

# Stanford

---



## Monte Winslow

Associate Professor of Genetics and of Pathology

### Bio

---

#### ACADEMIC APPOINTMENTS

- Associate Professor, Genetics
- Associate Professor, Pathology
- Member, Bio-X
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

#### HONORS AND AWARDS

- Stanford University Graduate Fellowship, Stanford University (2000-2004)
- Pre-Doctoral Fellowship, Howard Hughes Medical Institute (2001-2006)
- Hugh McDevitt Prize in Immunology, Stanford University (2006)
- Damon Runyon Cancer Research Foundation, Fellowship (2006-2009)
- Genentech Postdoctoral Fellowship, Massachusetts Institute of Technology (2009-2010)
- Scholar Award, Baxter Foundation (2011)
- Scholar Award, The V Foundation for Cancer Research (2012-2013)

#### PROFESSIONAL EDUCATION

- Ph.D., Stanford University , Immunology (2006)
- B.S., University of Victoria, Canada , Biochemistry and Microbiology (2000)

#### LINKS

- Winslow Lab Website: <http://winslowlab.stanford.edu/>

### Research & Scholarship

---

#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Metastasis is a major clinical challenge driven by poorly understood cell state alterations. The goal of our lab is to use unbiased genomic methods and in vivo models to better understanding the molecular and cellular changes that underlie tumor progression and each step of the metastatic cascade.

We use genetically-engineered mouse models of metastatic cancer in which the resulting tumors recapitulate the genetic alterations and histological progression of the human disease.

In these models, tumors develop within their appropriate microenvironment and undergo changes in their gene expression programs that endow them with the ability to invade blood and lymphatic vessels, survive in circulation, enter various distant organs, and ultimately grow into new tumor lesions. Given the dearth of human tissue samples from metastatic disease, especially from primary tumors and metastases from the same patient prior to therapy, these models represent a unique opportunity to understand the molecular biography of the most prevalent tumor types.

By generating activating and inactivating germline and inducible alleles, and modulating gene expression using lentiviral vectors, these models allow us to characterize the function of candidate genes and pathways during tumor progression and metastasis in vivo. By incorporating increasingly quantitative methods and powerful in vivo methods, our work is focused on uncovering general rules that govern tumor progression and metastatic spread and discovering novel therapeutic targets across the continuum of cancer progression including the lethal metastatic stage.

## Teaching

---

### COURSES

#### 2025-26

- Advanced Genetics: GENE 205 (Win)

#### 2024-25

- Advanced Genetics: GENE 205 (Win)

#### 2023-24

- Advanced Genetics: GENE 205 (Win)

#### 2022-23

- Advanced Genetics: GENE 205 (Win)
- Biology and Applications of CRISPR/Cas9: Genome Editing and Epigenome Modifications: BIOS 268, GENE 268 (Spr)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Camila Bolle, Sonia Bustos Barocio, Christie Chang, Caterina Colon, Griffin Hartmann, Jaclyn Ng, George Wythes

#### Postdoctoral Faculty Sponsor

Nesli Dolcen, Wen-Yang (Ann) Lin, Michelle Ozaki

#### Doctoral Dissertation Advisor (AC)

Stewart Kim, Danny Lee, Paloma Ruiz

#### Doctoral Dissertation Co-Advisor (AC)

Xiaochen Xiong

### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Genetics (Phd Program)

## Publications

---

### PUBLICATIONS

- **A Roadmap to Transform Lung Cancer Outcomes: Priorities in Biology, Therapeutic Innovation, Early Detection, Prevention and Interception.** *Cancer discovery*

- Winslow, M. M., Ahmed, M. A., Berg, C. D., Black, J. R., Downward, J., Govindan, R., Herbst, R. S., Heymach, J. V., Jaffee, E. M., Kraut, N., Merad, M., Meyerson, M., Pandya, et al  
2026
- **CXCL-CXCR2 signaling drives cancer-endothelium interactions in SCLC metastatic seeding.** *bioRxiv : the preprint server for biology*  
Yang, Z., Xu, A., Hughes, N., Peng, C. W., Visani, A., Narayanan, S. P., Ng, X. W., Guppy, I., Roberts, C., You, Y., Winslow, M. M., Piston, D. W., Park, et al  
2026
  - **Inactivation of CDKN2AARF Promotes p53-Independent Remodeling of the PDAC Tumor Microenvironment.** *Cancer research*  
Ferreira, S., Flowers, B. M., Choi, W. Y., Farina-Morillas, M., Gatto, A., Bhattacharyya, S., Boross, G., Hassan, G., Mulligan, A. S., Vogel, H., Wood, L. D., Weaver, V. M., Winslow, et al  
2026
  - **Aging represses oncogenic KRAS-driven lung tumorigenesis and alters tumor suppression.** *Nature aging*  
Shuldiner, E. G., Karmakar, S., Tsai, M. K., Hebert, J. D., Tang, Y. J., Andrejka, L., Robertson, M. R., Wang, M., Detrick, C. R., Cai, H., Tang, R., Kunder, C. A., Feldser, et al  
2025
  - **Functional mapping of epigenomic regulators uncovers coordinated tumor suppression by the HBO1 and MLL1 complexes.** *Cancer discovery*  
Tang, Y. J., Xu, H., Hughes, N. W., Ruiz, P., Kim, S. H., Shuldiner, E. G., Lopez, S. S., Hebert, J. D., Karmakar, S., Andrejka, L., Dolcen, D. N., Boross, G., Chu, et al  
2025
  - **EML4-ALK variant-specific genetic interactions shape lung tumorigenesis.** *Cancer discovery*  
Diaz-Jimenez, A., Shuldiner, E. G., Somogyi, K., Shih, K., Gonzalez-Velasco, O., Najajreh, M., Kim, S., Akkas, F., Murray, C. W., Andrejka, L., Tsai, M. K., Brors, B., Hofmann, et al  
2025
  - **RIT1 Drives Oncogenic Transformation and is an Actionable Target in Lung Adenocarcinoma.** *Cancer research*  
Mozzarelli, A. M., Cuevas-Navarro, A., Shuldiner, E. G., Vega, M., Chatila, W. K., Xu, J., Walch, H. S., Niu, Y., Petrov, D. A., Schultz, N., Urisman, A., Rudin, C. M., Winslow, et al  
2025
  - **Efficient and multiplexed somatic genome editing with Cas12a mice.** *Nature biomedical engineering*  
Hebert, J. D., Xu, H., Tang, Y. J., Ruiz, P. A., Detrick, C. R., Wang, J., Hughes, N. W., Donosa, O., Siah, V. P., Andrejka, L., Karmakar, S., Aboiralor, I., Tang, et al  
2025
  - **The Lung Cancer Autochthonous Model Gene Expression Database Enables Cross-Study Comparisons of the Transcriptomic Landscapes Across Mouse Models.** *Cancer research*  
Cai, L., Wu, F., Zhou, Q., Gao, Y., Yao, B., DeBerardinis, R. J., Acquaaah-Mensah, G. K., Aidinis, V., Beane, J. E., Biswal, S., Chen, T., Concepcion-Crisol, C. P., Grüner, et al  
2025: OF1-OF15
  - **Integrative multiomic approaches reveal ZMAT3 and p21 as conserved hubs in the p53 tumor suppression network.** *Cell death and differentiation*  
Boutelle, A. M., Mabene, A. R., Yao, D., Xu, H., Wang, M., Tang, Y. J., Lopez, S. S., Sinha, S., Demeter, J., Cheng, R., Benard, B. A., McCreary, E. M., Valente, et al  
2025
  - **Combinatorial in vivo genome editing identifies widespread epistasis and an accessible fitness landscape during lung tumorigenesis.** *Molecular biology and evolution*  
Hebert, J. D., Tang, Y. J., Szamecz, M., Andrejka, L., Lopez, S. S., Petrov, D. A., Boross, G., Winslow, M. M.  
2025
  - **A STAG2-PAXIP1/PAGR1 axis suppresses lung tumorigenesis.** *The Journal of experimental medicine*  
Ashkin, E. L., Tang, Y. J., Xu, H., Hung, K. L., Belk, J. A., Cai, H., Lopez, S. S., Dolcen, D. N., Hebert, J. D., Li, R., Ruiz, P. A., Keal, T., Andrejka, et al  
2025; 222 (1)
  - **CTLA4 blockade abrogates KEAP1/STK11-related resistance to PD-(L)1 inhibitors.** *Nature*

- Skoulidis, F., Araujo, H. A., Do, M. T., Qian, Y., Sun, X., Cobo, A. G., Le, J. T., Montesion, M., Palmer, R., Jahchan, N., Juan, J. M., Min, C., Yu, et al  
2024
- **Experimental variables determine the outcome of RAS-RAS interactions.** *The Journal of biological chemistry*  
Zhou, Z., Nguyen, T. L., Li, X., Poujol, C., Berlinska, E., Michelina, S. V., Kapp, J. N., Plückthun, A., Winslow, M. M., Ambrogio, C., Shan, Y., Santamaría, D., Westover, et al  
2024: 107859
  - **Oncogenic context shapes the fitness landscape of tumor suppression.** *Nature communications*  
Blair, L. M., Juan, J. M., Sebastian, L., Tran, V. B., Nie, W., Wall, G. D., Gerceker, M., Lai, I. K., Apilado, E. A., Grenot, G., Amar, D., Foggetti, G., Do Carmo, et al  
2023; 14 (1): 6422
  - **Crosstalk between small-cell lung cancer cells and astrocytes mimics brain development to promote brain metastasis.** *Nature cell biology*  
Qu, F., Brough, S. C., Michno, W., Madubata, C. J., Hartmann, G. G., Puno, A., Drainas, A. P., Bhattacharya, D., Tomasich, E., Lee, M. C., Yang, D., Kim, J., Peiris-Pagès, et al  
2023
  - **Fully accessible fitness landscape of oncogene-negative lung adenocarcinoma.** *Proceedings of the National Academy of Sciences of the United States of America*  
Yousefi, M., Andrejka, L., Szamecz, M., Winslow, M. M., Petrov, D. A., Boross, G.  
2023; 120 (38): e2303224120
  - **Hardwiring tissue-specific AAV transduction in mice through engineered receptor expression.** *Nature methods*  
Zengel, J., Wang, Y. X., Seo, J. W., Ning, K., Hamilton, J. N., Wu, B., Raie, M., Holbrook, C., Su, S., Clements, D. R., Pillay, S., Puschnik, A. S., Winslow, et al  
2023
  - **Phagocytosis increases an oxidative metabolic and immune suppressive signature in tumor macrophages.** *The Journal of experimental medicine*  
Gonzalez, M. A., Lu, D. R., Yousefi, M., Kroll, A., Lo, C. H., Briseño, C. G., Watson, J. E., Novitskiy, S., Arias, V., Zhou, H., Plata Stapper, A., Tsai, M. K., Ashkin, et al  
2023; 220 (6)
  - **High-Throughput Identification, Modeling, and Analysis of Cancer Driver Genes In Vivo.** *Cold Spring Harbor perspectives in medicine*  
Tang, Y. J., Shuldiner, E. G., Karmakar, S., Winslow, M. M.  
2023
  - **Dissecting metastasis using preclinical models and methods.** *Nature reviews. Cancer*  
Hebert, J. D., Neal, J. W., Winslow, M. M.  
2023
  - **A multiplexed in vivo approach to identify driver genes in small cell lung cancer.** *Cell reports*  
Lee, M. C., Cai, H., Murray, C. W., Li, C., Shue, Y. T., Andrejka, L., He, A. L., Holzem, A. M., Drainas, A. P., Ko, J. H., Coles, G. L., Kong, C., Zhu, et al  
2023; 42 (1): 111990
  - **Multiplexed screens identify RAS paralogues HRAS and NRAS as suppressors of KRAS-driven lung cancer growth.** *Nature cell biology*  
Tang, R., Shuldiner, E. G., Kelly, M., Murray, C. W., Hebert, J. D., Andrejka, L., Tsai, M. K., Hughes, N. W., Parker, M. I., Cai, H., Li, Y. C., Wahl, G. M., Dunbrack, et al  
2023
  - **A new system for multiplexed mosaic analysis of gene function in the mouse.** *Cell reports methods*  
Cai, H., Winslow, M. M.  
2022; 2 (9): 100295
  - **Machine-learning-optimized Cas12a barcoding enables the recovery of single-cell lineages and transcriptional profiles.** *Molecular cell*  
Hughes, N. W., Qu, Y., Zhang, J., Tang, W., Pierce, J., Wang, C., Agrawal, A., Morri, M., Neff, N., Winslow, M. M., Wang, M., Cong, L.  
2022
  - **Combinatorial Inactivation of Tumor Suppressors Efficiently Initiates Lung Adenocarcinoma with Therapeutic Vulnerabilities.** *Cancer research*

- Yousefi, M., Boross, G., Weiss, C., Murray, C. W., Hebert, J. D., Cai, H., Ashkin, E. L., Karmakar, S., Andrejka, L., Chen, L., Wang, M., Tsai, M. K., Lin, et al  
2022; 82 (8): 1589-1602
- **LKB1 drives stasis and C/EBP-mediated reprogramming to an alveolar type II fate in lung cancer.** *Nature communications*  
Murray, C. W., Brady, J. J., Han, M., Cai, H., Tsai, M. K., Pierce, S. E., Cheng, R., Demeter, J., Feldser, D. M., Jackson, P. K., Shackelford, D. B., Winslow, M. M.  
2022; 13 (1): 1090
  - **Tumor suppressor pathways shape EGFR-driven lung tumor progression and response to treatment.** *Molecular & cellular oncology*  
Foggetti, G., Li, C., Cai, H., Petrov, D. A., Winslow, M. M., Politi, K.  
2022; 9 (1): 1994328
  - **Tumor suppressor pathways shape EGFR-driven lung tumor progression and response to treatment** *MOLECULAR & CELLULAR ONCOLOGY*  
Foggetti, G., Li, C., Cai, H., Petrov, D. A., Winslow, M. M., Politi, K.  
2021
  - **LKB1 inactivation modulates chromatin accessibility to drive metastatic progression.** *Nature cell biology*  
Pierce, S. E., Granja, J. M., Corces, M. R., Brady, J. J., Tsai, M. K., Pierce, A. B., Tang, R., Chu, P., Feldser, D. M., Chang, H. Y., Bassik, M. C., Greenleaf, W. J., Winslow, et al  
2021
  - **miR-200 deficiency promotes lung cancer metastasis by activating Notch signaling in cancer-associated fibroblasts.** *Genes & development*  
Xue, B., Chuang, C., Prosser, H. M., Fuziwara, C. S., Chan, C., Sahasrabudhe, N., Kuhn, M., Wu, Y., Chen, J., Biton, A., Chen, C., Wilkinson, J. E., McManus, et al  
2021
  - **Quantitative in vivo analyses reveal a complex pharmacogenomic landscape in lung adenocarcinoma.** *Cancer research*  
Li, C., Lin, W., Rizvi, H., Cai, H., McFarland, C. D., Rogers, Z. N., Yousefi, M., Winters, I. P., Rudin, C. M., Petrov, D. A., Winslow, M. M.  
2021
  - **The AMBRA1 E3 ligase adaptor regulates the stability of cyclinD.** *Nature*  
Chaikovsky, A. C., Li, C., Jeng, E. E., Loebell, S., Lee, M. C., Murray, C. W., Cheng, R., Demeter, J., Swaney, D. L., Chen, S., Newton, B. W., Johnson, J. R., Drinas, et al  
2021
  - **Genetic determinants of EGFR-Driven Lung Cancer Growth and Therapeutic Response In Vivo.** *Cancer discovery*  
Foggetti, G., Li, C., Cai, H., Hellyer, J. A., Lin, W., Ayeni, D., Hastings, K., Choi, J., Wurtz, A., Andrejka, L., Maghini, D. G., Rashleigh, N., Levy, et al  
2021
  - **Microbial single-strand annealing proteins enable CRISPR gene-editing tools with improved knock-in efficiencies and reduced off-target effects.** *Nucleic acids research*  
Wang, C., Cheng, J. K., Zhang, Q., Hughes, N. W., Xia, Q., Winslow, M. M., Cong, L.  
2021
  - **A functional taxonomy of tumor suppression in oncogenic KRAS-driven lung cancer.** *Cancer discovery*  
Cai, H. n., Chew, S. K., Li, C. n., Tsai, M. K., Andrejka, L. n., Murray, C. W., Hughes, N. W., Shuldiner, E. G., Ashkin, E. L., Tang, R. n., Hung, K. L., Chen, L. C., Lee, et al  
2021
  - **Statins affect cancer cell plasticity with distinct consequences for tumor progression and metastasis.** *Cell reports*  
Dorsch, M., Kowalczyk, M., Planque, M., Heilmann, G., Urban, S., Dujardin, P., Forster, J., Ueffing, K., Nothdurft, S., Oeck, S., Paul, A., Liffers, S. T., Kaschani, et al  
2021; 37 (8): 110056
  - **Mechanisms of small cell lung cancer metastasis.** *EMBO molecular medicine*  
Ko, J., Winslow, M. M., Sage, J.  
2020: e13122
  - **Altered mitochondria functionality defines a metastatic cell state in lung cancer and creates an exploitable vulnerability.** *Cancer research*

- Chuang, C., Dorsch, M., Dujardin, P., Silas, S., Ueffing, K., Holken, J. M., Yang, D., Winslow, M. M., Gruner, B. M.  
2020
- **Zmat3 Is a Key Splicing Regulator in the p53 Tumor Suppression Program.** *Molecular cell*  
Bieging-Rolett, K. T., Kaiser, A. M., Morgens, D. W., Boutelle, A. M., Seoane, J. A., Van Nostrand, E. L., Zhu, C., Houlihan, S. L., Mello, S. S., Yee, B. A., McClendon, J., Pierce, S. E., Winters, et al  
2020; 80 (3): 452
  - **A versatile system to record cell-cell interactions.** *eLife*  
Tang, R., Murray, C. W., Linde, I. L., Kramer, N. J., Lyu, Z., Tsai, M. K., Chen, L. C., Cai, H., Gitler, A. D., Engleman, E., Lee, W., Winslow, M. M.  
2020; 9
  - **CRISPR screens in cancer spheroids identify 3D growth-specific vulnerabilities.** *Nature*  
Han, K., Pierce, S. E., Li, A., Spees, K., Anderson, G. R., Seoane, J. A., Lo, Y. H., Dubreuil, M., Olivas, M., Kamber, R. A., Wainberg, M., Kostyrko, K., Kelly, et al  
2020; 580 (7801): 136-141
  - **CRISPR screens in cancer spheroids identify 3D growth-specific vulnerabilities** *NATURE*  
Han, K., Pierce, S. E., Li, A., Spees, K., Anderson, G. R., Seoane, J. A., Lo, Y., Dubreuil, M., Olivas, M., Kamber, R. A., Wainberg, M., Kostyrko, K., Kelly, et al  
2020
  - **Axon-like protrusions promote small cell lung cancer migration and metastasis.** *eLife*  
Yang, D., Qu, F., Cai, H., Chuang, C., Lim, J. S., Jahchan, N., Gruner, B. M., S Kuo, C., Kong, C., Oudin, M. J., Winslow, M. M., Sage, J.  
2019; 8
  - **An Lkb1-Sik axis suppresses lung tumor growth and controls differentiation.** *Cancer discovery*  
Murray, C. W., Brady, J. J., Tsai, M. K., Li, C. n., Winters, I. P., Tang, R. n., Andrejka, L. n., Ma, R. K., Kunder, C. A., Chu, P. n., Winslow, M. M.  
2019
  - **Towards quantitative and multiplexed in vivo functional cancer genomics.** *Nature reviews. Genetics*  
Winters, I. P., Murray, C. W., Winslow, M. M.  
2018
  - **Intertumoral Heterogeneity in SCLC Is Influenced by the Cell Type of Origin.** *Cancer discovery*  
Yang, D., Denny, S. K., Greenside, P. G., Chaikovsky, A. C., Brady, J. J., Ouadah, Y., Granja, J. M., Jahchan, N. S., Lim, J. S., Kwok, S., Kong, C. S., Berghoff, A. S., Schmitt, et al  
2018
  - **Hmga2 is dispensable for pancreatic cancer development, metastasis, and therapy resistance.** *Scientific reports*  
Chiou, S., Dorsch, M., Kusch, E., Naranjo, S., Kozak, M. M., Koong, A. C., Winslow, M. M., Gruner, B. M.  
2018; 8 (1): 14008
  - **Tumor Suppressor Activity of Selenbp1, a Direct Nkx2-1 Target, in Lung Adenocarcinoma.** *Molecular cancer research : MCR*  
Caswell, D. R., Chuang, C., Ma, R. K., Winters, I. P., Snyder, E. L., Winslow, M. M.  
2018
  - **Mapping the in vivo fitness landscape of lung adenocarcinoma tumor suppression in mice** *NATURE GENETICS*  
Rogers, Z. N., McFarland, C. D., Winters, I. P., Seoane, J. A., Brady, J. J., Yoon, S., Curtis, C., Petrov, D. A., Winslow, M. M.  
2018; 50 (4): 483+
  - **A quantitative and multiplexed approach to uncover the fitness landscape of tumor suppression in vivo.** *Nature methods*  
Rogers, Z. N., McFarland, C. D., Winters, I. P., Naranjo, S., Chuang, C., Petrov, D., Winslow, M. M.  
2017
  - **Molecular definition of a metastatic lung cancer state reveals a targetable CD109-Janus kinase-Stat axis.** *Nature medicine*  
Chuang, C., Greenside, P. G., Rogers, Z. N., Brady, J. J., Yang, D., Ma, R. K., Caswell, D. R., Chiou, S., Winters, A. F., Grüner, B. M., Ramaswami, G., Spencley, A. L., Kopecky, et al  
2017; 23 (3): 291-300
  - **Blimp1 induces transient metastatic heterogeneity in pancreatic cancer.** *Cancer discovery*

- Chiou, S. H., Risca, V. I., Wang, G. X., Yang, D. n., Grüner, B. M., Kathiria, A. S., Ma, R. K., Vaka, D. n., Chu, P. n., Kozak, M. n., Castellini, L. n., Graves, E. E., Kim, et al  
2017
- **Nfib Promotes Metastasis through a Widespread Increase in Chromatin Accessibility** *CELL*  
Denny, S. K., Yang, D., Chuang, C., Brady, J. J., Lim, J. S., Gruner, B. M., Chiou, S., Schep, A. N., Baral, J., Hamard, C., Antoine, M., Wislez, M., Kong, et al  
2016; 166 (2): 328-342
  - **CD47-blocking immunotherapies stimulate macrophage-mediated destruction of small-cell lung cancer** *JOURNAL OF CLINICAL INVESTIGATION*  
Weiskopf, K., Jahchan, N. S., Schnorr, P. J., Cristea, S., Ring, A. M., Maute, R. L., Volkmer, A. K., Volkmer, J., Liu, J., Lim, J. S., Yang, D., Seitz, G., Thuyen Nguyen, et al  
2016; 126 (7): 2610-2620
  - **An Arntl2-Driven Secretome Enables Lung Adenocarcinoma Metastatic Self-Sufficiency** *CANCER CELL*  
Brady, J. J., Chuang, C., Greenside, P. G., Rogers, Z. N., Murray, C. W., Caswell, D. R., Hartmann, U., Connolly, A. J., Sweet-Cordero, E. A., Kundaje, A., Winslow, M. M.  
2016; 29 (5): 697-710
  - **Recombinase-based conditional and reversible gene regulation via XTR alleles** *NATURE COMMUNICATIONS*  
Robles-Oteiza, C., Taylor, S., Yates, T., Cicchini, M., Lauderback, B., Cashman, C. R., Burds, A. A., Winslow, M. M., Jacks, T., Feldser, D. M.  
2015; 6
  - **Design of Protease Activated Optical Contrast Agents That Exploit a Latent Lysosomotropic Effect for Use in Fluorescence-Guided Surgery.** *ACS chemical biology*  
Ofori, L. O., Withana, N. P., Prestwood, T. R., Verdoes, M., Brady, J. J., Winslow, M. M., Sorger, J., Bogoy, M.  
2015; 10 (9): 1977-1988
  - **Let-7 Represses Carcinogenesis and a Stem Cell Phenotype in the Intestine via Regulation of Hmga2.** *PLoS genetics*  
Madison, B. B., Jeganathan, A. N., Mizuno, R., Winslow, M. M., Castells, A., Cuatrecasas, M., Rustgi, A. K.  
2015; 11 (8)
  - **Pancreatic cancer modeling using retrograde viral vector delivery and in vivo CRISPR/Cas9-mediated somatic genome editing** *GENES & DEVELOPMENT*  
Chiou, S., Winters, I. P., Wang, J., Naranjo, S., Dudgeon, C., Tamburini, F. B., Brady, J. J., Yang, D., Gruener, B. M., Chuang, C., Caswell, D. R., Zeng, H., Chu, et al  
2015; 29 (14): 1576-1585
  - **Pancreatic cancer modeling using retrograde viral vector delivery and in vivo CRISPR/Cas9-mediated somatic genome editing.** *Genes & development*  
Chiou, S. H., Winters, I. P., Wang, J., Naranjo, S., Dudgeon, C., Tamburini, F. B., Brady, J. J., Yang, D., Grüner, B. M., Chuang, C. H., Caswell, D. R., Zeng, H., Chu, et al  
2015; 29 (14): 1576-85
  - **Upregulation of the microRNA cluster at the Dkl1-Dio3 locus in lung adenocarcinoma** *ONCOGENE*  
Valdmanis, P. N., Roy-Chaudhuri, B., Kim, H. K., Sayles, L. C., Zheng, Y., Chuang, C., Caswell, D. R., Chu, K., Zhang, Y., Winslow, M. M., Sweet-Cordero, E. A., Kay, M. A.  
2015; 34 (1): 94-103
  - **An AMPK-Independent Signaling Pathway Downstream of the LKB1 Tumor Suppressor Controls Snail1 and Metastatic Potential.** *Molecular cell*  
Goodwin, J. M., Svensson, R. U., Lou, H. J., Winslow, M. M., Turk, B. E., Shaw, R. J.  
2014; 55 (3): 436-450
  - **Neurotrophin receptor TrkB promotes lung adenocarcinoma metastasis.** *Proceedings of the National Academy of Sciences of the United States of America*  
Sinkevicius, K. W., Kriegel, C., Bellaria, K. J., Lee, J., Lau, A. N., Leeman, K. T., Zhou, P., Beede, A. M., Fillmore, C. M., Caswell, D., Barrios, J., Wong, K., Sholl, et al  
2014; 111 (28): 10299-10304
  - **Obligate Progression Precedes Lung Adenocarcinoma Dissemination** *CANCER DISCOVERY*

- Caswell, D. R., Chuang, C., Yang, D., Chiou, S., Cheemalavagu, S., Kim-Kiselak, C., Connolly, A., Winslow, M. M.  
2014; 4 (7): 781-789
- **Obligate progression precedes lung adenocarcinoma dissemination.** *Cancer discovery*  
Caswell, D. R., Chuang, C. H., Yang, D., Chiou, S. H., Cheemalavagu, S., Kim-Kiselak, C., Connolly, A., Winslow, M. M.  
2014; 4 (7): 781-9
  - **A Conditional System to Specifically Link Disruption of Protein-Coding Function with Reporter Expression in Mice** *CELL REPORTS*  
Chiou, S., Kim-Kiselak, C., Risca, V. I., Heimann, M. K., Chuang, C., Burds, A. A., Greenleaf, W. J., Jacks, T. E., Feldser, D. M., Winslow, M. M.  
2014; 7 (6): 2078-2086
  - **A conditional system to specifically link disruption of protein-coding function with reporter expression in mice.** *Cell reports*  
Chiou, S., Kim-Kiselak, C., Risca, V. I., Heimann, M. K., Chuang, C., Burds, A. A., Greenleaf, W. J., Jacks, T. E., Feldser, D. M., Winslow, M. M.  
2014; 7 (6): 2078-2086
  - **Differential Tks5 isoform expression contributes to metastatic invasion of lung adenocarcinoma** *GENES & DEVELOPMENT*  
Li, C. M., Chen, G., Dayton, T. L., Kim-Kiselak, C., Hoersch, S., Whittaker, C. A., Bronson, R. T., Beer, D. G., Winslow, M. M., Jacks, T.  
2013; 27 (14): 1557-1567
  - **MicroRNA-33a Mediates the Regulation of High Mobility Group AT-Hook 2 Gene (HMGA2) by Thyroid Transcription Factor 1 (TTF-1/NKX2-1)** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Rice, S. J., Lai, S., Wood, L. W., Helsley, K. R., Runkle, E. A., Winslow, M. M., Mu, D.  
2013; 288 (23): 16348-16360
  - **Characterizing deformability and surface friction of cancer cells.** *Proceedings of the National Academy of Sciences of the United States of America*  
Byun, S., Son, S., Amodei, D., Cermak, N., Shaw, J., Kang, J. H., Hecht, V. C., Winslow, M. M., Jacks, T., Mallick, P., Manalis, S. R.  
2013; 110 (19): 7580-7585
  - **A combinatorial extracellular matrix platform identifies cell-extracellular matrix interactions that correlate with metastasis** *NATURE COMMUNICATIONS*  
Reticker-Flynn, N. E., Malta, D. F., Winslow, M. M., Lamar, J. M., Xu, M. J., Underhill, G. H., Hynes, R. O., Jacks, T. E., Bhatia, S. N.  
2012; 3
  - **Occludin Is a Direct Target of Thyroid Transcription Factor-1 (TTF-1/NKX2-1)** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Runkle, E. A., Rice, S. J., Qi, J., Masser, D., Antonetti, D. A., Winslow, M. M., Mu, D.  
2012; 287 (34): 28790-28801
  - **Treating metastatic cancer with nanotechnology** *NATURE REVIEWS CANCER*  
Schroeder, A., Heller, D. A., Winslow, M. M., Dahlman, J. E., Pratt, G. W., Langer, R., Jacks, T., Anderson, D. G.  
2012; 12 (1): 39-50
  - **Response and Resistance to NF-kappa B Inhibitors in Mouse Models of Lung Adenocarcinoma** *CANCER DISCOVERY*  
Xue, W., Meylan, E., Oliver, T. G., Feldser, D. M., Winslow, M. M., Bronson, R., Jacks, T.  
2011; 1 (3): 236-247
  - **Nuclear factor I/B is an oncogene in small cell lung cancer** *GENES & DEVELOPMENT*  
Dooley, A. L., Winslow, M. M., Chiang, D. Y., Banerji, S., Stransky, N., Dayton, T. L., Snyder, E. L., Senna, S., Whittaker, C. A., Bronson, R. T., Crowley, D., Barretina, J., Garraway, et al  
2011; 25 (14): 1470-1475
  - **Suppression of lung adenocarcinoma progression by Nkx2-1** *NATURE*  
Winslow, M. M., Dayton, T. L., Verhaak, R. G., Kim-Kiselak, C., Snyder, E. L., Feldser, D. M., Hubbard, D. D., DuPage, M. J., Whittaker, C. A., Hoersch, S., Yoon, S., Crowley, D., Bronson, et al  
2011; 473 (7345): 101-U120
  - **Endogenous T Cell Responses to Antigens Expressed in Lung Adenocarcinomas Delay Malignant Tumor Progression** *CANCER CELL*  
DuPage, M., Cheung, A. F., Mazumdar, C., Winslow, M. M., Bronson, R., Schmidt, L. M., Crowley, D., Chen, J., Jacks, T.  
2011; 19 (1): 72-85
  - **Stage-specific sensitivity to p53 restoration during lung cancer progression** *NATURE*

Feldser, D. M., Kostova, K. K., Winslow, M. M., Taylor, S. E., Cashman, C., Whittaker, C. A., Sanchez-Rivera, F. J., Resnick, R., Bronson, R., Hemann, M. T., Jacks, T.  
2010; 468 (7323): 572-U249

- **Selective role of calcineurin in haematopoiesis and lymphopoiesis** *EMBO REPORTS*  
Gallo, E. M., Ho, L., Winslow, M. M., Staton, T. L., Crabtree, G. R.  
2008; 9 (11): 1141-1148
- **Targeted deletion reveals essential and overlapping functions of the miR-17 similar to 92 family of miRNA clusters** *CELL*  
Ventura, A., Young, A. G., Winslow, M. M., Lintault, L., Meissner, A., Erkeland, S. J., Newman, J., Bronson, R. T., Crowley, D., Stone, J. R., Jaenisch, R., Sharp, P. A., Jacks, et al  
2008; 132 (5): 875-886
- **Calcineurin sets the bandwidth for discrimination of signals during thymocyte development** *NATURE*  
Gallo, E. M., Winslow, M. M., Cante-Barrett, K., Radermacher, A. N., Ho, L., McGinnis, L., Iritani, B., Neilson, J. R., Crabtree, G. R.  
2007; 450 (7170): 731-U11
- **Selective role of NFATc3 in positive selection of thymocytes** *JOURNAL OF IMMUNOLOGY*  
Cante-Barrett, K., Winslow, M. M., Crabtree, G. R.  
2007; 179 (1): 103-110
- **Stringent control of NFATc1 nuclear occupancy is critical for maintaining balanced immune response** *GENE THERAPY AND MOLECULAR BIOLOGY*  
Pan, M., Winslow, M. M., Keum, J. S., Crabtree, G. R.  
2007; 11B: 171-176
- **Calcineurin/NFAT signalling regulates pancreatic beta-cell growth and function** *NATURE*  
Heit, J. J., Apelqvist, A. A., Gu, X., Winslow, M. M., Neilson, J. R., Crabtree, G. R., Kim, S. K.  
2006; 443 (7109): 345-349
- **Calcineurin/NFAT signaling in osteoblasts regulates bone mass** *DEVELOPMENTAL CELL*  
Winslow, M. M., Pan, M., Starbuck, M., Gallo, E. M., Deng, L., Karsenty, G., Crabtree, G. R.  
2006; 10 (6): 771-782
- **NFAT dysregulation by increased dosage of DSCR1 and DYRK1A on chromosome 21** *NATURE*  
Arron, J. R., Winslow, M. M., Polleri, A., Chang, C., Wu, H., Gao, X., Neilson, J. R., Chen, L., Heit, J. J., Kim, S. K., Yamasaki, N., Miyakawa, T., Francke, et al  
2006; 441 (7093): 595-600
- **CD8(+) recent thymic emigrants home to and efficiently repopulate the small intestine epithelium** *NATURE IMMUNOLOGY*  
Staton, T. L., Habtezion, A., Winslow, M. M., Sato, T., Love, P. E., Butcher, E. C.  
2006; 7 (5): 482-488
- **The calcineurin phosphatase complex modulates immunogenic B cell responses** *IMMUNITY*  
Winslow, M. M., Gallo, E. M., Neilson, J. R., Crabtree, G. R.  
2006; 24 (2): 141-152
- **Calcineurin B1 is essential for positive but not negative selection during thymocyte development** *IMMUNITY*  
Neilson, J. R., Winslow, M. M., Hur, E. M., Crabtree, G. R.  
2004; 20 (3): 255-266