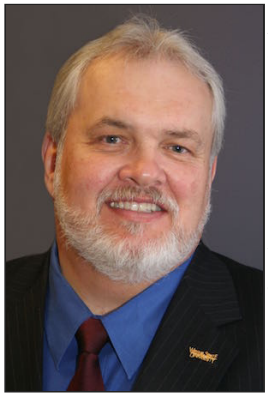
WAYNE STATE UNIVERSITY

Eugene Applebaum
College of Pharmacy
and Health Sciences

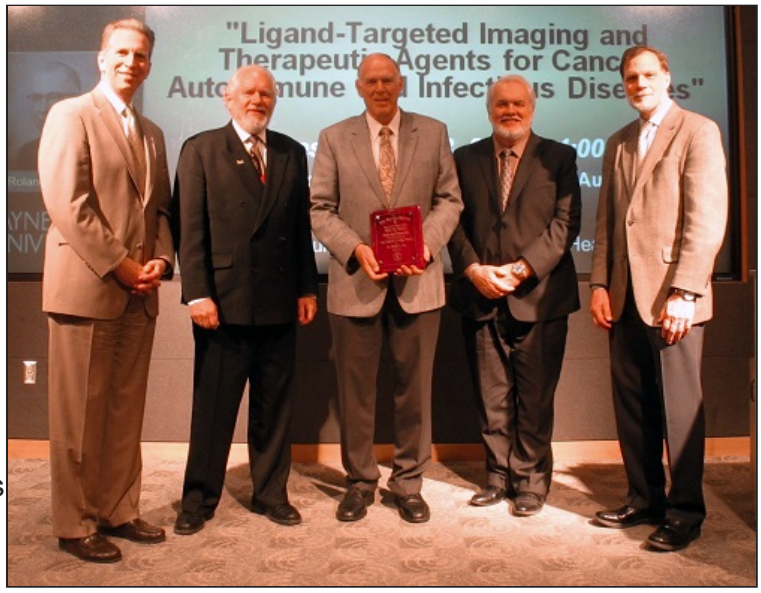


Another Monday is here! Many people dread this week because tax returns must be submitted by April 15, which is this Wednesday. Some of us count on deductions to help reduce the amount we will owe the federal government. According to **America Comes Alive**, in the 1950s, a man "listed his dog as a dependent, noting that 'It costs as much to keep Butch as myself.' Another wrote that food ought to be deductible because it constituted 'fuel for [his] engine.'"

You are probably wondering what this has to do with the EACPHS. Just as food fuels our bodies, research — the topic of today's note — is one of several things that sustains our College and the university. Wayne State is a premier public, urban research institution that is ranked in the Carnegie Foundation's highest category for research intensiveness. I am pleased to highlight the work of two **new** faculty members that illustrates the role our College plays in helping the university maintain its reputation as a leader in investigative innovation and new knowledge generation.

Christine Rabinak, assistant professor in the Department of Pharmacy Practice, recently received a Mentored Research Scientist Development Award funded by the **National Institute of Mental Health**. Through research on tetrahydrocannibinol (THC), a marijuana extract, she studies potential medication targets in brain systems to improve the treatment of post-traumatic stress disorder (PTSD). Many patients fail to respond to usual therapies for PTSD, and there is a need for research into areas of the brain that are involved in PTSD in order to develop new targeted interventions. Christine's earlier work showed that low doses of THC affect these areas of the brain and could be potentially useful in combination with other therapies. Her research includes brain imaging and measurement of electrical activity from skin in patients with PTSD as well as healthy volunteers. Christine is part of a growing group of WSU researchers working on various brain disorders, which has been identified as a key research priority, both at WSU and nationally.

Joseph Roche, an assistant professor in the Department of Health Care Sciences' Physical Therapy (PT) program, received a grant from the **Jain Foundation** for a project titled "Developing a Multi-pronged Strategy for the Clinical Management of Dysferlinopathies." Dysferlinopathies, or dysferlin-linked muscular dystrophies, are inherited diseases that cause progressive weakness and wasting of skeletal muscles and are caused by the absence of the protein dysferlin. The exact function of dysferlin is still unknown, although Roche's work suggests that it might be involved in maintaining the integrity of internal membrane systems like the sarco-endoplasmic reticulum and transverse tubules in muscle. His work has clearly demonstrated that following high levels of mechanical loading during exercise, dysferlin-deficient mouse muscle undergoes extensive muscle fiber damage and inflammatory cell infiltration that accumulates over several hours and days, suggesting that dysferlin might play a role in the adaptive response to exercise. Roche's current Jain Foundation funded project, which is a collaboration with Sujay Galen, also an assistant professor in the PT program, is aimed at identifying exercise programs that are capable of improving the health of dysferlin-deficient muscle without causing injury. These studies should provide useful information regarding exercise for patients with dysferlinopathies and for their caregivers and health professionals.



I would also like to extend congratulations to the Department of Pharmaceutical Sciences and the Rho Chi Society on the planning and presentation of the Roland T. Lakey Award Lecture, which took place last Wednesday. Dr. Philip Low, a Distinguished Professor from Purdue University and researcher renowned for the development of tumor-targeting technologies and treatments for multiple types of cancer, delivered an engaging address.

Finally, tomorrow is Pathologists' Assistant (PA) Day, a day that places a spotlight on the profession and thus the students, staff, faculty, and graduates of our Pathologists' Assistant program. Now in its 26th year, it is one of eight programs in the nation that are fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences. (There are also two programs in Canada, which brings the total to 10.) Our alumni are employed in highly visible pathology departments of major medical institutions — including MD Anderson Cancer Center, University of Michigan Medical Center, and Mass General — in cities throughout the U.S. Our graduates from the Pathologists' Assistant program are in high demand in this unique profession, and the quality of the education they receive here is noteworthy. I know the graduates will continue the legacy of excellence in education and in the profession as they move forward. That said, Happy PA Day to Peter Frade and our PA students, staff, faculty, and alumni!

Have a great week!

Howard

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