## Focus on Faculty #74 Elliot Mitmaker



Dr. Elliot Mitmaker is an Associate Professor in the Department of Surgery and the Gerald Bronfman Department of Oncology. Born and raised in Montreal, Dr. Mitmaker completed his B.Sc. in Psychology at McGill University with a special interest in human motivation, language acquisition and neurocognitive behavioral disorders. Somehow, this piqued his interest in the study of medicine which took him down the I-95 South to the City of Brotherly Love -Philadelphia. It was his time spent at Jefferson Medical College that provided the foundation for his career as an academic surgeon. He obtained his M.D. in 2003 and returned to McGill University where he completed a General Surgery residency from 2003 to 2009. During this period, he enrolled in the Department of Experimental Surgery and obtained his M.Sc. with a thesis focus on the role of microsatellite instability in thyroid cancer. This, in turn, triggered a genuine passion for endocrine oncology. After attending his first American Association of Endocrine Surgeon's meeting in 2005, Dr. Mitmaker discovered his path. Heading south again, he found himself in the City by the Bay - San Francisco where he went on to complete a prestigious 2-year research and clinical fellowship in Endocrine Surgery at the University of California, San Francisco (UCSF) from 2009 to 2011. Following completion of his fellowship, he was recruited back to McGill and has since developed a successful academic endocrine surgery practice.

Dr. Mitmaker's clinical and research interests include endocrine oncological conditions of the thyroid, parathyroid and adrenal glands along with rare genetic endocrine syndromes. His research profile involves the analysis of the molecular mechanisms in the development of these

endocrine-related tumours, which includes the innovative use of nanoparticles to target and treat thyroid cancer cells using bioaffinity technologies.

At the onset of his academic appointment at McGill University, medical curricula began to evolve and so did his interest in the field of medical education. Dr. Mitmaker's role as an educator spans from the undergraduate level to the graduate and postgraduate levels. He has demonstrated an unwavering dedication towards medical education which has influenced many students, residents and fellows in both the clinical and research spheres with his greatest influence and effectiveness as a teacher when integrating topics in Endocrine Surgery. Dr. Mitmaker has held many leadership positions including Site Director at the undergraduate level and now Program Director at the postgraduate level. He has used these platforms to innovate and improve the quality and effectiveness of medical education in the current digital era.

Other clinical research interests include education and outcomes research. Some examples of his work include being a co-creator of the eLearning platform – Think Like A Surgeon© – Thyroidectomy, helping teach surgical decision-making to residents and students. Additional areas of focus involve the management of endocrine surgical emergencies including pheochromocytoma and hypercalcemic crisis. Dr. Mitmaker also created the first Multidisciplinary Adrenal Clinic at McGill incorporating surgeons and endocrinologists to rapidly diagnose and treat adrenal gland tumors. Over the last decade, Dr. Mitmaker's interest in Endocrine Surgical Oncology has led to several clinical innovations, new collaborations and an improved healthcare experience for trainees and patients alike. Finally, his leadership role as program director of the General Surgical Oncology Residency program within the Gerald Bronfman Department of Oncology has really allowed him to grow, innovate and achieve new heights.

During his spare time, Dr. Mitmaker enjoys listening to music (he considers himself to be an amateur audiophile), playing tennis and trying new restaurants. He is also very busy at home as a father to two young boys.

Grogan RH, **Mitmaker EJ**, Clark OH. *The Evolution of Biomarkers in Thyroid Cancer – From Mass Screening to a Personalized Biosignature*. Cancers. 2010;2: 885-912.

Dotan I, Roche PJ, Tamilia M, Paliouras M, **Mitmaker EJ**, Trifiro MA. *Engineering Multi-Walled Carbon Nanotube Therapeutic Bionanofluids to Selectively Target Papillary Thyroid Cancer Cells*. PLoS One. 2016 Feb 22;11(2):e0149723.

Madani A, Gornitsky J, Watanabe Y, Benay C, Altieri MS, Pucher PH, Tabah R, **Mitmaker EJ**. Measuring Decision-Making During Thyroidectomy: Validity Evidence for a Web-Based Assessment Tool. World J Surg. 2018 Feb;42(2):376-383.

**Mitmaker EJ**, Tabah R, How J. Thyroid Nodule DNA Methylation Signatures: An Important Diagnostic Annotation. Clin Cancer Res. 2019 Jan 15;25(2):457-459.