

Michael T. Scherzer

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Education

- 2022 **Ph.D, Oncological Sciences**, *University of Utah*, Salt Lake City, UT.
advisor: Professor Martin McMahon
- 2015 **M.Eng, Bioengineering**, *University of Louisville*, Louisville, KY.
advisor: Associate Professor Levi Beverly
- 2013 **B.S, Bioengineering**, *University of Louisville*, Louisville, KY.

Experience

- 05/2022-pres. **Post-Doctoral Fellow**, *Judson-Torres Lab*, Univ. of Utah, Dept. of Dermatology.
○ Dissecting melanocytic cell states and their role in melanoma formation
- 5/2016-04/2022 **Graduate Research Assistant**, *Huntsman Cancer Institute*.
○ Developed and characterized new mouse-models of lung adenocarcinoma
○ Employed Single-Cell RNA-Seq to determine tumor-cell heterogeneity in mouse-models of lung adenocarcinoma
- 01/2013-07/2015 **Research Technician**, *Beverly Lab*, Univ. of Louisville, Dept. of Pharmacology and Toxicology.
○ Initiated investigations into cancer-associated fibroblasts and their effect on cancer cells
○ Created large-scale lentiviral libraries encoding every gene involved in sphingolipid metabolism
- 04/2012-12/2012 **Engineering Technician**, *Parallel Products*, Louisville, KY.
○ Responsible for Quality Control of distilled ethanol for use as a fuel additive

Preprints

- 2022 Ma, Y, Pronovost, S, Lewis, MR, **Scherzer MT**, Shen, J, Edgar BA. Rare codons mediate growth signaling-dependent cell proliferation. *In review at Science*
- 2022 **Scherzer MT**, Vaishnavi A, Foth M, Battistone B, Lozano G, McMahon M. (In Prep) P53 Missense Mutants Differentially alter BRAF(V600E) Lung Tumorigenesis (in prep)

Peer-reviewed manuscripts (also see [Google Scholar](#))

- 2023 **Scherzer MT**, Deacon D, Judson-Torres R. Perilesional Epigenomes Distinguish Melanocytic Nevus Subtypes. *Journal of Investigative Dermatology*
- 2022 Vaishnavi A, Juan J, Jacob M, Stehn C, Gardner EE, **Scherzer MT**, Schuman S, Van Veen JE, Newberg JY, Liu A, Mann K, Adams DJ, Grossmann A, Mann MB, McMahon M. Transposon Mutagenesis Reveals RBMS3 Silencing as a Promoter of Malignant Progression of BRAFV600E-Driven Lung Tumorigenesis. *Cancer research*
- 2020 Vaishnavi A, **Scherzer MT**, Kinsey CG, Parkman GL, Truong A, Ghazi P, Schuman S, Battistone B, Garrido-Laguna I, McMahon M. Inhibition of MEK1/2 Forestalls the Onset of Acquired Resistance to Entrectinib in Multiple Models of NTRK1-Driven Cancer. *Cell Reports*

- 2020 Truong A, Yoo JH, **Scherzer MT**, Sanchez JM et al. Chloroquine Sensitizes GNAQ/11-mutated Melanoma to MEK1/2 Inhibition. *Clinical Cancer Research*
- 2019 Van Veen JE, **Scherzer MT**, Boshuzien J, McMahon M. Mutationally- activated PI3K promotes de-differentiation of lung tumors initiated by the BRAFV600E oncoprotein kinase. *eLife*
- 2016 Dupre, T., Doll, M., Shah, P., Sharp, C., Kiefer, A., **Scherzer MT**, Siskind, L. Suramin Protects against cisplatin-induced acute kidney injury. *Am J Renal Physiology*
- 2015 **Scherzer, MT**, Waigel, S, Donninger H, Arumugam V, Zacharias, W, Clark, G, Siskind, L, Soucy, P, Beverly, L. Fibroblast derived-Extracellular Matrices: An Alternative Cell Culture System That Increases Metastatic Cellular Properties. *Plos One*
- 2014 Saurabh K*, **Scherzer, MT***, SHah, P, Mims, A, Lockwood, W, Kraft A, Beverly LJ. The PIM family of oncoproteins: small kinases with huge implications in myeloid leukemogenesis and as therapeutic targets. *Oncotarget*
- 2015 Saurabh K*, **Scherzer, MT***, Song A, Yip KW, Reed JC, et al. Dissecting the In Vivo Leukemogenic Potency of BCLxl. *J Leuk (Los Angel)*

Invited Presentations

- 2018-2021 Oncological Sciences Department Research in Progress, **University of Utah**.
- 2023 Trp53 Investigating genetic and environmental interactions on melanocyte transcriptional states Huntsman Cancer Institute Melanoma Center Grand Rounds, **Huntsman Cancer Institute**
- 2019 Trp53 Missense Mutants Differentially Affect BRAF V600E lung Tumorigenesis and Response to MAPK blockade HCI Trainee Symposium, **Huntsman Cancer Institute**
- 2018 *BRAF (V600E) Lung Tumorigenesis and Biology*. Monte Winslow and Laura Attardi Laboratories, Invited speaker. **Stanford University**

Mentorship

Technicians and Scientists

- 05/23-present **Rebecca Zitnay.**, *Project*: Spheroid invasion assays to characterize melanoma heterogeneity, Huntsman Cancer Institute.
- 01/23-present **Anastasia Prokofyeva.**, *Project*: Investigating the genetic and environmental interactions that alter melanocyte cell states, Huntsman Cancer Institute.

Graduate Students

- 7/22-12/22 **Min Hu.**, *Rotation Project*: Identifying common cellular themes important for melanoma malignancy across datasets and species, University of Utah.
- 01/19-04/19 **Jason G.**, *Rotation Project*: Exploring MAPK+Autophagy dual-inhibition in BRAF(V600E)-driven lung cancers, University of Utah.
- 9/18-12/18 **Deji A.**, *Rotation Project*: HPV16 E7 infection and resistance to MAPK inhibitors, University of Utah.

Teaching Experience

University of Utah

- 2023 **Lecturer**, *Special Topics in Melanocyte Biology*.
- 2016 **Teaching Assistant**, *Cell Biology I*.

2017 **Teaching Assistant**, *Cell Biology II*.

University of Louisville

2014 **Guest Lecture**, *Biomaterials*.

2013 **Guest Lecture**, *BioMEMs*.

2013 **Guest Lecture**, *Artificial Organs*.

Grants

2023 **Utah Melanoma Center**, *Pilot Project Award*.

Honors

2023 **Huntsman Cancer Institute**, *Huntsman Alliance of Postdocs Board*.