

Gayun Chan-Smutko, MS, CGC

MGH Institute of Health Professions
Charlestown Navy Yard
36 First Avenue, Boston, MA 02129

Ph: 617-724-2261
gchansmutko@mghihp.edu

EDUCATION

2000-2002 Brandeis University, Waltham, MA
M.S., Genetic Counseling
1990-1994 University of Michigan, Ann Arbor, MI
B.S., Cellular and Molecular Biology

CERTIFICATION AND LICENSE INFORMATION

American Board of Genetic Counselors Certification, 2005
Recertification, 2015

Commonwealth of Massachusetts
Board of Registration of Genetic Counselors, License # GC040

State of New Hampshire
Office of Licensed Allied Health Professionals, License # 0022

FACULTY APPOINTMENT

2018-present Associate Professor, MGH Institute of Health Professions, Boston, MA

2014-2018 Associate Professor of the Practice, Brandeis University, Waltham, MA

AWARDS

Recipient of the 2019 National Society of Genetic Counselors Leadership in Diversity and Inclusion inaugural award.

EXPERIENCE

2018-present Associate Director, M.S. in Genetic Counseling Program
MGH Institute of Health Professions, Boston, MA

- Admissions Committee
- Faculty Search Committees
 - Director of Clinical Education
 - Director of Student Research
 - Associate Director, Accessibility Resources
- Diversity, Equity and Inclusion Council
- Power, Privilege and Positionality Event Planning Committee

- Strategic Priority 5B, Team 1 (Dean Inez Tuck, Chair)
- DEI Case Studies Subcommittee (Charley Haynes, Chair)
- 2019 DEI Scorecard Taskforce

2014-2018 Assistant Director, M.S. in Genetic Counseling Program
Brandeis University, Waltham, MA

- Course: Introduction to Genetic Counseling I and II. Instructor.
- Course: Fieldwork I and II. Instructor.
- Primary advisor on two student research projects each year.
- Admissions Committee, Faculty Search Committees.

2006-2018 Senior Genetic Counselor, Center for Cancer Risk Assessment
Massachusetts General Hospital, Boston, MA

Perform all duties of Genetic Counselor. Additional responsibilities include:

- Mentor a growing genetic counseling staff.
- Collaborate with attending physicians to develop two new clinical programs in endocrine tumor genetics and neuro-oncology genetics.
- Evaluate health information technology platforms.

2002-2006 Genetic Counselor, Center for Cancer Risk Assessment
Massachusetts General Hospital, Boston, MA

- Provide cancer genetic counseling services in hereditary breast/ovarian, gastrointestinal, renal cell carcinoma/von Hippel-Lindau disease programs.
- Carry out research responsibilities in each cancer genetics program.
- Supervise genetic counseling masters-degree program students.
- Provide outreach services, including clinician education and cancer genetic counseling in the outpatient setting.
- Develop and maintain standard operating procedure for data entry into Progeny database.

RELATED PROFESSIONAL EXPERIENCE

1994-2000 Senior Research Associate, Human Genetics/Genotyping Department
Millennium Pharmaceuticals, Inc., Cambridge, MA

- Supervised and led a four-person R&D team focused on SNP development for fine mapping and association studies.
- Focused on building infrastructure to migrate from microsatellite to SNP typing.
- Evaluated dHPLC technology for mutation detection and SNP development.
- Established a robust set of microsatellite markers for genome-wide scans and linkage analysis of complex disease traits.

CONTINUING EDUCATION

CMS Online Feedback Course (5 sessions, Fall 2018)
Course Design Institute (3 sessions, Spring 2019)
American College of Medical Genetics Annual Conference, 2019
Association of Genetic Counseling Program Directors Biennial Retreat, 2014, 2016, 2018
National Society of Genetic Counselors Annual Conference, 2001-present
New England Regional Genetics Group Annual Conference, 2001
American Society of Human Genetics Annual Conference, 1996-99, 2001

PROFESSIONAL MEMBERSHIPS

National Society of Genetic Counselors (NSGC)
NSGC Cancer SIG
New England Regional Genetics Group, Inc. (NERGG)
Association of Genetic Counseling Program Directors (AGCPD)

PROFESSIONAL ACTIVITIES

AGCPD Code of Conduct Taskforce, *Chair* (current)
AGCPD Match Policies and Procedures Subcommittee (2017)
Volunteer instructor/discussion leader (1day events)
 7th Grade Science, Pollard Middle School in Needham (2016 – 2018)
 AP Biology, Wellesley High School (2017, 2018)
Career Representative at the Health Occupations Students of America (HOSA), MA Chapter Conference (2016)
VHL Alliance Kid's Book Workgroup (2005-2007)

PEER-REVIEWED PUBLICATIONS

Schneider M, Dinkelborg K, Xiao X, Chan-Smutko G, Hruska K, Huang D, Sagar P, Harisinghani M, Iliopoulos O. Early onset renal cell carcinoma in an adolescent girl with germline FLCN exon 5 deletion. *Fam Cancer*. 2018 Jan;17(1):135-139.

Chan-Smutko G. Genetic Counseling in Von Hippel-Lindau Disease: Navigating the Landscape of a Well-Established Syndrome. *Current Genetic Medicine Reports*. 2017:1-9.

Biller JA, Butros SR, Chan-Smutko G, Abrams AN, Chung DC, Hagen CE. Case records of the Massachusetts General Hospital. Case 6-2016. A 10-year-old boy with abdominal cramping and fevers. *N Engl J Med*. 2016 Feb 25; 374:772-81.

Alexander EK, Chan-Smutko G, Saksena MA, Popa I. Case records of the Massachusetts General Hospital. Case 19-2013. A 35-year-old woman with recurrent goiter and ductal carcinoma of the breast. *N Engl J Med*. 2013 Jun 20; 368(25):2416-24.

Chan-Smutko G. Genetic testing by cancer site: urinary tract. *Cancer J*. 2012 Jul-Aug;18(4):343-9.

Shannon KM, Rodgers LH, Chan-Smutko G, Patel D, Gabree M, Ryan PD. Which individuals undergoing BRACAnalysis need BART testing? *Cancer Genet.* 2011 Aug;204(8):416-22.

Wham D, Vu T, Chan-Smutko G, Kobelka C, Urbauer D, Heald B. 2010. Assessment of clinical practices among cancer genetic counselors. *Fam Cancer.* 9(3):459-68.

Chan-Smutko G, Patel D, Shannon KM, Ryan PD. 2008. Professional challenges in cancer genetic testing: who is the patient? *Oncologist.* 13:232-38.

Herraiz M, Barbesino G, Faquin W, Chan-Smutko G, Patel D, Shannon KM, Daniels GH, Chung DC. 2007. Prevalence of thyroid cancer in familial adenomatous polyposis syndrome and the role of screening ultrasound examinations. *Clin Gastroenterol Hepatol.* 5(3):367-73.

Shannon KM, Muzikansky A, Chan-Smutko G, Niendorf KB, Ryan PD. 2006. Uptake of BRCA1 rearrangement panel testing: in individuals previously tested for BRCA1/2 mutations. *Genet Med.* 8(12):740-5.

Iliopoulos O, Chan-Smutko G, Gonzalez RG, Louis DN, Stone JR. Case records of the Massachusetts General Hospital. Case 23-2006. A 36-year-old man with numbness in the left hand and hypertension. *N Engl J Med.* Jul 27;355(4):394-402.

Jo WS, Bandipalliam P, Shannon KM, Niendorf KB, Chan-Smutko G, Hur C, Syngal S, Chung DC. 2005. Correlation of polyp number and family history of colon cancer with germline MYH mutations. *Clin Gastroenterol Hepatol.* 3(10):1022-8.

Parker A, Meyer J, Lewitsky S, Rennich JS, Chan G, Thomas J, Orho-Melander M, Lehtovirta M, Forsblom C, Hyrkkö A, Carlsson M, Lindgren C, Groop LC. 2001. A gene conferring susceptibility to type 2 diabetes in conjunction with obesity is located on chromosome 18p11. *Diabetes.* 50(3):675-80.

Ekelund J, Hovatta I, Parker A, Paunio T, Varilo T, Martin R, Suhonen J, Ellonen P, Chan G, Sinsheimer JS, Sobel E, Juvonen H, Arajärvi R, Partonen T, Suvisaari J, Lonngvist J, Meyer J, Peltonen L. 2001. Chromosome 1 loci in Finnish schizophrenia families. *Hum Mol Genet.* 10:1611-7.

Chen H, Jawahar S, Qian Y, Duong Q, Chan G, Parker A, Meyer JM, Moore KJ, Chayen S, Gross DJ, Glaser B, Permutt MA, Fricker LD. 2001. Missense polymorphism in the human carboxypeptidase E gene alters enzymatic activity. *Hum Mutat.* 18: 120-31.

Faraone SV, Meyer J, Matise T, Svrakic D, Pepple J, Malaspina D, Suarez B, Hampe C, Chan G, Aelony A, Friedman JH, Kaufmann C, Cloninger CR, Tsuang MT. 1999. Suggestive linkage of chromosome 10p to schizophrenia is not due to transmission ratio distortion. *Am J Med Genet.* 88:607-8.

Mahtani MM, Widen E, Lehto M, Thomas J, McCarthy M, Brayer J, Bryant B, Chan G, Daly M, Forsblom C, Kanninen T, Kirby A, Kruglyak L, Munnely K, Parkkonen M, Reeve-Daly MP, Weaver A, Brettin T, Duyk G, Lander ES, Groop LC. 1996. Mapping of a gene for type 2 diabetes associated with an insulin secretion defect by a genome scan in Finnish families. *Nat Genet.* 14(1), 90-4.

BOOK CHAPTERS

Shannon K and Chan-Smutko G. "Medical Genetics". *Psychiatric Care of the Medical Patient*. 3rd Edition. Eds. Fogel BS and Greenberg DB. Oxford University Press, 2015. Chapter 64.

Chan-Smutko, G. "Genetic testing by cancer site: urinary tract". *CANCER: Principles and Practice of Oncology*, 10th edition, Eds. Vincent T. DeVita, Jr., Theodore S. Lawrence, and Steven A. Rosenberg. Wolters Kluwer, 2014.

Chan-Smutko G and Iliopoulos O. "Familial Renal Cell Cancers and Pheochromocytomas". *Principles of Clinical Cancer Genetics*. Eds. Chung DC, Haber DA New York: Springer, 2010. 109-128.

Hulick P, Chan-Smutko G, Zimmer M, Iliopoulos O. "Genetic Counseling for Inherited Forms of Kidney Cancer." *Renal Cell Cancer: Diagnosis and Therapy*. Eds. De La Rosette JJMCH, Sternberg CN, van Poppel HPA. New York: Springer-Verlag, 2008. 161-172.

PATIENT RESOURCES

Kruger M, Chan-Smutko G, Eckerman A, Doyle C. *VHL Handbook Kid's Edition: A Handbook for Parents and Kids Living with von Hippel-Lindau*. VHL Family Alliance, May 1 2009.
<https://www.vhl.org/product/vhl-handbook-kids-edition/>

ON-LINE RESOURCE CONTRIBUTIONS

Chan-Smutko G, Plon SE, Iliopoulos O. "Clinical features, diagnosis, and management of von Hippel-Lindau disease." Dep. Ed. Michael E. Ross. UpToDate Online. 18 Dec. 2007-2013.

Chan-Smutko G, Plon SE, Iliopoulos O. "Molecular biology and pathogenesis of von Hippel-Lindau disease." Dep. Ed. Michael E. Ross. UpToDate Online. 24 July 2008-2013.

PRESENTATIONS AND INVITED LECTURES

National Society of Genetic Counselors Annual Education Conference. October 2015. Pre-conference Symposium: "Beyond the Usual Suspects: Updates on Counseling and Management Strategies for Rare Inherited Cancer Predisposition Syndromes." Topic: Inherited susceptibility to renal cell carcinoma.

Harvard Medical School Genetics Training Program. Fall 2010-13. Course: Advanced Human Genetics. Topics have included: "Inherited Cancer Predisposition Syndromes" and "Hereditary Renal Cell Carcinoma and Related Conditions".

Brandeis University, Masters Program in Genetic Counseling. Fall 2005-09, 2011-16. Course: Introduction to Genetic Counseling. Topic: Cancer Case Management.

Brandeis University, Masters Program in Genetic Counseling. Spring 2012-18. Course: Clinical Genetics. Topic: Familial Renal Cell Carcinoma, Paraganglioma and Pheochromocytoma.

Boston University School of Medicine, MS Genetic Counseling Program. Fall 2012-2018. Course: Cancer Genetic Counseling. Topic: Familial Renal Cell Carcinoma and Related Conditions.

VHL Family Alliance, Annual Meeting. 2012. Title: "Genetics and Childhood Issues". Panelist.

VHL Family Alliance, Annual Meeting. 2013. Title: "Putting It All Together: The VHL Patient". Co-presenter.

MGH Vincent Ob/Gyn Resident Didactics. Feb 2009. Title: "Genetic Testing in Women's Cancers – The Basics."

Simmons College, College of Nursing. Fall 2007 and 2008. Course: Cancer Pathobiology. Topic: Genetic Counseling and Translation of Genetics to Clinical Practice.

Brandeis University, Masters Program in Genetic Counseling. Spring, 2007. Course: Seminar Series. Topic: Challenging Cases in Cancer Genetics.

National Consortium of Breast Centers, Annual Education Conference. Mar 2006. Titles: "BRCA Testing: The Details" and "Taking and Recording the Genetic Family History".

MGH Pre-Clinical Genetics Conference. Dec 2005. Title: "Hereditary Leiomyomatosis and Renal Cell Carcinoma".

MGH Pre-Clinical Genetics Conference. Dec 2004. Title: "Hereditary Paraganglioma".

VHL Family Alliance, Northeast Regional Conference. 2003. Title: "Genetic Privacy".