SUBMITTED BY: EZEMENARI M. OBASI, Ph.D., VICE PRESIDENT FOR RESEARCH & INNOVATION

University Contract to Purchase Technology From a Company Owned by a School of Medicine Faculty Member

RECOMMENDATION

The Administration recommends that the Board of Governors authorize the President or her designee to enter into an agreement with Mitovation Inc., a Michigan corporation. The agreement will allow the purchase of critical technology to advance research funded by the National Institutes of Health (NIH) to leverage the patented, non-invasive infrared light technology to expedite the proposed work supported by an NIH-funded study, "Non-invasive infrared light therapy and medical device to treat spinal cord injury." This project explores the potential treatment of incomplete spinal cord injury in the initial 24 hours following a trauma.

BACKGROUND

Maik Hüttemann, Ph.D., professor of molecular medicine and genetics and division director for research, and professor of biochemistry, microbiology and immunology in the School of Medicine at Wayne State University, discovered that discrete wavelengths of infrared light can modulate mitochondria of cells during the critical reperfusion period after an ischemic event, such as a stroke or heart attack, resulting in a robust therapeutic benefit. This discovery resulted in the development of a platform technology that can be applied to multiple pathologies in which cells experience acute or chronic stress.

The specific "inhibitory" wavelengths of infrared light were disclosed with the Office of Technology Transfer at Wayne State University, which resulted in four published US patents (US Patents 8,945,196; 9,610,460; 10,071,261, and 11,020,604) that were filed by Wayne State University.

Mitovation, Inc. was cofounded by Mr. Mark Morsfield (CEO), Dr. Maik Hüettemann and Dr. Thomas Sanderson (formerly of WSU's Department of Internal Medicine and currently at the University of Michigan). Mitovation was incorporated in Delaware in 2017. It is the intent of Mitovation, Inc. to further develop above-described technology under the proposed license agreement for clinical applications.

Michigan Conflict of Interest law requires specific sunshine procedures in order for a University employee, or a company owned by a university employee, to contract directly or indirectly with the university:

- (A) The employee must disclose any pecuniary interest in the contract to the Board and the disclosure must be made a matter of record in the Board's proceedings.
- (B) The contract must be approved by a vote of not less than two-thirds of the full membership of the Board in open session.
- (C) The Board's minutes must report:

- (i) The name of each party involved in the contract.
- (ii) The terms of the contract, including duration, financial consideration between the parties, facilities or services of the public entity included in the contract, and the nature and degree of assignment of employees of the public entity for fulfillment of the contract.
- (iii) The nature of any pecuniary interest.

If the Board approves this Recommendation, the minutes will report as follows:

The Board of Governors authorized the President, or her designee, to enter into a contract with Mitovation Inc. in which Maik Hüttemann, Ph.D. holds an equity position.

- (i) The parties involved in the contract are Wayne State University and Mitovation Inc.
- (ii) The contract will provide that:
 - (a) Scope: Intent to purchase a dual wavelength laser system (750 and 950 nm) for the purpose of conducting research funded through National Institutes of Health grant R01NS134695. Such a system is not available elsewhere but required to build a human prototype device with the goal of treating spinal cord injury as part of the recently funded R01 grant. It should be noted that the costs for the purchase of the laser system cover the parts necessary to assemble it but not any of the two-year development phase and associated costs.
 - (b) Duration: The purchase of the laser system is a one-time purchase.
 - (c) Financial Consideration: A one-time purchase of \$56,000.
 - (d) No University employees are assigned in connection with the purchase agreement.
- (iii) Dr. Hüttemann's pecuniary interest consists of a 54.82% ownership of Mitovation Inc. Dr. Hüttemann will therefore have the potential to financially benefit from the commercial success of the company. Dr. Hüttemann has filed a Financial Conflict of Interest with the Office of Research Integrity (COI Disclosure # COI-24-08-0949).