Scott A. Turner, PhD, FACMG

Assistant Professor
Associate Director of Molecular Diagnostics
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Education

2002 B.Sc. Biology, Bates College, Lewiston, ME
2014 Ph.D. Genetics, Dartmouth College, Hanover, NH
2016 Clinical Genomics and Advance Technologies Post-Doctoral Fellowship, Dartmouth-Hitchcock Medical Center, Lebanon, NH
2018 ABMGG Clinical Molecular Genetics Fellowship, Vanderbilt University Medical Center, Nashville, TN

Licenses & Certifications

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

Professional Service (outside)

Association of Molecular Pathology (AMP): Clinical Practice Committee Working Group, Somatic Variant Interpretation Across Clinical Laboratories (ISV)
Association of Molecular Pathology (AMP): Clinical Practice Committee Working Group, Somatic Interpretation of Sequence Variant (ISV) guideline update

Association of Molecular Pathology (AMP)/American College of Medical Genetics (ACMG) Working Group, Update to Technical standards for the interpretation and reporting of acquired CNAs and CN-LOS in neoplastic disorders

Visiting Professor, NIH/NIGRI, GENE 527 Molecular Genetics in the Era of Cancer Genomics.

Recent Invited Presentations

3-2024: “Low rate of clinical follow-up for potential germline variants identified in hematologic malignancies with a next generation sequencing panel” H Wollenzien, T Olson, K Rafferty, SA Turner, A Ferreira-Gonzalez, E Barrie, American College of Medical Genetics Annual Conference, Toronto, ON

4-2023: “Molecular Profiling in Hematologic Malignancies, National Institutes of Health, Invited Presentation for Cytogenetics and Molecular Genetics in the Era of Cancer Genomics Lecture Series. Washington, DC

04-2023: “Molecular Profiling in Solid Tumors”, National Institutes of Health, Invited Presentation for Cytogenetics and Molecular Genetics in the Era of Cancer Genomics Lecture Series. Washington, DC

11-2023: “NGS Library Quantification Standardization to Optimize Comprehensive Molecular Profiling in Hematologic Malignancy” F Sabato, E Barrie, A Ferreira-Gonzalez, SA Turner Association of Molecular Pathology Annual Conference, Salt Lake City, UT.

11-2023: “Performance Evaluation of a Novel Multi-variant CFTR DNA Control” F Sabato, J Lynch, A Ferreira-Gonzalez, SA Turner, Association of Molecular Pathology Annual Conference, Salt Lake City, UT.

11-2023: “Validation of BRAF Idylla Mutation Assay for the Detection of V600E/D and V600K/R/M Mutations in Patients with Advanced Melanoma”. J Collie, A Martelli, F. Sabato, R Abou Shaar, J Lynch, E Barrie, SA Turner, A Ferreira-Gonzalez. Association of Molecular Pathology Annual Conference, Salt Lake City, UT.

5-2023: “Application of Molecular Techniques in the Clinical Laboratory: An Immersive Educational Experience for Clinical Learners” SA Turner, G Goa, C Jackson-Cook, E Barrie, A Ferreira-Gonzalez. Association of Professors of Human and Medical Genetics Annual Conference, Kiawah Island, SC.

11-2022: “Profile in Building of Patients with Hematological Cancers Using Machine Learning” V Williamson, B Bullard, T Olson, F Sabato, E Barrie, SA Turner, A Ferreira-Gonzalez Association of Molecular Pathology Annual Conference, Phoenix, AZ.

06-2015: “Clinical validation and implementation of a targeted sequencing panel for predisposition to inherited cancer,” Cancer Genomics Consortium/Cytogenomic/Array Group Annual Meeting, Denver, CO.

11-2014: “Using Chromosomal Microarray Analysis to Diagnose a Rare 17p13.3 Microdeletion,” Molecular Pathology Annual Meeting, Washington, DC

Selected Publications

Peer Reviewed Papers

Zobril EK, Grible JM, Boyd DC, Hairr NS, Leftwich TJ, Esquivel MF, Duong AK, **Turner SA**, Ferreira-Gonzalez A, Olex AL, Sartorius CA, Dozmorov MG, Harrell JC. Stratification of Tamoxifen Synergistic Combinations for the Treatment of ER+ Breast Cancer. *Cancers* 2023 Jun 14;15(12):3179 (PMID 37370789)

Boyd DC, Zobril EK, Olex AL, Leftwich TJ, Hairr NS, Byers HA, Valentine AD, Altman JE, Alzubi MA, Grible JM, **Turner SA**, Ferreira-Gonzalez A, Dozmorov MG, Harrell JC. Discovering Synergistic Compounds with BYL-719 in PI3K Overactivated Basal-like PDXs. *Cancers* 2023 Mar 3;15(5):1582 (PMID 36900375)

Li MM, Cottrell CE, Pullambhatla M, Roy S, Temple-Smolkin RL, **Turner SA**, Wang K, Zhou Y, Vnencak-Jones CL. Assessment of Somatic Variant Classification Using the Association for Molecular Pathology/American Society of Clinical Oncology/College of American Pathologist Guidelines: A Report from the Association of Molecular Pathology. *Journal of Molecular Diagnostics* 2023 Feb;25(2):69-86. (PMID 36503149)

Turner SA, Abou Shaar R, Yang Z. The basics of commonly used molecular techniques for diagnosis, and applications of molecular testing in cytopathology. *Diagnostic Cytopathology* 2023 Jan; 51(1):83-94 (PMID 36345929)

Rafferty KA, Barrie ES, **Turner SA**, Ferreira-Gonzalez A, Jackson-Cook C, Paulraj P, Severe Graft-Versus-Host Disease Following Solid-Organ Transplant Confirmed by Chimerism Studies and Cytogenetic Analysis*, Exp Clin Transplant* 2022 Mar 15 (PMID 35297330)

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). (PMID 32576280)

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. (PMID 32335897)

Yang, C, Austin F, Richar H, Idowu M, Williamson V, Sabato F, Ferreira-Gonzalez A, **Turner SA**. Lynch syndrome-associated ultra-hypermutated pediatric glioblastoma

mimicking a constitutional mismatch repair deficiency syndrome, *Cold Spring Harbour Molecular Case Study*, 2019 Oct 23;5(5) (PMID 31604779)

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. (PMID: 29875428)

Book Chapters and Monographs

Turner SA, Muthusamy S. Minimal (Measurable) Residual Disease in Solid Tumors, *Advances in Molecular Pathology, 6 ed* Academic Press Elsevier (2023)

Media

Turner SA "Changing Interpretations of Sequencing Results – Clinical Impact in the Realm of Hereditary Cancers *Genetics In Medicine GenePod* Podcast Audio, Nature Publishing Group, August 2018 https://www.nature.com/collections/bafjcicdai/2018-archive