Scott A. Turner, PhD, FACMG

Assistant Professor
Associate Director of Molecular Diagnostics
Associate Director of the Laboratory Genetics and Genomics Fellowship Program
Department of Pathology
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Board Certification

American Board of Medical Genetics and Genomics (ABMGG), Clinical Molecular Genetics; certified 2019

Education

Postgraduate Training

ABMGG Clinical Molecular Genetics Fellowship
Vanderbilt University Medical Center, Nashville, TN
Department of Pathology, Microbiology, and Immunology

Molecular Pathology Postdoctoral Fellowship
Dartmouth-Hitchcock Medical Center, Lebanon, NH
Department of Pathology and Laboratory Medicine

Graduate Education

Doctor of Philosophy, Genetics
The Geisel School of Medicine at Dartmouth College, Hanover, NH
Department of Genetics

Awards

National Institutes of Health Training Grant Award: 2012
Ryan Fellow Award, Albert J. Ryan Foundation: 2011
Howard Hughes Student Research Award, HHMI: 2002

VCU and Medical Center Appointments

Assistant Professor, Department of Pathology
Associate Director, Molecular Diagnostics
Associate Director, Laboratory Genetics and Genomics Fellowship

Professional Organizations

American College of Medical Genetics (ACMG)
Association of Molecular Pathology (AMP)

Recent Invited Presentations

AMP Variant Interpretation Testing Across Laboratory (VITAL): "Insights and instruction on society survey" Association of Molecular Pathology Annual Meeting, Baltimore, MD (2019)

The Impact of Variant Reclassification on Management of Hereditary Cancer Syndromes, American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting, Phoenix, AZ (2017)

Molecular Dx in Low to Middle Income Countries: Point-of-Care Screening for High Risk HPV, Vendor-Sponsored Talk at the Association of Molecular Pathology Annual Meeting, Charlotte, NC (2017)

Clinical validation and implementation of a targeted sequencing panel for predisposition to inherited cancer, Cancer Genomics Consortium/Cytogenomic/Array Group Annual Meeting, Denver, CO (2015)

Cancer Mutations in the Age of Clinical Genomics, New England Alliance for Heath, Dartmouth-Hitchcock Medical Center, Lebanon NH (2015)

Using Chromosomal Microarray Analysis to Diagnose a Rare 17p13.3 Microdeletion, Molecular Pathology Annual Meeting, Washington, DC (2014)

Evaluating OncoScan FFPE Assay Kit for Somatic Mutation Identification in Solid Tumors, Affymetrix Users' Meeting, New Haven, CT (2014)

Recent Publications

Peer Reviewed Publications

Turner SA, Abou Shaar R, Yang Z. The basics of commonly used molecular techniques for diagnosis, and application of molecular testing in cytology. Diagn Cytopathol. 2023 Jan;51(1):83-94.

Gillam J, Catic A, Paulraj P, Dalton J, Lai G, Jackson-Cook C, **Turner S**, Ferreira-Gonzalez A, Barrie E. Acute megakaryoblastic leukemia with trisomy 3 and CBFA2T3::GLIS2: A case report. Genes Chromosomes Cancer. 2022 Aug;61(8):491-496.

Li MM, Cottrell CE, Pullambhatla M, Roy S, Temple-Smolkin RL, **Turner SA**, Wang K, Zhou Y, Vnencak-Jones CL. Assessments of Somatic Variant Classification Using the Association for Molecular Pathology/American Society of Clinical Oncology/College of American Pathologists Guidelines: A Report from the Association for Molecular Pathology. *J Mol Diagn*. 2022 Dec 9:S1525-1578(22)00339-7.

Finlay-Schultz, J., Jacobsen, B.M., Riley, D., **Turner, S.A**. *et al.* New generation breast cancer cell lines developed from patient-derived xenografts. *Breast Cancer Res* **22,** 68 (2020).

Reichert, SC, Li, R, A. **Turner, S,** et al. *HNRNPH1*-related syndromic intellectual disability: Seven additional cases suggestive of a distinct syndromic neurodevelopmental syndrome. *Clin Genet*. 2020; 98: 91– 98.

Yang, C, Austin F, Richard H, Idowu M, Williamson V, Sabato F, Ferreira-Gonzalez A, **Turner SA.** Lynch syndrome-assocaited ultra-hypermutated pediatric glioblastoma mimicking a constitutional mismatch repair deficiency syndrome, Gold Spring Harbour Molecular Case Stud, 2019 Oct 23;5(5).

Turner SA, Shaver AC, Kovach AE, Oluwole OO, Mason EF. Myelodysplastic/myeloproliferative neoplasm with eosinophilia as a manifestation of Li Fraumeni Sydnrome, Leuk Lymphoma 2019 Dec;60(13):3312-3315.

Scott A. Turner, Smita Rao, Cindy Vnencak-Jones, Georgia Wiesner. The Impact of Variant Reclassification on Management of Hereditary Cancer Syndromes, Genet Med. 2018 Jun 6. doi: 10.1038/s41436-018-0063-z.

S. Turner, C. Studwell, S. Deharvengt, K.D. Lyons, J.A. Plata, E. LaRochelle, A.M. Zapata, L. Kennedy, and S. Bejarano, High-Risk HPV Genotypes Identified in Northern Honduras: Evidence for Prevention. Journal of Global Oncology 2018 4:Supplement 2, 211s-211s.

Scott A. Turner, Sophie J. Deharvengt, Jorge Plate, Ethan P. Larochelle, Suyapa Bejarano, Linda Kennedy, Gregory J. Tsongalis. Implementation of Multicolor Meltcurve Analysis for High-Risk Human Papilloma Virus Detection in Low- and Middle-Income Countries: A Pilot Study for Expanded Cervical Cancer Screening in Honduras. Journal of Global Oncology, 0(0) DOI 10.1200/JGO.17.00035 epub August 28, 2017.

Miraflor AP, de Abreu FB, Peterson JD, **Turner SA**, Amos CI, Tsongalis, GJ, Yan S. Somatic mutation analysis in melanoma using targeted next generation sequencing. Exp. Mol. Pathol. 2017 Aug 16; 103(2): 172-177.

Hahn NM, Bivalacqua TJ, Ross AE, Netto GJ, Baras AS, Park JC, Chapman C, Masterson TA, Koch MO, Bihrle R, Foster RS, Gardner TA, Cheng L, Jones DR, McElyea K, Sandusky GE, Breen T, Liu Z, Albany C, Moore ML, Loman RA, Reed A, **Turner SA,** de Abreu FB, Gallagher TL, Tsongalis GJ, Plimack ER, Greenberg RE, Geynisman DM. A Phase II Trial of Dovitinib in BCG-Unresponsive Urothelial Carcinoma with FGF3 Mutations or Over-expression: Hoosier Cancer Research Network Trial HCRN 12-157. Clin Cancer Res. 2016 Dec 8.

Gardner JA, Peterson JD, **Turner SA**, Soares BL, Lancor CR, Dos Santos LL, Kaur P, Ornstein DL, Tsongalis GJ, de Abreu FB. Detection of CALR Mutation in Clonal and Nonclonal Hematologic Diseases Using Fragment Analysis and Next-Generation Sequencing. Am J Clin Pathol. 2016 Oct;146(4):448-55.

Turner SA, Peterson JD, Pettus JR, de Abreu FB, Amos CI, Dragnev KH, Tsongalis GJ. The Pitfalls of Companion Diagnostics: Evaluation of Discordant EGFR Mutation Results from a Clinical Laboratory and a Central Laboratory, *Journal of Molecular Diagnostics*, 2016 May;18(3):331-5.

Scott A. Turner, Stephanie E. Vallee, Mary Beth Dinulos, Linda Kennedy, Peter Mason, Dean Seibert, MarcoTulio Martinez, Heather B. Steinmetz, Gregory J. Tsongalis, Joel A. Lefferts. Discovery of a Novel *CBS* Mutation and Diagnosis of

Homocystinuria by Whole Exome Sequencing in a Family from Rural Honduras. Clinical Reports in Clinical Pathology, Vol2, No. 3, September 2015, e-Version First.

Book Chapters:

Turner, SA, Tsongalis, GJ, Automation of the Molecular Diagnostic Laboratory, *Diagnostic Molecular Pathology, A Guide to Applied Molecular Testing.* Academic Press Elsevier (2017)

Turner, SA, Tsongalis, GJ, Personalized Medicine for the Treatment of Human Cancer, *The Molecular Basis for Human Cancer* 2nd ed. Humana Press (2015)