

Approved by the
Regents
May 15, 2014

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES

Raymond S. Douglas M.D., Ph.D., associate professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, Medical School, is recommended for promotion to professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, Medical School.

Academic Degrees:

M.D./Ph.D.	1998	University of Pennsylvania
B.A.	1990	University of Pennsylvania

Professional Record:

2009-present	Associate Professor of Ophthalmology and Visual Sciences, University of Michigan
2008-2009	Associate Professor of Ophthalmology, UCLA
2004-2008	Assistant Professor of Ophthalmology, UCLA

Summary of Evaluation:

Teaching: Dr. Douglas educates residents and fellows on oculoplastics diagnoses, thyroid eye disease, and medical and surgical management of patients. He is the director of an American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) Fellowship Program which is one of 24 in the country. This program is an important part of Ophthalmology's educational curriculum and training program. It includes clinical and surgical apprenticeship and didactic conferences. The program has expanded the role of fellow education to promote resident teaching at local, national, and international lectures. Directing the fellowship will continue to be a primary focus for Dr. Douglas' professional development in education. He has also instituted a monthly fellow teaching conference where fellows present cases for discussion and teaching to the oculoplastics faculty. Fellows are required to engage in clinical or translational research and complete a thesis for ASOPRS. Dr. Douglas also gives quarterly in-service lectures to clinical staff which includes direct one-on-one learning through development and implementation of research projects. Dr. Douglas also supervises research trainees in his lab. In the last two years he has taught international graduate students during a one-year research program in joint association with a university in China. Dr. Douglas also teaches residents and his involvement in resident teaching is diverse and is a substantial portion of his teaching commitment. Clinically-oriented teaching occurs in surgery and in the clinic, both at the Kellogg Eye Center and in oculoplastics at the Veterans Hospital. More formal resident teaching occurs through a series of structured sessions including ophthalmology grand rounds, the resident lecture series which is an extensive year-long review of ophthalmology, a yearly dissection skills session and a monthly thyroid eye disease (TED) conference. Finally, residents have a two-month research rotation in their second year and several residents have directed projects in the

laboratory. Three residents rotated in the laboratory last year each submitting an abstract to national meetings. Dr. Douglas is also very involved in patient education through the National Graves and Thyroid Disease Foundation. He assisted in organizing and participated in each two-day national meeting for the last 10 years. In addition, he has established a quarterly patient education and support group at the Kellogg Eye Center. Dr. Douglas is involved in curriculum design and development with the International Thyroid Eye Disease Society in which a two-day symposium is offered bi-annually. The Society also presents a highly regarded annual course at the American Academy of Ophthalmology. Dr. Douglas also leads an international course to educate physicians in the care of patients with Graves' disease and thyroid eye diseases. The course has been initiated in China, Denmark, Thailand, India and Brazil and has been met with success and initiated an exchange of students for long-term collaborations.

Research: Dr. Douglas' research training in immunology and his clinical training in orbital surgery have provided him with the unique opportunity to investigate clinically relevant questions in the field of thyroid eye disease (TED) and expand treatment options for these patients. His scientific training as an immunologist established the groundwork for investigations of the immunologic mechanisms of human disease. He has received R01 funding (The role of CD40+ fibrocytes in thyroid eye disease) in addition to Research to Prevent Blindness Awards to sustain these research investigations. His lab identified novel targets in the immune pathway which may mediate thyroid eye disease and other autoimmune diseases. Previous work in the laboratory identified overexpression of the insulin-like growth factor-1 receptor (IGF-1R) which is now being explored as a therapeutic target in thyroid eye diseases. He is the principal investigator of a clinical trial investigating the use of a humanized blocking antibody to the IGF-1R as a biologic therapy. This is the largest TED trial conducted to date in the U.S.

Recent and Significant Publications:

Hwang CJ, Afifiyan N, Sand D, Naik V, Said J, Pollock SJ, Chen B, Phipps RP, Goldberg RA, Smith TJ, Douglas RS: Orbital fibroblasts from patients with thyroid-associated ophthalmopathy overexpress CD40: CD154 hyperinduces IL-6, IL-8, and MCP-1. *Invest Ophthalmol Vis Sci* 50:2262-2268, 2009.

Douglas RS, Tsirbas A, Gordon M, Lee D, Khadavi N, Garneau HC, Goldberg RA, Cahill K, Dolman PJ, Elner V, Feldon S, Lucarelli M, Uddin J, Kazim M, Smith TJ, Khanna D: Development of criteria for evaluating clinical response in thyroid eye disease using a modified Delphi technique. *Arch Ophthalmol* 127:1155-1160, 2009.

Douglas RS, Afifiyan NF, Hwang CJ, Chong K, Haider U, Richards P, Gianoukakis AG, Smith TJ: Increased generation of fibrocytes in thyroid-associated ophthalmopathy. *J Clin Endocrinol Metab* 95:430-438, 2010.

Gillespie EF, Papageorgiou KI, Fernando R, Raychaudhuri N, Cockerham KP, Charara LK, Goncalves AC, Zhao SX, Ginter A, Lu Y, Smith TJ, Douglas RS: Increased expression of TSH receptor by fibrocytes in thyroid-associated ophthalmopathy leads to chemokine production. *J Clin Endocrinol Metab* 97:E740-6, 2012.

Gillespie EF, Raychaudhuri N, Papageorgiou KI, Atkins SJ, Lu Y, Charara LK, Mester T, Smith TJ, Douglas RS: Interleukin-6 (IL-6) production in CD40-engaged fibrocytes in thyroid-associated ophthalmopathy: Involvement of Akt and NF-kappaB. *Invest Ophthalmol Vis Sci* 53:7746-7753, 2012.

Service: Clinically, Dr. Douglas maintains an active oculoplastics practice at the Kellogg Eye Center. He is well respected by ophthalmologists at the local to international levels. With his unique experience, he attracts some of the most challenging cases. Dr. Douglas has a national and international presence as a member of several societies, among them the American Academy of Ophthalmology, ASOPRS, and the International Thyroid Eye Disease Society which he co-founded in 2007. He is a regular reviewer of major clinical and research journals in oculoplastics, thyroid and ophthalmology research and is frequently invited to give presentations on his expertise in these areas. His departmental administrative participation includes serving on the Leadership Committee as director of strategic planning, as co-chair of the Research and Therapeutics Committee, and as a member of the Resident Selection Committee. He recently authored the initial collaborative study of the group detailing the initial development of a clinical response index for TED. As director of the TED Center at the Kellogg Eye Center, the TED Center has expanded its patient care operations three-fold over three years. The program was recently recognized by the University of Michigan as a destination type program, one of only a handful of centers on campus with that distinction. The Thyroid Eye Disease Center has incorporated patient-centered innovations including concierge-style, coordinated multispecialty care, 'no wait' referrals, patient support groups, education through social media and partnerships with national foundations. In the near future, the center will incorporate telemedicine and remote consultation models to increase the national and international referral base.

External Reviewers:

Reviewer A: "His research regarding the pathogenesis of Graves' disease represents some of the best work in the field....He stands at the head of his field as a gifted surgeon and clinician, and at the same time is productive and distinguished as a researcher. He is in the top ranks of his peer group."

Reviewer B: "In the past ten years, Dr. Douglas has enjoyed a nearly meteoric rise in national and international acclaim because of his work on the underlying pathophysiology of thyroid associated orbitopathy (TAO)."

Reviewer C: "His teaching activities have been extensive and he has mentored numerous individuals, many of whom are becoming prominent members of our oculoplastics community....His research efforts are breaking new ground in the fields of autoimmunity, cell signaling, and extracellular matrix, particularly in thyroid eye disease, the most common autoimmune disorder....He certainly ranks among the top researchers today in the field of thyroid eye disease."

Reviewer D: "He was recently inducted into the Orbital Society, a highly selective international group with membership that is limited and by invitation. Dr. Douglas is a founding member and

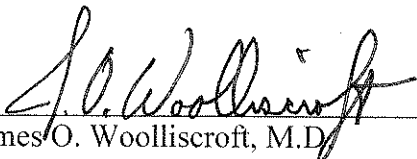
Vice President of the International Thyroid Eye Disease Society....With his rare combination of a background in immunology, interest in orbital and oculofacial plastic surgery, high-order organizational and communication skills, intellectual power, and strong motivation, Dr. Douglas is rapidly establishing himself as an international leader in efforts to elucidate and manage thyroid eye disease."

Reviewer E: "Dr. Douglas has excellent standing in the research field; one of the top 5 in the world....His work would certainly (100%) meet the criteria for a full professorship at my university."

Reviewer F: "Both in Europe and North America, I have known few ophthalmologists who are scientists as well as surgeons, Dr. Douglas being one of them. His work in this field has been important and consistently innovative....He is one of the founders and current Vice-President of the International Thyroid Eye Disease Society (ITEDS), whose members are both endocrinologists and ophthalmologists from various countries besides the U.S."

Summary of Recommendation:

Dr. Douglas has shown excellence in leadership and productivity in all areas, including clinical work, research, service and teaching, and there is no doubt that his career will continue to thrive. I enthusiastically recommend the promotion of Raymond S. Douglas, M.D., Ph.D. to professor of ophthalmology and visual sciences, with tenure, Department of Ophthalmology and Visual Sciences, Medical School.


James O. Woolliscroft, M.D.
Dean
Lyle C. Roll Professor of Medicine

May 2014