shift the direction of their research to follow promising leads, new ideas, or use new technology to propel scientific discoveries in new ways. Funds invested today in innovative research help provide state-of-the-art care for patients tomorrow.

## **POST-DOCTORAL AND STUDENT FELLOWSHIPS—\$25,000 to \$75,000 (one year)**

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These funds support an aspiring scientist while providing research training and mentorship in the laboratory setting.



*“Cognitive impairment due to HIV impacts quality of life for many with this disease. This becomes especially relevant as patients are living longer. Dr. Gelbard’s research has huge potential to mitigate this important cause of disability.”*

**-MICHAEL GOTTLIEB '73M (MD), '74M (RES), '77M (RES)**

The first physician to identify AIDS as a new disease in 1981.

For more information about how your gift can make an impact, please contact Dianne Moll at:  
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MEDICINE of THE HIGHEST ORDER