Stanford



Erinn Rankin

Associate Professor of Radiation Oncology (Radiation Biology) and of Obstetrics and Gynecology (Oncology)

Radiation Oncology - Radiation and Cancer Biology

Curriculum Vitae available Online

CONTACT INFORMATION

- **Administrative Contact**

  Micah Kelly - Administrative Associate

  Email mkelly3@stanford.edu

  Tel 650-736-4757

Bio

ACADEMIC APPOINTMENTS

- Associate Professor, Radiation Oncology - Radiation and Cancer Biology
- Associate Professor, Obstetrics & Gynecology - Gynecologic Oncology
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Co-Director Cancer Biology PhD Program, Stanford School of Medicine, (2026- present)

HONORS AND AWARDS

- Carol and Doug Kimmelman Scholar, Stanford University (2021)
- Pape Family Pilot Award, Rivkin Center for Ovarian Cancer Research (2016)
- Research Award, Mary Kay Foundation (2016)
- Ovarian Cancer Academy Award, Department of Defense (2015)
- Gabilan Faculty Award, Stanford University (2014-2016)
- J. Martin Brown Award for Outstanding Achievements in the Radiation Sciences, Stanford University (2012)
- Postdoctoral Trainee Award, NCI (2007-2012)
- Saul Winegrad Award for Outstanding Dissertation, University of Pennsylvania (2007)

PROFESSIONAL EDUCATION

- BS, University of Illinois Urbana-Champaign , Microbiology (2000)
- PhD, University of Pennsylvania , Cellular and Molecular Biology (2007)

LINKS

- Rankin Lab Website: http://med.stanford.edu/rankinlab

Teaching

COURSES

2026-27

- Cancer Biology Journal Club: CBIO 280 (Aut)
- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)
- Lecture Seminar Series in Cancer Biology Program: CBIO 245 (Aut, Win, Spr)

2025-26

- Cancer Biology Journal Club: CBIO 280 (Win, Spr)
- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)
- Lecture Seminar Series in Cancer Biology Program: CBIO 245 (Win, Spr)
- Molecular and Genetic Basis of Cancer: CBIO 240 (Aut)

2024-25

- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)
- Molecular and Genetic Basis of Cancer: CBIO 240 (Aut)

2023-24

- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)
- Molecular and Genetic Basis of Cancer: CBIO 240 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Celeste Diaz, Kristen Frombach, Claudia Leonard, Phillip Liu, Esther Mozipo, Abena Peasah, Mike Tsai

Orals Chair

Lehi Acosta-Alvarez

Postdoctoral Faculty Sponsor

Lu Ji, Man Zhao

Doctoral Dissertation Advisor (AC)

Natalie Pilla

Publications

PUBLICATIONS

- **FLASH reduces radiation-induced oral mucositis in a mouse model of Fanconi anemia.** *Clinical and translational radiation oncology*
  Loo, P., Pan, M., Zhao, M., Melemenidis, S., Schulz, J. B., Chen, D., Whitmore, L., Richter, S., Dirbas, F. M., Casey, K. M., Graves, E. E., Epperly, M. W., Greenberger, et al
  2027; 62: 101334

- **A targetable FTO/SLC7A11/CBS/CTH axis controls cysteine metabolism, growth and survival in NSCLC.** *Science advances*
  Kuganesan, N., Pan, M., Jiang, H., Melemenidis, S., Ye, J., Richter, S., Diehn, M., Casey, K. M., Graves, E. E., Le, Q. T., Rankin, E. B.
  2026; 12 (27): eaed6463

- **FLASH reduces radiation-induced oral mucositis in a mouse model of Fanconi anemia.** *bioRxiv : the preprint server for biology*
  Loo, P., Pan, M., Zhao, M., Melemenidis, S., Chen, D., Whitmore, L., Richter, S., Dirbas, F. M., Casey, K. M., Graves, E. E., Epperly, M. W., Greenberger, J., Loo, et al

2026

- **Inhibition of the m6A RNA demethylase FTO radiosensitizes cervical cancer by enhancing DNA damage: Preclinical data on an emerging novel cancer therapeutic target**
  Adams, E., Kuganesan, N., Pu, L., Liang, B., Melemenidis, S., Richter, S., Jackson, S., Ghezelayagh, T., Kidd, E., Howitt, B., Graves, E., Rankin, E.
  ACADEMIC PRESS INC ELSEVIER SCIENCE.2026: S370-S371

- **Addressing respiratory gating latency for accurate pulse delivery in preclinical electron FLASH irradiation on a clinical linear accelerator.** *ArXiv*
  Manjappa, R., Wang, J., Melemenidis, S., Viswanathan, V., Ashraf, R., Skinner, L., Soto, L. A., Lau, B., Ko, R. B., von Eyben, R., Graves, E., Yu, S., Bush, et al
  2026

- **Addressing respiratory gating latency for accurate pulse delivery in preclinical electron FLASH irradiation on a clinical linear accelerator.** *ArXiv*
  Manjappa, R., Wang, J., Melemenidis, S., Viswanathan, V., Ashraf, R., Skinner, L., Soto, L. A., Lau, B., Ko, R. B., von Eyben, R., Graves, E., Yu, S. J., Bush, et al
  2026

- **FLASH reduces radiation-induced oral mucositis in a mouse model of Fanconi anemia**
  Loo, P., Pan, M., Zhao, M., Melemenidis, S., Chen, D., Casey, K. M., Epperly, M., Greenberger, J. S., Loo, B. W., Rankin, E.
  AMER ASSOC CANCER RESEARCH.2026

- **Genetic inhibition of FTO does not exacerbate the severity of radiation-induced oral mucositis in C57BL/6 mice**
  Pan, M., Pu, L., Melemenidis, S., Graves, E., Casey, K. M., Rankin, E.
  AMER ASSOC CANCER RESEARCH.2026

- **Mitochondrial uncoupling inhibits serine catabolism via FTO activation in metastatic breast cancer.** *Cancer biology & medicine*
  Jin, X., Li, A. M., Zhao, M., Jiang, H., Xiao, Y., Yip, M., Melemenidis, S., Jackson, S., Yang, Y., Simmermaker, C., Zhou, M. N., Sinha, S., Cuthbertson, et al
  2026

- **High throughput mutational characterization of the GPCR ligand C5a using yeast display and deep sequencing.** *Structure (London, England : 1993)*
  Xu, Y., Thakkar, K., Guan, L., Miao, Y., Mehibel, M., Lee, R. B., Marciano, D., Viswanathan, V., Wang, Z., Wang, J., Ji, L., Cao, H., Petrakian, et al
  2025

- **FTO inhibition attenuates renal fibrosis by downregulating ferroptosis activator ACSL4 and profibrotic factor TGFBI.** *iScience*
  Zhang, D., Chiu, C. L., Wen, R., Qiu, Z., Garcia-Marques, F., Bermudez, A., Zhao, M., Zhao, H., Dixon, S. J., Peehl, D. M., Rankin, E. B., Pitteri, S., Brooks, et al
  2025; 28 (10): 113515

- **FTO inhibition attenuates renal fibrosis by downregulating ferroptosis activator ACSL4 and profibrotic factor TGFBI** *ISCIENCE*
  Zhang, D., Chiu, C., Wen, R., Qiu, Z., Garcia-Marques, F., Bermudez, A., Zhao, M., Zhao, H., Dixon, S. J., Peehl, D. M., Rankin, E. B., Pitteri, S., Brooks, et al
  2025; 28 (10)

- **The RNA demethylase FTO promotes glutamine metabolism in clear cell renal cell carcinoma through the regulation of SLC1A5.** *Science advances*
  Zhao, M., Zhang, D., Jiang, H., Kuganesan, N., Natarajan, S., Pu, L., Thakkar, K. N., Zhao, H., Le, Q. T., Giaccia, A. J., Brooks, J. D., Peehl, D. M., Ye, et al
  2025; 11 (25): eadv2417

- **FTO inhibition enhances the therapeutic index of radiation therapy in head and neck cancer.** *JCI insight*
  Ji, L., Pu, L., Wang, J., Cao, H., Melemenidis, S., Sinha, S., Guan, L., Laseinde, E. E., von Eyben, R., Richter, S. A., Nam, J. M., Kong, C., Casey, et al
  2025; 10 (11)

- **Tumor-derived erythropoietin acts as an immunosuppressive switch in cancer immunity.** *Science (New York, N.Y.)*
  Chiu, D. K., Zhang, X., Cheng, B. Y., Liu, Q., Hayashi, K., Yu, B., Lee, R., Zhang, C., An, X., Rajadas, J., Reticker-Flynn, N. E., Rankin, E. B., Engleman, et al
  2025; 388 (6745): eadr3026

- **Effectiveness of FLASH vs. Conventional Dose Rate Radiotherapy in a Model of Orthotopic, Murine Breast Cancer.** *Cancers*
  Melemenidis, S., Viswanathan, V., Dutt, S., Kapadia, N., Lau, B., Soto, L. A., Ashraf, M. R., Thakur, B., Mutahar, A. Z., Skinner, L. B., Yu, A. S., Surucu, M., Casey, et al
  2025; 17 (7)

- **Targeting AXL inhibits the growth and metastasis of prostate cancer in bone.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
  Chiu, C. L., Zhang, D., Zhao, H., Wei, Y., Polasko, A. L., Thomsen, M. T., Yang, V., Yang, K. K., Hauck, S., Peterson, E. E., Wen, R. M., Qiu, Z., Corey, et al
  2025

- **Dosimetric calibration of anatomy-specific ultra-high dose rate electron irradiation platform for preclinical FLASH radiobiology experiments.** *Medical physics*
  Wang, J., Melemenidis, S., Manjappa, R., Viswanathan, V., Ashraf, R. M., Levy, K., Skinner, L. B., Soto, L. A., Chow, S., Lau, B., Ko, R. B., Graves, E. E., Yu, et al
  2024

- **Navigating the Critical Translational Questions for Implementing FLASH in the Clinic.** *Seminars in radiation oncology*
  Loo, B. W., Verginadis, I. I., Sørensen, B. S., Mascia, A. E., Perentesis, J. P., Koong, A. C., Schüler, E., Rankin, E. B., Maxim, P. G., Limoli, C. L., Vozenin, M. C.
  2024; 34 (3): 351-364

- **Exploring deep learning for estimating the isoeffective dose of FLASH irradiation from mouse intestinal histology images.** *International journal of radiation oncology, biology, physics*
  Fu, J., Yang, Z., Melemenidis, S., Viswanathan, V., Dutt, S., Manjappa, R., Lau, B., Soto, L. A., Ashraf, R., Skinner, L., Yu, S. J., Surucu, M., Casey, et al
  2024

- **Therapeutic targeting of the functionally elusive TAM receptor family.** *Nature reviews. Drug discovery*
  Miao, Y. R., Rankin, E. B., Giaccia, A. J.
  2023

- **Serine starvation silences estrogen receptor signaling through histone hypoacetylation.** *Proceedings of the National Academy of Sciences of the United States of America*
  Li, A. M., He, B., Karagiannis, D., Li, Y., Jiang, H., Srinivasan, P., Ramirez, Y., Zhou, M. N., Curtis, C., Gruber, J. J., Lu, C., Rankin, E. B., Ye, et al
  2023; 120 (38): e2302489120

- **Human enteroids as a tool to study conventional and ultra-high dose rate radiation.** *Integrative biology : quantitative biosciences from nano to macro*
  Klett, K. C., Martin-Villa, B. C., Villarreal, V. S., Melemenidis, S., Viswanathan, V., Manjappa, R., Ashraf, M. R., Soto, L., Lau, B., Dutt, S., Rankin, E. B., Loo, B. W., Heilshorn, et al
  2023; 15

- **Mitochondrial uncoupling induces epigenome remodeling and promotes differentiation in neuroblastoma.** *Cancer research*
  Jiang, H., Greathouse, R. L., Tiche, S. J., Zhao, M., He, B., Li, Y., Li, A. M., Forgo, B., Yip, M., Li, A., Shih, M., Banuelos, S., Zhou, et al
  2022

- **The controversial role and therapeutic development of the m6A demethylase FTO in renal cell carcinoma.** *Translational oncology*
  Zhang, D., Wornow, S., Peehl, D. M., Rankin, E. B., Brooks, J. D.
  2022; 25: 101518

- **Serine starvation silences estrogen receptor signaling through histone hypoacetylation**
  Li, A. M., Li, Y., He, B., Jiang, H., Lu, C., Gruber, J. J., Rankin, E. B., Ye, J.
  AMER ASSOC CANCER RESEARCH.2022

- **Loss of parathyroid hormone receptor signaling in osteoprogenitors is associated with accumulation of multiple hematopoietic lineages in the bone marrow.** *Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research*
  Kimura, T., Panaroni, C., Rankin, E. B., Purton, L. E., Wu, J. Y.
  2022

- **Abdominopelvic FLASH Irradiation Improves PD-1 Immune Checkpoint Inhibition in Preclinical Models of Ovarian Cancer.** *Molecular cancer therapeutics*

Eggold, J. T., Chow, S., Melemenidis, S., Wang, J., Natarajan, S., Loo, P. E., Manjappa, R., Viswanathan, V., Kidd, E. A., Engleman, E., Dorigo, O., Loo, B. W., Rankin, et al

2021

- **GAS6/AXL inhibition enhances ovarian cancer sensitivity to chemotherapy and PARP inhibition through increased DNA damage and enhanced replication stress.** *Molecular cancer research : MCR*

  Mullen, M. M., Lomonosova, E., Toboni, M. D., Oplt, A., Cybulla, E., Blachut, B., Zhao, P., Noia, H., Wilke, D., Rankin, E. B., Kuroki, L. M., Hagemann, A. R., Hagemann, et al

  2021

- **Cancer-associated mesothelial cells promote ovarian cancer chemoresistance through paracrine osteopontin signaling.** *The Journal of clinical investigation*

  Qian, J., LeSavage, B. L., Hubka, K. M., Ma, C., Natarajan, S., Eggold, J. T., Xiao, Y., Fuh, K. C., Krishnan, V., Enejder, A., Heilshorn, S. C., Dorigo, O., Rankin, et al

  2021; 131 (16)

- **GAS6 inhibition induces platinum sensitivity through increased replication stress in ovarian cancer**

  Mullen, M., Lomonosova, E., Toboni, M., Oplt, A., Cybulla, E., Blachut, B., Noia, H., Wilke, D., Rankin, E., Kuroki, L., Hagemann, A., Hagemann, I., McCourt, et al

  ACADEMIC PRESS INC ELSEVIER SCIENCE.2021: S40

- **Eliminating hypoxic tumor cells improves response to PARP inhibitors in homologous recombination-deficient cancer models.** *The Journal of clinical investigation*

  Mehibel, M., Xu, Y., Li, C. G., Moon, E. J., Thakkar, K. N., Diep, A. N., Kim, R. K., Bloomstein, J. D., Xiao, Y., Bacal, J., Saldivar, J. C., Le, Q., Cimprich, et al

  2021; 131 (11)

- **Eliminating hypoxic tumor cells improves response to PARP inhibitors in homologous recombination & ndash;deficient cancer models** *JOURNAL OF CLINICAL INVESTIGATION*

  Mehibel, M., Xu, Y., Li, C. G., Moon, E., Thakkar, K. N., Diep, A. N., Kim, R. K., Bloomstein, J. D., Xiao, Y., Bacal, J., Saldivar, J. C., Le, Q., Cimprich, et al

  2021; 131 (11)

- **Neutralization of PD-L2 is Essential for Overcoming Immune Checkpoint Blockade Resistance in Ovarian Cancer.** *Clinical cancer research : an official journal of the American Association for Cancer Research*

  Miao, Y. R., Thakkar, K. N., Qian, J., Kariolis, M. S., Huang, W., Nandagopal, S., Yang, T. T., Diep, A. N., Cherf, G. M., Xu, Y., Moon, E. J., Xiao, Y., Alemany, et al

  2021

- **-003 Oxygen dependent resistance to PARP inhibitors**

  Mehibel, M., Xu, J., Li, G., Moon, J., Thakkar, K., Diep, A., Kim, R., Blomstein, J., Xiao, S., Bacal, J., Saldivar, J., Le, Q., Cimprich, et al

  AMER ASSOC CANCER RESEARCH.2021

- **Omental macrophages secrete chemokine ligands that promote ovarian cancer colonization of the omentum via CCR1.** *Communications biology*

  Krishnan, V., Tallapragada, S., Schaar, B., Kamat, K., Chanana, A. M., Zhang, Y., Patel, S., Parkash, V., Rinker-Schaeffer, C., Folkins, A. K., Rankin, E. B., Dorigo, O.

  2020; 3 (1): 524

- **FLASH irradiation enhances the therapeutic index of abdominal radiotherapy in mice**

  Natarajan, S., Levy, K., Wang, J., Chow, S., Eggold, J., Loo, P., Manjappa, R., Lartey, F. M., Schuler, E., Skinner, L., Rafat, M., Ko, R., Kim, et al

  AMER ASSOC CANCER RESEARCH.2020

- **Reprogramming of serine metabolism during breast cancer progression**

  Li, A., Ducker, G. S., Li, Y., Seoane, J. A., Xiao, Y., Melemenidis, S., Zhou, Y., Liu, L., Vanharanta, S., Graves, E. E., Rankin, E. B., Curtis, C., Massague, et al

  AMER ASSOC CANCER RESEARCH.2020

- **Total abdominal ultra-rapid FLASH irradiation enhances the efficacy of PD-1 inhibition in preclinical models of ovarian cancer**

  Chow, S., Eggold, J. T., Levy, K., Wang, J., Manjappa, R., Breitkreutz, D. Y., Yu, A. S., Bush, K., Dorigo, O., Loo, B. W., Rankin, E. B.

  AMER ASSOC CANCER RESEARCH.2020

- **Ultrarapid total abdominal FLASH irradiation in a preclinical model of ovarian cancer.**
  Levy, K., Wang, J., Eggold, J., Natarajan, S., Maxim, P., Loo, B., Rankin, E.
  AMER ASSOC CANCER RESEARCH.2020: 49

- **Validated limited gene predictor for cervical cancer lymph node metastases.** *Oncotarget*
  Bloomstein, J. D., von Eyben, R., Chan, A., Rankin, E. B., Fregoso, D. R., Wang-Chiang, J., Lee, L., Xie, L., David, S. M., Stehr, H., Esfahani, M. S., Giaccia, A. J., Kidd, et al
  2020; 11 (24): 2302–9

- **Induced tumor heterogeneity reveals factors informing radiation and immunotherapy combinations.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
  Aguilera, T. A., Elghonaimy, E., Shehade, H., Rafat, M., Castellini, L., Jiang, D., Kariolis, M., Koong, A., Le, Q., Ellies, L. G., Rankin, E. B., Graves, E. E., Giaccia, et al
  2020

- **Abdominal FLASH irradiation reduces radiation-induced gastrointestinal toxicity for the treatment of ovarian cancer in mice.** *Scientific reports*
  Levy, K. n., Natarajan, S. n., Wang, J. n., Chow, S. n., Eggold, J. T., Loo, P. E., Manjappa, R. n., Melemenidis, S. n., Lartey, F. M., Schüler, E. n., Skinner, L. n., Rafat, M. n., Ko, et al
  2020; 10 (1): 21600

- **Evaluating the Reproducibility of Mouse Anatomy under Rotation in a Custom Immobilization Device for Conformal FLASH Radiotherapy.** *Radiation research*
  Ko, R. B., Soto, L. A., von Eyben, R. n., Melemenidis, S. n., Rankin, E. B., Maxim, P. G., Graves, E. E., Loo, B. W.
  2020

- **The m6A RNA demethylase FTO is a HIF-independent synthetic lethal partner with the VHL tumor suppressor.** *Proceedings of the National Academy of Sciences of the United States of America*
  Xiao, Y. n., Thakkar, K. N., Zhao, H. n., Broughton, J. n., Li, Y. n., Seoane, J. A., Diep, A. N., Metzner, T. J., von Eyben, R. n., Dill, D. L., Brooks, J. D., Curtis, C. n., Leppert, et al
  2020

- **Metabolic Profiling Reveals a Dependency of Human Metastatic Breast Cancer on Mitochondrial Serine and One-Carbon Unit Metabolism.** *Molecular cancer research : MCR*
  Li, A. M., Ducker, G. S., Li, Y. n., Seoane, J. A., Xiao, Y. n., Melemenidis, S. n., Zhou, Y. n., Liu, L. n., Vanharanta, S. n., Graves, E. E., Rankin, E. B., Curtis, C. n., Massague, et al
  2020

- **TOTAL ABDOMINAL ULTRA-RAPID FLASH IRRADIATION DEMONSTRATES DECREASED GASTROINTESTINAL TOXICITY COMPARED TO CONVENTIONAL TOTAL ABDOMINAL IRRADIATION IN MICE**
  Levy, K., Eggold, J., Rafat, M., Schuler, E., Shehade, H., Fregoso, D., Vilches-Moure, J., Koong, A., Maxim, P., Loo, B. W., Rankin, E.
  AMER ASSOC CANCER RESEARCH.2019: 182

- **THE HYPOXIC TUMOR-MESOTHELIAL NICHE PROMOTES OVARIAN CANCER METASTASIS THROUGH COLLAGEN REMODELING**
  Natarajan, S., Foreman, K., Soriano, M., Shehade, H., Fregoso, D., Eggold, J., Rosen, N. S., Heilshorn, S., Krieg, A. J., Krishnan, V., Dorigo, O., Sinha, S., Fuh, et al
  AMER ASSOC CANCER RESEARCH.2019: 168

- **S100A10 is a critical mediator of GAS6/AXL-induced angiogenesis in renal cell carcinoma.** *Cancer research*
  Xiao, Y., Zhao, H., Tian, L., Nolley, R., Diep, A. N., Ernst, A., Fuh, K. C., Miao, Y. R., von Eyben, R., Leppert, J. T., Brooks, J. D., Peehl, D. M., Giaccia, et al
  2019

- **Genomics and molecular mechanisms of high grade serous ovarian cancer: the 12th Biennial Rivkin Center Ovarian Cancer Research Symposium.** *International journal of gynecological cancer : official journal of the International Gynecological Cancer Society*
  Rankin, E. B.
  2019; 29 (Suppl 2): s7–s11

- **Modulating the tumor microenvironment to enhance efficacy of PARP inhibitors**
  Mehibel, M., Xu, J., Diep, A., Thakkar, K., Li, C. G., Xiao, Y., Rankin, E., Giaccia, A.
  AMER SOC CLINICAL ONCOLOGY.2019

- **Preclinical testing of ultra-rapid FLASH total abdominal irradiation demonstrates survival benefit and decreased gastrointestinal toxicity compared to conventional external beam radiation.**
  Levy, K., Rafat, M., Schueler, E., Eggold, J., Wang, J., Casey, K., Koong, A., Maxim, P., Loo, B. W., Rankin, E.
  AMER SOC CLINICAL ONCOLOGY.2019

- **Collagen Remodeling in the Hypoxic Tumor-Mesothelial Niche Promotes Ovarian Cancer Metastasis** *CANCER RESEARCH*
  Natarajan, S., Foreman, K. M., Soriano, M., Rossen, N. S., Shehade, H., Fregoso, D. R., Eggold, J. T., Krishnan, V., Dorigo, O., Krieg, A. J., Heilshorn, S. C., Sinha, S., Fuh, et al
  2019; 79 (9): 2271–84

- **Collagen remodeling in the hypoxic tumor-mesothelial niche promotes ovarian cancer metastasis.** *Cancer research*
  Natarajan, S., Foreman, K. M., Soriano, M. I., Rossen, N. S., Shehade, H., Fregoso, D. R., Eggold, J. T., Krishnan, V., Dorigo, O., Krieg, A. J., Heilshorn, S. C., Sinha, S., Fuh, et al
  2019

- **Hypoxia-Induced Phenotypes that Mediate Tumor Heterogeneity.** *Advances in experimental medicine and biology*
  Qian, J. n., Rankin, E. B.
  2019; 1136: 43–55

- **Hypoxic signaling in the tumor-mesothelial niche promotes collagen remodeling and ovarian cancer metastasis.**
  Foreman, K., Fuh, K., SorianoJAL, M., Dorigo, O., Krishnan, V., Shehade, H., Natarajan, S., Sinha, S., Krieg, A., Rankin, E.
  AMER ASSOC CANCER RESEARCH.2018: 57

- **Erythropoiesis, EPO, macrophages, and bone.** *Bone*
  Eggold, J. T., Rankin, E. B.
  2018

- **Systematic discovery of mutation-specific synthetic lethals by mining pan-cancer human primary tumor data.** *Nature communications*
  Sinha, S., Thomas, D., Chan, S., Gao, Y., Brunen, D., Torabi, D., Reinisch, A., Hernandez, D., Chan, A., Rankin, E. B., Bernards, R., Majeti, R., Dill, et al
  2017; 8: 15580-?

- **Systematic discovery of mutation-specific synthetic lethals by mining pan-cancer human primary tumor data.** *Nature communications*
  Sinha, S., Thomas, D., Chan, S., Gao, Y., Brunen, D., Torabi, D., Reinisch, A., Hernandez, D., Chan, A., Rankin, E. B., Bernards, R., Majeti, R., Dill, et al
  2017; 8: 15580-?

- **Inhibition of the GAS6/AXL pathway augments the efficacy of chemotherapies** *JOURNAL OF CLINICAL INVESTIGATION*
  Kariolis, M. S., Miao, Y. R., Diep, A., Nash, S. E., Olcina, M. M., Jiang, D., Jones, D. S., Kapur, S., Mathews, I. I., Koong, A. C., Rankin, E. B., Cochran, J. R., Giaccia, et al
  2017; 127 (1): 183-198

- **Targeting integrins with RGD-conjugated gold nanoparticles in radiotherapy decreases the invasive activity of breast cancer cells.** *International journal of nanomedicine*
  Wu, P. H., Onodera, Y. n., Ichikawa, Y. n., Rankin, E. B., Giaccia, A. J., Watanabe, Y. n., Qian, W. n., Hashimoto, T. n., Shirato, H. n., Nam, J. M.
  2017; 12: 5069–85

- **Cabozantinib inhibits tumor growth and metastasis of a patient-derived xenograft model of papillary renal cell carcinoma with MET mutation** *CANCER BIOLOGY & THERAPY*
  Zhao, H., Nolley, R., Chan, A. M. W., Rankin, E. B., Peehl, D. M.
  2017; 18 (11): 863–71

- **Reprogramming the immunological microenvironment through radiation and targeting Axl** *NATURE COMMUNICATIONS*
  Aguilera, T. A., Rafat, M., Castellini, L., Shehade, H., Kariolis, M. S., Hui, A. B., Stehr, H., von Eyben, R., Jiang, D., Ellies, L. G., Koong, A. C., Diehn, M., Rankin, et al
  2016; 7

- **The Receptor Tyrosine Kinase AXL in Cancer Progression.** *Cancers*
  Rankin, E. B., Giaccia, A. J.
  2016; 8 (11)

- **AXL modulates extracellular matrix protein expression and is essential for invasion and metastasis in endometrial cancer.** *Oncotarget*
  Divine, L. M., Nguyen, M. R., Meller, E., Desai, R. A., Arif, B., Rankin, E. B., Bligard, K. H., Meyerson, C., Hagemann, I. S., Massad, M., Thaker, P. H., Hagemann, A. R., McCourt, et al
  2016

- **Cabozantinib inhibits tumor growth and metastasis of a patient-derived xenograft model of papillary renal cell carcinoma with MET mutation.** *Cancer biology & therapy*
  Zhao, H., Nolley, R., Chan, A. M., Rankin, E. B., Peehl, D. M.
  2016: 0-?

- **Polycomb repressive complex 2 regulates skeletal growth by suppressing Wnt and TGF-beta signalling** *NATURE COMMUNICATIONS*
  Mirzamohammadi, F., Papaioannou, G., Inloes, J. B., Rankin, E. B., Xie, H., Schipani, E., Orkin, S. H., Kobayashi, T.
  2016; 7

- **Hypoxia: Signaling the Metastatic Cascade.** *Trends in cancer*
  Rankin, E. B., Nam, J. M., Giaccia, A. J.
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