

**SUBMITTED BY: STEPHEN M. LANIER, PH.D., VICE PRESIDENT FOR RESEARCH
UNIVERSITY SUBCONTRACT FROM
RAY THERAPEUTICS,
A COMPANY PARTIALLY OWNED BY A
SCHOOL OF MEDICINE FACULTY MEMBER**

RECOMMENDATION

The Administration recommends the Board of Governors authorize the President or his designee to contract with *Ray Therapeutics, Inc.* to further develop intellectual property related to retinal gene therapy for treating blindness caused by retinal degenerative diseases. This contract will be to perform comparative studies in mouse models to evaluate pharmacology and function of virus vector constructs containing the licensed gene of CoChR-3M from Wayne State University.

BACKGROUND

Zhuo-Hua Pan, Ph.D., professor of ophthalmology, visual and anatomical sciences in the School of Medicine at Wayne State University, developed a novel technology – optogenetic gene therapy – that has the potential to treat blindness caused by retinal degenerative diseases. In 2011, RetroSense Therapeutics licensed the intellectual properties (IPs) of the first generation of optogenetic technology from Wayne State University and successfully advanced a gene therapy product to clinical trial in 2015. The company was acquired by a pharmaceutical company (Allergan) with a front payment of \$60 million. Since then, Dr. Pan’s group developed the next generation of optogenetic technology that promises to produce better outcomes for treating blindness. Ray Therapeutics, a newly formed start-up company led by the same entrepreneurs of RetroSense, has signed a license option agreement with Wayne State University for the new IPs for the goal of developing the next generation of optogenetic gene therapy products.

To guide the company scientifically, Dr. Pan joined Ray Therapeutics as a scientific advisor and co-founder. In this sponsored research contract, Dr. Pan’s laboratory will perform the preclinical studies in mouse models to evaluate and determine the lead candidate products.

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 his designee, to contract with Ray Therapeutics, Inc. of which Dr. Zhuo-Hua Pan, professor of ophthalmology, visual and anatomical sciences in the School of Medicine at Wayne State University, is a scientific advisor and co-founder.

- (i) The parties involved in the contract are Wayne State University and Ray Therapeutics, Inc.
- (ii) The contract will provide:
 - a. Scope: Research services for Ray Therapeutics, Inc. will be provided by Dr. Zhuo-Hua Pan's laboratory personnel in the Department of Ophthalmology, Visual and Anatomical Sciences, School of Medicine, Wayne State University. Experiments will be conducted in Dr. Pan's lab located on the 8th floor of Scott Hall, the core facilities located on the 7th and 8th floors of Scott Hall, and the DLAR animal facilities at Wayne State.
 - b. Term: The contract will have an initial term of 36 months, with an estimated start date of October 1, 2021.
 - c. Financial Consideration: The contract to Wayne State University will total \$332,640 (\$72,000/per year for three years plus 54% indirect cost).
- (iii) Dr. Pan's pecuniary interest consists of an ownership interest in Ray Therapeutics. Dr. Pan currently holds 10% equity interest and will therefore have the potential to financially benefit from the commercial success of the company.