



## Julien Sage

Elaine and John Chambers Professor of Pediatric Cancer and Professor of Genetics  
Pediatrics - Hematology & Oncology

### CONTACT INFORMATION

- **Alternate Contact**

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### Bio

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### ACADEMIC APPOINTMENTS

- Professor, Pediatrics - Hematology & Oncology
- Professor, Genetics
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Faculty Fellow, Sarafan ChEM-H
- Member, Stanford Cancer Institute

### ADMINISTRATIVE APPOINTMENTS

- Member, Institute for Stem Cell Biology and Regenerative Medicine, (2006- present)
- co-Director, Cancer Biology PhD program, (2016- present)

### HONORS AND AWARDS

- Scholar Award, Damon Runyon Cancer Research Foundation (2005-2008)
- Scholar Award, Leukemia and Lymphoma Society (2009-2014)
- Morgridge Faculty Scholar, Lucille Packard Foundation for Children's Health (2008-2013)
- Harriet and Mary Zelencik Scientist in Children's Cancer and Blood Diseases, Lucille Packard Foundation for Children's Health (2013-2021)

### PROFESSIONAL EDUCATION

- B.S., Ecole Normale Supérieure, France , Biology (1993)
- Ph.D., Nice University, France , Biology (1998)

### LINKS

- the Sage lab: <http://med.stanford.edu/sage>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our research program focuses on the mechanisms that control the proliferation of mammalian cells under normal and pathological conditions (regeneration, cancer), with a particular emphasis on stem cells and gene regulatory networks. We combine genetic, genomics, and proteomics approaches to identify and investigate genes and pathways involved in cancer initiation and progression. We use genome-editing strategies to develop and study genetically-engineered mouse models for human cancers, including lung cancer, pancreatic cancer, and liver cancer. Our work spans the investigation of fundamental biological processes to the implementation of clinical trials based on our findings in pre-clinical models.

### CLINICAL TRIALS

- Cancer Biology of Retinoblastoma, Not Recruiting
- Phase 2a Desipramine in Small Cell Lung Cancer and Other High-Grade Neuroendocrine Tumors, Not Recruiting

## Teaching

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### COURSES

#### 2024-25

- Cancer Biology Journal Club: CBIO 280 (Aut, Win, Spr)
- Lecture Seminar Series in Cancer Biology Program: CBIO 245 (Aut, Win, Spr)

#### 2023-24

- Cancer Biology Journal Club: CBIO 280 (Aut, Win, Spr)
- Lecture Seminar Series in Cancer Biology Program: CBIO 245 (Aut, Win, Spr)

#### 2022-23

- Cancer Biology Journal Club: CBIO 280 (Aut, Win, Spr)
- Lecture Seminar Series in Cancer Biology Program: CBIO 245 (Aut, Win, Spr)

#### 2021-22

- Cancer Biology Journal Club: CBIO 280 (Aut, Win, Spr)
- Lecture Seminar Series in Cancer Biology Program: CBIO 245 (Aut, Win, Spr)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Cecelia Brown, Sonia Bustos Barocio, Ricardo Mack, Rebecca Mancusi, Edel McCrea, Lindsey Mehl, Emily Shuldiner

#### Postdoctoral Faculty Sponsor

Debadrita Bhattacharya, Maya Gershovich, Wen Hao Hsu

#### Doctoral Dissertation Advisor (AC)

Caterina Colon, Oscar Donosa, Gina Duronio, Taylar Hammond, Griffin Hartmann, Venkat Sankar

#### Doctoral (Program)

Taylar Hammond

### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)

- Genetics (Phd Program)
- Hematology (Fellowship Program)
- Pediatric Hem/Onc (Fellowship Program)
- Stem Cell Biology and Regenerative Medicine (Phd Program)

## Publications

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### PUBLICATIONS

- **GCN2 is a determinant of the response to WEE1 kinase inhibition in small-cell lung cancer.** *Cell reports*  
Drainas, A. P., Hsu, W. H., Dallas, A. E., Poltorack, C. D., Kim, J. W., He, A., Coles, G. L., Baron, M., Bassik, M. C., Sage, J.  
2024; 43 (8): 114606
- **Small-cell lung cancer neuronal features and their implications for tumor progression, metastasis, and therapy.** *Molecular cancer research : MCR*  
Hartmann, G. G., Sage, J.  
2024
- **Genetically-engineered mouse models of small cell lung cancer: the next generation.** *Oncogene*  
Oser, M. G., MacPherson, D., Oliver, T. G., Sage, J., Park, K. S.  
2024
- **Small cell lung cancer plasticity enables NFIB-independent metastasis.** *Cancer research*  
Ko, J. H., Lambert, K. E., Bhattacharya, D., Lee, M. C., Colon, C. I., Hauser, H., Sage, J.  
2023
- **Sensitization of cancer cells to ferroptosis coincident with cell cycle arrest.** *Cell chemical biology*  
Rodencal, J., Kim, N., He, A., Li, V. L., Lange, M., He, J., Tarangelo, A., Schafer, Z. T., Olzmann, J. A., Long, J. Z., Sage, J., Dixon, S. J.  
2023
- **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
- **An engineered interleukin-1 decoy cytokine inhibits receptor signaling and proliferation in lung adenocarcinoma** *BIOENGINEERING & TRANSLATIONAL MEDICINE*  
McIntosh, B. J., Hartmann, G. G., Yamada-Hunter, S. A., Liu, P., Williams, C. F., Sage, J., Cochran, J. R.  
2023
- **Monitoring the Cell Cycle of Tumor Cells in Mouse Models of Human Cancer.** *Cold Spring Harbor perspectives in medicine*  
Hammond, T., Sage, J.  
2023
- **Lineage plasticity in SCLC generates non-neuroendocrine cells primed for vasculogenic mimicry.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*  
Pearsall, S. M., Williamson, S. C., Humphrey, S., Hughes, E., Morgan, D., García Marqués, F. J., Awanis, G., Carroll, R., Burks, L., Shue, Y. T., Bermudez, A., Frese, K. K., Galvin, et al  
2023
- **Unified tumor growth mechanisms from multimodel inference and dataset integration.** *PLoS computational biology*  
Beik, S. P., Harris, L. A., Kochen, M. A., Sage, J., Quaranta, V., Lopez, C. F.  
2023; 19 (7): e1011215
- **Taking it up a notch: a promising immunotherapy against small cell lung cancer.** *Translational lung cancer research*  
Apaydin, A. A., Sage, J.  
2023; 12 (5): 948-952
- **Integrative analysis of a large real-world cohort of small cell lung cancer identifies distinct genetic subtypes and insights into histological transformation.** *Cancer discovery*

- Sivakumar, S., Moore, J. A., Montesion, M., Sharaf, R., Lin, D. I., Colon, C. I., Fleischmann, Z., Ebot, E. M., Newberg, J. Y., Mills, J. M., Hegde, P. S., Pan, Q., Dowlati, et al  
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
  - **DLL3 regulates Notch signaling in small cell lung cancer.** *iScience*  
Kim, J. W., Ko, J. H., Sage, J.  
2022; 25 (12): 105603
  - **Radiotherapy in combination with CD47 blockade elicits a macrophage-mediated abscopal effect.** *Nature cancer*  
Nishiga, Y., Drainas, A. P., Baron, M., Bhattacharya, D., Barkal, A. A., Ahrari, Y., Mancusi, R., Ross, J. B., Takahashi, N., Thomas, A., Diehn, M., Weissman, I. L., Graves, et al  
2022
  - **Spatial epitope barcoding reveals clonal tumor patch behaviors.** *Cancer cell*  
Rovira-Clave, X., Drainas, A. P., Jiang, S., Bai, Y., Baron, M., Zhu, B., Dallas, A. E., Lee, M. C., Chu, T. P., Holzem, A., Ayyagari, R., Bhattacharya, D., McCaffrey, et al  
2022
  - **Archetype tasks link intratumoral heterogeneity to plasticity and cancer hallmarks in small cell lung cancer.** *Cell systems*  
Groves, S. M., Ildefonso, G. V., McAtee, C. O., Ozawa, P. M., Ireland, A. S., Stauffer, P. E., Wasdin, P. T., Huang, X., Qiao, Y., Lim, J. S., Bader, J., Liu, Q., Simmons, et al  
2022
  - **OCA-T1 and OCA-T2 are coactivators of POU2F3 in the tuft cell lineage.** *Nature*  
Wu, X. S., He, X. Y., Ipsaro, J. J., Huang, Y. H., Preall, J. B., Ng, D., Shue, Y. T., Sage, J., Egeblad, M., Joshua-Tor, L., Vakoc, C. R.  
2022
  - **A conserved YAP/Notch/REST network controls the neuroendocrine cell fate in the lungs.** *Nature communications*  
Shue, Y. T., Drainas, A. P., Li, N. Y., Pearsall, S. M., Morgan, D., Sinnott-Armstrong, N., Hipkins, S. Q., Coles, G. L., Lim, J. S., Oro, A. E., Simpson, K. L., Dive, C., Sage, et al  
2022; 13 (1): 2690
  - **Succinate Accumulation Is Not Sufficient for Tumorigenesis in Mouse Chromaffin Cells But Dual Loss of SDHB and NF1 Yields SDHx-Like Pheochromocytomas**  
Armstrong, N., Storey, C. M., Noll, S. E., Margulis, K., Soe, M. H., Xu, H., Yeh, B., Fishbein, L., Kebebew, E., Howitt, B. E., Zare, R. N., Sage, J., Annes, et al  
LIPPINCOTT WILLIAMS & WILKINS.2022: E32-E33
  - **Anti-GD2 synergizes with CD47 blockade to mediate tumor eradication.** *Nature medicine*  
Theruvath, J., Menard, M., Smith, B. A., Linde, M. H., Coles, G. L., Dalton, G. N., Wu, W., Kiru, L., Delaidelli, A., Sotillo, E., Silberstein, J. L., Geraghty, A. C., Banuelos, et al  
1800
  - **The cell cycle inhibitor RB is diluted in G1 and contributes to controlling cell size in the mouse liver.** *Frontiers in cell and developmental biology*  
Zhang, S., Zatulovskiy, E., Arand, J., Sage, J., Skotheim, J. M.  
2022; 10: 965595
  - **RB depletion is required for the continuous growth of tumors initiated by loss of RB.** *PLoS genetics*  
Doan, A., Arand, J., Gong, D., Drainas, A. P., Shue, Y. T., Lee, M. C., Zhang, S., Walter, D. M., Chaikovskiy, A. C., Feldser, D. M., Vogel, H., Dow, L. E., Skotheim, et al  
2021; 17 (12): e1009941
  - **Inter-cellular CRISPR screens reveal regulators of cancer cell phagocytosis.** *Nature*  
Kamber, R. A., Nishiga, Y., Morton, B., Banuelos, A. M., Barkal, A. A., Vences-Catalan, F., Gu, M., Fernandez, D., Seoane, J. A., Yao, D., Liu, K., Lin, S., Spees, et al  
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., Drainas, et al  
2021
- **Small-cell lung cancer.** *Nature reviews. Disease primers*  
Rudin, C. M., Brambilla, E. n., Faivre-Finn, C. n., Sage, J. n.  
2021; 7 (1): 3
  - **NSD2 dimethylation at H3K36 promotes lung adenocarcinoma pathogenesis.** *Molecular cell*  
Sengupta, D., Zeng, L., Li, Y., Hausmann, S., Ghosh, D., Yuan, G., Nguyen, T. N., Lyu, R., Caporicci, M., Morales Benitez, A., Coles, G. L., Kharchenko, V., Czaban, et al  
2021
  - **A Call to Action: Dismantling Racial Injustices in Preclinical Research and Clinical Care of Black Patients Living with Small Cell Lung Cancer.** *Cancer discovery*  
Thomas, P. L., Madubata, C. J., Aldrich, M. C., Lee, M. M., Owonikoko, T. K., Minna, J. D., Rudin, C. M., Sage, J., Lovly, C. M.  
2020
  - **Mechanisms of small cell lung cancer metastasis.** *EMBO molecular medicine*  
Ko, J., Winslow, M. M., Sage, J.  
2020: e13122
  - **Cells of origin of lung cancers: lessons from mouse studies.** *Genes & development*  
Ferone, G., Lee, M. C., Sage, J., Berns, A.  
2020; 34 (15-16): 1017–32
  - **Investigating Tumor Heterogeneity in Mouse Models.** *Annual review of cancer biology*  
Tammela, T., Sage, J.  
2020; 4 (1): 99-119
  - **The MEK5-ERK5 kinase axis controls lipid metabolism in small cell lung cancer.** *Cancer research*  
Cristea, S., Coles, G. L., Hornburg, D., Gershkovitz, M., Arand, J., Cao, S., Sen, T., Williamson, S. C., Kim, J. W., Drainas, A. P., He, A., Le Cam, L., Byers, et al  
2020
  - **Immune receptor inhibition through enforced phosphatase recruitment.** *Nature*  
Fernandes, R. A., Su, L. n., Nishiga, Y. n., Ren, J. n., Bhuiyan, A. M., Cheng, N. n., Kuo, C. J., Picton, L. K., Ohtsuki, S. n., Majzner, R. G., Rietberg, S. P., Mackall, C. L., Yin, et al  
2020
  - **Integrating Old and New Paradigms of G1/S Control.** *Molecular cell*  
Rubin, S. M., Sage, J. n., Skotheim, J. M.  
2020
  - **Unbiased Proteomic Profiling Uncovers a Targetable GNAS/PKA/PP2A Axis in Small Cell Lung Cancer Stem Cells.** *Cancer cell*  
Coles, G. L., Cristea, S. n., Webber, J. T., Levin, R. S., Moss, S. M., He, A. n., Sangodkar, J. n., Hwang, Y. C., Arand, J. n., Drainas, A. P., Mooney, N. A., Demeter, J. n., Spradlin, et al  
2020
  - **Investigating Tumor Heterogeneity in Mouse Models** *ANNUAL REVIEW OF CANCER BIOLOGY, VOL 4*  
Tammela, T., Sage, J., Jacks, T., Sawyers, C. L.  
2020; 4: 99–119
  - **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
  - **Manipulating a tumour suppressor** *NATURE*  
Rubin, S. M., Sage, J.  
2019; 569 (7756): 343–44

- **Targeting DNA Damage Response Promotes Antitumor Immunity through STING-Mediated T-cell Activation in Small Cell Lung Cancer** *CANCER DISCOVERY*  
Sen, T., Rodriguez, B., Chen, L., Della Corte, C. M., Morikawa, N., Fujimoto, J., Cristea, S., Thuyen Nguyen, Diao, L., Li, L., Fan, Y., Yang, Y., Wang, J., et al  
2019; 9 (5): 646–61
- **Cyclin D-Cdk4,6 Drives Cell-Cycle Progression via the Retinoblastoma Protein's C-Terminal Helix.** *Molecular cell*  
Topacio, B. R., Zatulovskiy, E., Cristea, S., Xie, S., Tambo, C. S., Rubin, S. M., Sage, J., Koivomagi, M., Skotheim, J. M.  
2019
- **Molecular subtypes of small cell lung cancer: a synthesis of human and mouse model data.** *Nature reviews. Cancer*  
Rudin, C. M., Poirier, J. T., Byers, L. A., Dive, C., Dowlati, A., George, J., Heymach, J. V., Johnson, J. E., Lehman, J. M., MacPherson, D., Massion, P. P., Minna, J. D., Oliver, et al  
2019
- **Road map for fibrolamellar carcinoma: progress and goals of a diversified approach.** *Journal of hepatocellular carcinoma*  
Kastenhuber, E. R., Craig, J., Ramsey, J., Sullivan, K. M., Sage, J., de Oliveira, S., Riehle, K. J., Scott, J. D., Gordan, J. D., Bardeesy, N., Abou-Alfa, G. K.  
2019; 6: 41-48
- **E2F4 regulates transcriptional activation in mouse embryonic stem cells independently of the RB family.** *Nature communications*  
Hsu, J. n., Arand, J. n., Chaikovskiy, A. n., Mooney, N. A., Demeter, J. n., Brison, C. M., Oliverio, R. n., Vogel, H. n., Rubin, S. M., Jackson, P. K., Sage, J. n.  
2019; 10 (1): 2939
- **Systems-level network modeling of Small Cell Lung Cancer subtypes identifies master regulators and destabilizers.** *PLoS computational biology*  
Wooten, D. J., Groves, S. M., Tyson, D. R., Liu, Q. n., Lim, J. S., Albert, R. n., Lopez, C. F., Sage, J. n., Quaranta, V. n.  
2019; 15 (10): e1007343
- **Intertumoral Heterogeneity in SCLC Is Influenced by the Cell Type of Origin.** *Cancer discovery*  
Yang, D., Denny, S. K., Greenside, P. G., Chaikovskiy, 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
- **Non-canonical functions of the RB protein in cancer** *NATURE REVIEWS CANCER*  
Dick, F. A., Goodrich, D. W., Sage, J., Dyson, N. J.  
2018; 18 (7): 442–51
- **Human hepatic organoids for the analysis of human genetic diseases.** *JCI insight*  
Guan, Y., Xu, D., Garfin, P. M., Ehmer, U., Hurwitz, M., Enns, G., Michie, S., Wu, M., Zheng, M., Nishimura, T., Sage, J., Peltz, G.  
2017; 2 (17)
- **CD47 is not Over-Expressed in Fibrolamellar Hepatocellular Carcinoma** *ANNALS OF CLINICAL AND LABORATORY SCIENCE*  
Cooney, T., Wei, M. C., Rangaswami, A., Xu, L., Sage, J., Hazard, F. K.  
2017; 47 (4): 395–402
- **Lysine methyltransferase SMYD2 promotes cyst growth in autosomal dominant polycystic kidney disease.** *The Journal of clinical investigation*  
Li, L. X., Fan, L. X., Zhou, J. X., Grantham, J. J., Calvet, J. P., Sage, J., Li, X.  
2017; 127 (7): 2751-2764
- **Intratumoural heterogeneity generated by Notch signalling promotes small-cell lung cancer** *NATURE*  
Lim, J. S., Ibaseta, A., Fischer, M. M., Cancilla, B., O'Young, G., Cristea, S., Luca, V. C., Yang, D., Jahchan, N. S., Hamard, C., Antoine, M., Wislez, M., Kong, et al  
2017; 545 (7654): 360-?
- **CHK1 inhibition in small cell lung cancer produces single-agent activity in biomarker-defined disease subsets and combination activity with cisplatin or olaparib.** *Cancer research*  
Sen, T., Tong, P., Stewart, C. A., Cristea, S., Valliani, A., Shames, D. S., Redwood, A., Fan, Y., Li, L., Glisson, B. S., Minna, J., Sage, J., Gibbons, et al  
2017
- **Combining immune checkpoint inhibition and DNA damage repair (DDR) targeted therapy in small cell lung cancer (SCLC)**  
Sen, T., Chen, L., Rodriguez, B., Yang, Y., Fan, Y., Stewart, C., Glisson, B., Pivnicka-Worms, H., Sage, J., Heymach, J. V., Gibbons, D. L., Byers, L. A.  
AMER ASSOC CANCER RESEARCH.2017

- **G1 cyclins protect pluripotency.** *Nature cell biology*  
Arand, J., Sage, J.  
2017; 19 (3): 149-150
- **Chemosensitive Relapse in Small Cell Lung Cancer Proceeds through an EZH2-SLFN11 Axis.** *Cancer cell*  
Gardner, E. E., Lok, B. H., Schneeberger, V. E., Desmeules, P., Miles, L. A., Arnold, P. K., Ni, A., Khodos, I., de Stanchina, E., Nguyen, T., Sage, J., Campbell, J. E., Ribich, et al  
2017; 31 (2): 286-299
- **Relationship between anti-depressant use and lung cancer survival.** *Cancer treatment and research communications*  
Zingone, A., Brown, D., Bowman, E. D., Vidal, O., Sage, J., Neal, J., Ryan, B. M.  
2017; 10: 33–39
- **Novel functions for the transcription factor E2F4 in development and disease.** *Cell cycle*  
Hsu, J., Sage, J.  
2016: 1-8
- **Essential role for the planarian intestinal GATA transcription factor in stem cells and regeneration.** *Developmental biology*  
Flores, N. M., Oviedo, N. J., Sage, J.  
2016; 418 (1): 179-188
- **Is the Canonical RAF/MEK/ERK Signaling Pathway a Therapeutic Target in SCLC?** *Journal of thoracic oncology*  
Cristea, S., Sage, J.  
2016; 11 (8): 1233-1241
- **Identification and Targeting of Long-Term Tumor-Propagating Cells in Small Cell Lung Cancer.** *Cell reports*  
Jahchan, N. S., Lim, J. S., Bola, B., Morris, K., Seitz, G., Tran, K. Q., Xu, L., Trapani, F., Morrow, C. J., Cristea, S., Coles, G. L., Yang, D., Vaka, et al  
2016; 16 (3): 644-656
- **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
- **Identification of tumorigenic cells and therapeutic targets in pancreatic neuroendocrine tumors** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Krampitz, G. W., George, B. M., Willingham, S. B., Volkmer, J., Weiskopf, K., Jahchan, N., Newman, A. M., Sahoo, D., Zemek, A. J., Yanovsky, R. L., Nguyen, J. K., Schnorr, P. J., Mazur, et al  
2016; 113 (16): 4464-4469
- **Coordination of stress signals by the lysine methyltransferase SMYD2 promotes pancreatic cancer** *GENES & DEVELOPMENT*  
Reynoird, N., Mazur, P. K., Stellfeld, T., Flores, N. M., Lofgren, S. M., Carlson, S. M., Brambilla, E., Hainaut, P., Kaznowska, E. B., Arrowsmith, C. H., Khatri, P., Stresemann, C., Gozani, et al  
2016; 30 (7): 772-785
- **Coordination of stress signals by the lysine methyltransferase SMYD2 promotes pancreatic cancer.** *Genes & development*  
Reynoird, N., Mazur, P. K., Stellfeld, T., Flores, N. M., Lofgren, S. M., Carlson, S. M., Brambilla, E., Hainaut, P., Kaznowska, E. B., Arrowsmith, C. H., Khatri, P., Stresemann, C., Gozani, et al  
2016; 30 (7): 772-785
- **Control of Proliferation and Cancer Growth by the Hippo Signaling Pathway.** *Molecular cancer research*  
Ehmer, U., Sage, J.  
2016; 14 (2): 127-140
- **Loss of Pten Disrupts the Thymic Epithelium and Alters Thymic Function.** *PloS one*  
Garfin, P. M., Nguyen, T., Sage, J.

2016; 11 (2)

- **Novel insights into the oncogenic function of the SMYD3 lysine methyltransferase.** *Translational cancer research*  
Mazur, P. K., Gozani, O. n., Sage, J. n., Reynoird, N. n.  
2016; 5 (3): 330–33
- **Crosstalk between stem cell and cell cycle machineries** *CURRENT OPINION IN CELL BIOLOGY*  
Kareta, M. S., Sage, J., Wernig, M.  
2015; 37: 68-74
- **Pancreatic cancer takes its Toll.** *The Journal of experimental medicine*  
Mazur, P. K., Sage, J.  
2015; 212 (12): 1988
- **Combined inhibition of BET family proteins and histone deacetylases as a potential epigenetics-based therapy for pancreatic ductal adenocarcinoma.** *Nature medicine*  
Mazur, P. K., Herner, A., Mello, S. S., Wirth, M., Hausmann, S., Sánchez-Rivera, F. J., Lofgren, S. M., Kuschma, T., Hahn, S. A., Vangala, D., Trajkovic-Arsic, M., Gupta, A., Heid, et al  
2015; 21 (10): 1163-1171
- **Comprehensive genomic profiles of small cell lung cancer** *NATURE*  
George, J., Lim, J. S., Jang, S. J., Cun, Y., Ozretic, L., Kong, G., Leenders, F., Lu, X., Fernandez-Cuesta, L., Bosco, G., Mueller, C., Dahmen, I., Jahchan, et al  
2015; 524 (7563): 47-U73
- **Comprehensive genomic profiles of small cell lung cancer.** *Nature*  
George, J., Lim, J. S., Jang, S. J., Cun, Y., Ozretic, L., Kong, G., Leenders, F., Lu, X., Fernández-Cuesta, L., Bosco, G., Müller, C., Dahmen, I., Jahchan, et al  
2015; 524 (7563): 47-53
- **Inhibition of pluripotency networks by the rb tumor suppressor restricts reprogramming and tumorigenesis.** *Cell stem cell*  
Kareta, M. S., Gorges, L. L., Hafeez, S., Benayoun, B. A., Marro, S., Zmoos, A., Cecchini, M. J., Spacek, D., Batista, L. F., O'Brien, M., Ng, Y., Ang, C. E., Vaka, et al  
2015; 16 (1): 39-50
- **Genomic analysis of fibrolamellar hepatocellular carcinoma.** *Human molecular genetics*  
Xu, L., Hazard, F. K., Zmoos, A., Jahchan, N., Chaib, H., Garfin, P. M., Rangaswami, A., Snyder, M. P., Sage, J.  
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