Approved by the Regents
May 16, 2019

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES
DEPARTMENT OF MOLECULAR AND INTEGRATIVE PHYSIOLOGY

Patrice E. Fort, Ph.D., assistant professor of ophthalmology and visuals sciences, Department of Ophthalmology and Visual Sciences, and assistant professor of molecular and integrative physiology, Department of Molecular and Integrative Physiology, Medical School, is recommended for promotion to associate professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, and associate professor of molecular and integrative physiology, without tenure, Department of Molecular and Integrative Physiology, Medical School.

Academic Degrees

Ph.D.	2005	Louis Pasteur University
M.S.	2001	Louis Pasteur University
B.S.	2000	Claude Bernard University

Professional Record

2016-present	Assistant Professor of Ophthalmology and Visual Science, University of Michigan,
2016-present	Assistant Professor of Molecular and Integrative Physiology, University of Michigan
2011-2016	Research Assistant Professor of Ophthalmology and Visual Sciences, University of Michigan
2008-2010	Research Associate of Ophthalmology, Pennsylvania State University

Summary of Evaluation:

Teaching: Dr. Fort is a passionate and wonderful teacher. Since 2014, he has co-directed the Visual Sciences Course (OPHTH 733), resdesigning the one credit course into a two-credit course to better integrate basic knowledge of the visual system in its entirety along with critical thinking. Since 2013, he has been a series examiner for CMB 850 and a small group discussion facilitator for PIBS 503 until 2017. During his time at the University of Michigan, Dr. Fort has mentored fellows, undergraduate, graduate and medical students, and residents. One to three students per year participating in the Undergraduate Research Opportunity Program, and he has mentored them since 2012. Dr. Fort has been a student seminar evaluator for the Molecular and Integrative Physiology Graduate Program for the past two years and serves on the Preliminary Exam Advisory and Evaluative committee in the same program. He has been invited as a speaker on 13 occasions at regional, national and international meetings.

Research: Dr. Fort is a strong and growing contributor and innovator to the diabetic retinopathy and overall research program. His role and influence in the department and beyond is far-reaching, as he works diligently toward dissecting the basic mechanisms of diabetic retinopathy and neurodegenerative diseases, with a desire to develop new means of treating and curing diabetic vascular disease and neurodegenerative diseases, both directly and through his collaborative work with other institutions. Dr. Fort has consistently shown a strong commitment to understanding neurodegeneration in vision and, in particular, to advancing our understanding of the physiopathology of diabetic retinopathy as an avenue to develop new therapeutic strategies. His current research focuses on how

to accelerate advances in treating and preventing deleterious effects of diabetes on the retina and more broadly to diseases and processes associated with retinal neurodegeneration. His work is impactful beyond the diabetic retinopathy community as it will provide a template for the neurodegenerative research community as well. Dr. For participates in team science, which is required for making significant contributions in this field. He is currently well funded through NIH grants, as a principal investigator and co-investigator. His expertise in diabetic retinopathy and neurodegenerative diseases of the retina, as well as neuroprotective mechanisms is increasing his national and international recognition, and has helped him to develop collaborations with several faculty at the University of Michigan as well as other institutions; including with Drs. Sennlaub and Guillonneau in Paris at the Vision Institute, Drs. Nagaraj and Nahomi at the University of Colorado, and with collaborators at Eversight eye bank. Dr. Fort has published 31 peer-reviewed articles in high-impact journals.

Recent and Significant Publications

Ruebsam A, Dulle J, Myers A, Sakrikar D, Green K, Khan N, Schey K, Fort PE: A specific phosphorylation regulates the protective role of αA-crystallin in diabetes. *JCI Insight* 3(4):2018.

Nahomi R, Sampathkumar S, Myers A, Elghazi L, Smith D, Tang J, Lee C, Kern T, Nagaraj R, Fort PE: The Absence of Indoleamine 2,3-Dioxygenase Inhibits Retinal Capillary Degeneration in Diabetic Mice. *Invest Ophthalmol Vis Sci* 59(5): 2042-2053, 2018.

Dulle J, Rübsam A, Garnai S, Pawar H, Fort P: BetaB2-crystallin mutations associated with cataract and glaucoma leads to mitochondrial alterations in lens epithelial cells and retinal neurons. *Exp Eye Res:* Feb:155:85-90, 2017.

Dulle J, Fort P: Crystallins and neuroinflammation: The glial side of the story. *Biochimica et biophysica acta:* Jan:1860:278-86, 2016.

Gardner T, Abcouwer S, Losiewicz M, Fort P: Phosphatase control of 4E-BP1 phosphorylation state is central for glycolytic regulation of retinal protein synthesis. *American journal of physiology, endocrinology and metabolism.* Sep 15:309(6)E:546-556, 2015.

Service: Dr. Fort has been invited to participate in many study sections and review panels nationally and internationally. He is the director of Ophthalmology's vision seminar series and is a co-chair of the Ophthalmology Research Day. In the Cellular and Molecular Biology program, he serves as an admission committee member. In the Neuroscience Graduate Program, Dr. Fort is a member of the admission, preliminary exam advisory and evaluative committees. He is a member of several national organizations, including the Association for Research in Vision and Ophthalmology, the International Society for Eye Research, and the American Diabetes Association. He has been a reviewer for a significant number of important journals nationally and internationally, including *Molecular Vision*, *Diabetes,* and the *International Journal of Ophthalmic Pathology*. Dr. Fort has been a session chair twice for Retina and Retinal Disorders and once for Diabetic Retinopathy at the Association for Research in Vision and Ophthalmology meeting, which is the largest and most important vision research meeting internationally.

External Reviewers:

Reviewer A: "Dr. Fort is a highly respected and internationally acclaimed scientist who has focused his research on retinal cell death and neuroprotection with emphasis on the role of crystallins in diabetic retinopathy. Dr. Fort has made a number of novel and important findings that have forced vision

scientists to re-evaluation their traditional view of diabetic complications and has identified new therapeutic targets.

Reviewer B: "Dr. Fort has made significant contributions toward furthering our understanding of the molecular basis behind diabetic retinal disease and neuroprotection by carving out an interesting niche with a foucs on cystallins. Since there are still no treatment options to counteract the neuroretinal degeneration associated with diabetes, discovering novel ways to protect the retina is key to finding a way to slow down or stop this disease…He has achieved a well-established professional position and a national reputation for his research and scholarly work."

Reviewer C: "Because of his work, Dr. Fort has been a leader at international meetings, such as ARVO, ISER, and the RD meeting…He has a keen intellect, ability of effectively communicate [sic] clearly and concisely, an ability to listen, and a soft personality that makes for a really great teacher."

Reviewer D: "I have been impressed with Dr. Fort's scientific rigor, creativity and focus in his scholarly work…He uses rigorous methods and has developed strong collaborations…His work is recognized as scholarly by experts in the field and, especially outstanding, is his assessment of the role of cystallins in the neurovascular unit…He more than qualified for promotion based on the University of Michigan's Promotion guidelines and based on the guidelines of the (my institution) and many other SOMs I've reviewed over the past 10 years."

Reviewer E: "Dr. Fort has been tenacious in pursuit of funds to support his research efforts…he has carved out a niche of expertise and be steadfastly pursuing this…Dr. Fort has been a productive, engaged and highly committed member of the vision research scientific community."

Summary of Recommendations:
Dr. Fort is a productive and influential ophthalmologic scientist focusing on diabetic retinopathy. He has excellent service with study sections, journal service and institutionally. I am pleased, therefore, to recommend Patrice E. Fort, Ph.D. for promotion to associate professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, and associate professor of molecular and integrative physiology, without tenure, Department of Microbiology and Integrative Physiology, Medical School.

Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School

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