



Sylvia K. Plevritis, PhD

William M. Hume Professor in the School of Medicine and Professor of Radiology
(Integrative Biomedical Imaging Informatics at Stanford)

Biomedical Data Science

CONTACT INFORMATION

- **Administrative Contact**

Jessica Ly - Program Coordinator & Executive Associate

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Bio

BIO

Dr. Sylvia K. Plevritis is Professor of Biomedical Data Science, and of Radiology at Stanford University, and Chair of Biomedical Data Science. She leads a systems biology cancer research program that bridges genomics, biocomputation, imaging and population sciences to decipher properties of cancer progression to guide advances in early detection and treatment response. Dr. Plevritis received her Ph.D. in Electrical Engineering and M.S. in Health Services Research, both from Stanford University, with a focus on cancer imaging physics and modeling cancer outcomes, respectively. She has had a primary authorship role on over 100 scientific cancer-related articles. She is a fellow of the American Institute for Medical and Biological Engineering (AIMBE) and Distinguished Investigator in the Academy of Radiology Research. She received the 2016 Inaugural Award for Basic Scientist of the Year in Stanford Radiology. Dr. Plevritis has served on numerous NIH study sections, chaired scientific programs for the several professional societies including the American Association for Cancer Research (AACR) and presented keynote lectures across multiple scales of computational cancer biology. Sylvia Plevritis is the Program Director of the Stanford Center in Cancer Systems Biology (CCSB), Program Director of the Stanford Cancer Systems Biology Scholars Program (CSBS), and co-Division Chief of Integrative Biomedical Imaging Informatics at Stanford (IBIIS). In addition, she has been a Principal Investigator with the NCI Cancer Intervention Surveillance Network (CISNET) for over fifteen years. She serves on NCI Board of Scientific Advisors, Leadership Council of the Stanford Cancer Institute and the Leadership Council of the Stanford Bio-X Program.

ACADEMIC APPOINTMENTS

- Professor, Biomedical Data Science
- Professor, Radiology
- Member, Bio-X
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Chair, Department of Biomedical Data Science, (2019- present)
- Director, Biomedical Informatics Training Program, (2019- present)
- co-Lead, Stanford Cancer Institute: Cancer Biology Program, (2018- present)

PROFESSIONAL EDUCATION

- M.S., Stanford University , Health Services Research (1996)
- PhD, Stanford University , Electrical Engineering (1992)
- B.E., The Cooper Union , Electrical Engineering (1985)

LINKS

- Stanford Center for Cancer Systems Biology: <https://ccsb.stanford.edu/about.html>
- Plevritis Lab: <http://plevritis.stanford.edu>
- Department of Biomedical Data Science: <http://dbds.stanford.edu>
- Biomedical Informatics Graduate Program: <https://med.stanford.edu/bmi.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research program focuses on computational modeling of cancer biology and cancer outcomes. My laboratory develops stochastic models of the natural history of cancer based on clinical research data. We estimate population-level outcomes under differing screening and treatment interventions. We also analyze genomic and proteomic cancer data in order to identify molecular networks that are perturbed in cancer initiation and progression and relate these perturbations to patient outcomes.

Teaching

COURSES

2023-24

- Translational Bioinformatics: BIOE 217, BIOMEDIN 217, CS 275 (Spr)

2021-22

- Biomedical Informatics Student Seminar: BIOMEDIN 201 (Aut, Win, Spr)
- Introduction to Biomedical Data Science Research Methodology: BIOE 212, BIOMEDIN 212, CS 272, GENE 212 (Spr)

2020-21

- Biomedical Informatics Student Seminar: BIOMEDIN 201 (Sum)
- Introduction to Biomedical Data Science Research Methodology: BIOE 212, BIOMEDIN 212, CS 272, GENE 212 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Asiri Ediriwickrema, Noah Greenwald, Gautam Machiraju

Doctoral Dissertation Advisor (AC)

Jacob Chang

Doctoral (Program)

Kristy Carpenter

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biomedical Informatics (Phd Program)
- Cancer Biology (Phd Program)

Publications

PUBLICATIONS

- **p53 governs an AT1 differentiation programme in lung cancer suppression.** *Nature*
Kaiser, A. M., Gatto, A., Hanson, K. J., Zhao, R. L., Raj, N., Ozawa, M. G., Seoane, J. A., Biegging-Rolett, K. T., Wang, M., Li, I., Trope, W. L., Liou, D. Z., Shrager, et al
2023
- **Advances and prospects for the Human BioMolecular Atlas Program (HuBMAP).** *Nature cell biology*
Jain, S., Pei, L., Spraggins, J. M., Angelo, M., Carson, J. P., Gehlenborg, N., Ginty, F., Gonçalves, J. P., Hagood, J. S., Hickey, J. W., Kelleher, N. L., Laurent, L. C., Lin, et al
2023
- **Galectin-1 mediates chronic STING activation in tumors to promote metastasis through MDSC recruitment.** *Cancer research*
Nambiar, D. K., Viswanathan, V., Cao, H., Zhang, W., Guan, L., Chamoli, M., Holmes, B., Kong, C., Hildebrand, R., Koong, A. J., von Eyben, R., Plevritis, S., Li, et al
2023
- **Organization of the human intestine at single-cell resolution.** *Nature*
Hickey, J. W., Becker, W. R., Nevins, S. A., Horning, A., Perez, A. E., Zhu, C., Zhu, B., Wei, B., Chiu, R., Chen, D. C., Cotter, D. L., Esplin, E. D., Weimer, et al
2023; 619 (7970): 572-584
- **Risk Model-Based Lung Cancer Screening : A Cost-Effectiveness Analysis.** *Annals of internal medicine*
Toumazis, I., Cao, P., de Nijs, K., Bastani, M., Munshi, V., Hemmati, M., Ten Haaf, K., Jeon, J., Tammemägi, M., Gazelle, G. S., Feuer, E. J., Kong, C. Y., Meza, et al
2023
- **Improved Relapse Prediction in Pediatric Acute Myeloid Leukemia By Deconvolving Lineage-Specific and Cancer-Specific Features in Single-Cell Data**
Keyes, T., Jager, A., Krueger, M., Plevritis, S., Tibshirani, R., Aplenc, R., Nolan, G. P., Redell, M. S., Davis, K. L.
AMER SOC HEMATOLOGY.2022: 6288-6289
- **Post-infusion CAR T-Reg cells identify patients resistant to CD19-CAR therapy** *NATURE MEDICINE*
Good, Z., Spiegel, J. Y., Sahaf, B., Malipatlolla, M. B., Ehlinger, Z. J., Kurra, S., Desai, M. H., Reynolds, W. D., Lin, A., Vandris, P., Wu, F., Prabhu, S., Hamilton, et al
2022
- **Editorial: Artificial Intelligence, machine learning and the changing landscape of molecular biology** *JOURNAL OF MOLECULAR BIOLOGY*
Zou, J., Li, H., Plevritis, S.
2022; 434 (15)
- **Editorial: Artificial Intelligence, machine learning and the changing landscape of molecular biology.** *Journal of molecular biology*
Zou, J., Li, H., Plevritis, S.

2022: 167712

- **Role of spatially distinct tumor fibroblast in erlotinib resistance**
Bouchard, G., Plevritis, S. K.
AMER ASSOC CANCER RESEARCH.2022
- **Reverse fate mapping of CD19-targeted CAR T cells in patients with large B-cell lymphoma**
Good, Z., Hamilton, M. P., Spiegel, J. Y., Kurra, S., Desai, M., Prabhu, S., Yang, E., Ozawa, M. G., Hanson, P. J., Wu, F., Frank, M. J., Baird, J. H., Muffly, et al
AMER ASSOC CANCER RESEARCH.2022
- **Identification of cell types in multiplexed in situ images by combining protein expression and spatial information using CELESTA.** *Nature methods*
Zhang, W., Li, I., Reticker-Flynn, N. E., Good, Z., Chang, S., Samusik, N., Saumyaa, S., Li, Y., Zhou, X., Liang, R., Kong, C. S., Le, Q., Gentles, et al
2022
- **Contributions of screening, early-stage treatment, and metastatic treatment to breast cancer mortality reduction by molecular subtype in US women, 2000-2017.**
Caswell-Jin, J., Sun, L., Munoz, D., Lu, Y., Li, Y., Huang, H., Hampton, J. M., Song, J., Jayasekera, J., Schechter, C., Alagoz, O., Stout, N. K., Trentham-Dietz, et al
LIPPINCOTT WILLIAMS & WILKINS.2022
- **Lymph node colonization induces tumor-immune tolerance to promote distant metastasis.** *Cell*
Reticker-Flynn, N. E., Zhang, W., Belk, J. A., Basto, P. A., Escalante, N. K., Pilarowski, G. O., Bejnood, A., Martins, M. M., Kenkel, J. A., Linde, I. L., Bagchi, S., Yuan, R., Chang, et al
2022
- **Visualization, benchmarking and characterization of nested single-cell heterogeneity as dynamic forest mixtures.** *Briefings in bioinformatics*
Anchang, B., Mendez-Giraldez, R., Xu, X., Archer, T. K., Chen, Q., Hu, G., Plevritis, S. K., Motsinger-Reif, A. A., Li, J.
2022
- **Reconstructing codependent cellular cross-talk in lung adenocarcinoma using REMI.** *Science advances*
Yu, A., Li, Y., Li, I., Ozawa, M. G., Yeh, C., Chiou, A. E., Trope, W. L., Taylor, J., Shrager, J., Plevritis, S. K.
2022; 8 (11): eabi4757
- **A Dataset Generation Framework for Evaluating Megapixel Image Classifiers and Their Explanations**
Machiraju, G., Plevritis, S., Mallick, P., Avidan, S., Brostow, G., Cisse, M., Farinella, G. M., Hassner, T.
SPRINGER INTERNATIONAL PUBLISHING AG.2022: 422-442
- **Multi-omics analysis of spatially distinct stromal cells reveals tumor-induced O-glycosylation of the CDK4-pRB axis in fibroblasts at the invasive tumor edge.** *Cancer research*
Bouchard, G., Garcia-Marques, F. J., Karacosta, L. G., Zhang, W., Bermudez, A., Riley, N. M., Varma, S., Mehl, L. C., Benson, J. A., Shrager, J. B., Bertozzi, C. R., Pitteri, S. J., Giaccia, et al
2021
- **A Cost-Effectiveness Analysis of Lung Cancer Screening With Low-Dose Computed Tomography and a Diagnostic Biomarker.** *JNCI cancer spectrum*
Toumazis, I., Erdogan, S. A., Bastani, M., Leung, A., Plevritis, S. K.
2021; 5 (6): pkab081
- **Cost-effectiveness Evaluation of the 2021 US Preventive Services Task Force Recommendation for Lung Cancer Screening.** *JAMA oncology*
Toumazis, I., de Nijs, K., Cao, P., Bastani, M., Munshi, V., Ten Haaf, K., Jeon, J., Gazelle, G. S., Feuer, E. J., de Koning, H. J., Meza, R., Kong, C. Y., Han, et al
2021
- **Evaluation of Alternative Diagnostic Follow-up Intervals for Lung Reporting and Data System Criteria on the Effectiveness of Lung Cancer Screening.** *Journal of the American College of Radiology : JACR*
Bastani, M., Toumazis, I., Hedou', J., Leung, A., Plevritis, S. K.
2021
- **Reflecting on 20 years of breast cancer modeling in CISNET: Recommendations for future cancer systems modeling efforts.** *PLoS computational biology*
Trentham-Dietz, A., Alagoz, O., Chapman, C., Huang, X., Jayasekera, J., van Ravesteyn, N. T., Lee, S. J., Schechter, C. B., Yeh, J. M., Plevritis, S. K., Mandelblatt, J. S., Breast Working Group of the Cancer Intervention and Surveillance Modeling Network (CISNET)
2021; 17 (6): e1009020

- **Evaluation of the Benefits and Harms of Lung Cancer Screening With Low-Dose Computed Tomography: Modeling Study for the US Preventive Services Task Force.** *JAMA*
Meza, R., Jeon, J., Toumazis, I., Ten Haaf, K., Cao, P., Bastani, M., Han, S. S., Blom, E. F., Jonas, D. E., Feuer, E. J., Plevritis, S. K., de Koning, H. J., Kong, et al
2021; 325 (10): 988–97
- **A risk-based framework for assessing real-time lung cancer screening eligibility that incorporates life expectancy and past screening findings.** *Cancer*
Toumazis, I., Alagoz, O., Leung, A., Plevritis, S. K.
2021
- **Systems biology for investigating drug resistance mechanism of melanoma**
Su, Y., Li, G., Ko, M., Cheng, H., Zhu, R., Xue, M., Robert, L., Levine, R., Ribas, A., Nolan, G., Wei, W., Plevritis, S., Baltimore, et al
AMER ASSOC CANCER RESEARCH.2020
- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression**
Reticker-Flynn, N. E., Basto, P. A., Zhang, W., Martins, M. M., Chang, S., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
AMER ASSOC CANCER RESEARCH.2020
- **Risk-Based lung cancer screening: A systematic review.** *Lung cancer (Amsterdam, Netherlands)*
Toumazis, I., Bastani, M., Han, S. S., Plevritis, S. K.
2020; 147: 154–86
- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression.**
Reticker-Flynn, N. E., Basto, P. A., Zhang, W., Bejnood, A., Kenkel, J. A., Martins, M. M., Chang, S., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
AMER ASSOC CANCER RESEARCH.2020: 25–26
- **Disparities of national lung cancer screening guidelines in the U.S. population.** *Journal of the National Cancer Institute*
Han, S. S., Chow, E., Ten Haaf, K., Toumazis, I., Cao, P., Bastani, M., Tammemagi, M., Jeon, J., Feuer, E., Meza, R., Plevritis, S.
2020
- **A human lung tumor microenvironment interactome identifies clinically relevant cell-type cross-talk.** *Genome biology*
Gentles, A. J., Hui, A. B., Feng, W. n., Azizi, A. n., Nair, R. V., Bouchard, G. n., Knowles, D. A., Yu, A. n., Jeong, Y. n., Bejnood, A. n., Forgó, E. n., Varma, S. n., Xu, et al
2020; 21 (1): 107
- **Multi-omic single-cell snapshots reveal multiple independent trajectories to drug tolerance in a melanoma cell line.** *Nature communications*
Su, Y. n., Ko, M. E., Cheng, H. n., Zhu, R. n., Xue, M. n., Wang, J. n., Lee, J. W., Frankiw, L. n., Xu, A. n., Wong, S. n., Robert, L. n., Takata, K. n., Yuan, et al
2020; 11 (1): 2345
- **Cost-Effectiveness Analysis of Lung Cancer Screening in the United States.** *Annals of internal medicine*
Criss, S. D., de Koning, H. J., Plevritis, S. K., Meza, R. n., Kong, C. Y.
2020; 172 (10): 706–7
- **TRAIL-induced variation of cell signaling states provides nonheritable resistance to apoptosis.** *Life science alliance*
Baskar, R., Fienberg, H. G., Khair, Z., Favaro, P., Kimmey, S., Green, D. R., Nolan, G. P., Plevritis, S., Bendall, S. C.
2019; 2 (6)
- **Precision Medicine in Pancreatic Disease-Knowledge Gaps and Research Opportunities: Summary of a National Institute of Diabetes and Digestive and Kidney Diseases Workshop.** *Pancreas*
Lowe, M. E., Andersen, D. K., Caprioli, R. M., Choudhary, J., Cruz-Monserrate, Z., Dasyam, A. K., Forsmark, C. E., Gorelick, F. S., Gray, J. W., Haupt, M., Kelly, K. A., Olive, K. P., Plevritis, et al
2019; 48 (10): 1250–58
- **The human body at cellular resolution: the NIH Human Biomolecular Atlas Program** *NATURE*
Snyder, M. P., Lin, S., Posgai, A., Atkinson, M., Regev, A., Rood, J., Rozenblatt-Rosen, O., Gaffney, L., Hupalowska, A., Satija, R., Gehlenborg, N., Shendure, J., Laskin, et al
2019; 574 (7777): 187–92
- **Cost-Effectiveness Analysis of Lung Cancer Screening Accounting for the Effect of Indeterminate Findings** *JNCI CANCER SPECTRUM*
Toumazis, I., Tsai, E. B., Erdogan, S., Han, S. S., Wan, W., Leung, A., Plevritis, S. K.

2019; 3 (3)

- **Cost-Effectiveness Analysis of Lung Cancer Screening Accounting for the Effect of Indeterminate Findings.** *JNCI cancer spectrum*
Toumazis, I., Tsai, E. B., Erdogan, S. A., Han, S. S., Wan, W., Leung, A., Plevritis, S. K.
2019; 3 (3): pkz035
- **Lymph node colonization promotes distant tumor metastasis through the induction of systemic immune tolerance**
Reticker-Flynn, N. E., Martins, M. M., Basto, P. A., Zhang, W., Bejnood, A., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
AMER ASSOC CANCER RESEARCH.2019
- **Community assessment to advance computational prediction of cancer drug combinations in a pharmacogenomic screen** *NATURE COMMUNICATIONS*
Menden, M. P., Wang, D., Mason, M. J., Szalai, B., Bulusu, K. C., Guan, Y., Yu, T., Kang, J., Jeon, M., Wolfinger, R., Nguyen, T., Zaslavskiy, M., Jang, et al
2019; 10: 2674
- **Sparse discriminative latent characteristics for predicting cancer drug sensitivity from genomic features.** *PLoS computational biology*
Knowles, D. A., Bouchard, G., Plevritis, S.
2019; 15 (5): e1006743
- **Cost-Effectiveness Analysis of Lung Cancer Screening in the United States: A Comparative Modeling Study.** *Annals of internal medicine*
Criss, S. D., Cao, P. n., Bastani, M. n., Ten Haaf, K. n., Chen, Y. n., Sheehan, D. F., Blom, E. F., Toumazis, I. n., Jeon, J. n., de Koning, H. J., Plevritis, S. K., Meza, R. n., Kong, et al
2019
- **A comparative modeling analysis of risk-based lung cancer screening strategies.** *Journal of the National Cancer Institute*
Ten Haaf, K. n., Bastani, M. n., Cao, P. n., Jeon, J. n., Toumazis, I. n., Han, S. S., Plevritis, S. K., Blom, E. F., Kong, C. Y., Tammemägi, M. C., Feuer, E. J., Meza, R. n., de Koning, et al
2019
- **Mapping lung cancer epithelial-mesenchymal transition states and trajectories with single-cell resolution.** *Nature communications*
Karacosta, L. G., Anchang, B. n., Ignatiadis, N. n., Kimmey, S. C., Benson, J. A., Shrager, J. B., Tibshirani, R. n., Bendall, S. C., Plevritis, S. K.
2019; 10 (1): 5587
- **Change in Survival in Metastatic Breast Cancer with Treatment Advances: Meta-Analysis and Systematic Review.** *JNCI cancer spectrum*
Caswell-Jin, J. L., Plevritis, S. K., Tian, L., Cadham, C. J., Xu, C., Stout, N. K., Sledge, G. W., Mandelblatt, J. S., Kurian, A. W.
2018; 2 (4): pky062
- **A radiogenomic dataset of non-small cell lung cancer** *SCIENTIFIC DATA*
Bakr, S., Gevaert, O., Echegaray, S., Ayers, K., Zhou, M., Shafiq, M., Zheng, H., Benson, J., Zhang, W., Leung, A. C., Kadoch, M., Hoang, C. D., Shrager, et al
2018; 5
- **A radiogenomic dataset of non-small cell lung cancer.** *Scientific data*
Bakr, S., Gevaert, O., Echegaray, S., Ayers, K., Zhou, M., Shafiq, M., Zheng, H., Benson, J. A., Zhang, W., Leung, A. N., Kadoch, M., D Hoang, C., Shrager, et al
2018; 5: 180202
- **Caution Needed for Analyzing the Risks of Second Cancers** *JOURNAL OF THORACIC ONCOLOGY*
Han, S. S., Plevritis, S. K., Wakelee, H. A.
2018; 13 (9): E172–E173
- **Caution Needed for Analyzing the Risks of Second Cancers.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Han, S. S., Plevritis, S. K., Wakelee, H. A.
2018; 13 (9): e172–e173
- **GFPT2-Expressing Cancer-Associated Fibroblasts Mediate Metabolic Reprogramming in Human Lung Adenocarcinoma** *CANCER RESEARCH*
Zhang, W., Bouchard, G., Yu, A., Shafiq, M., Jamali, M., Shrager, J. B., Ayers, K., Bakr, S., Gentles, A. J., Diehn, M., Quon, A., West, R. B., Nair, et al
2018; 78 (13): 3445–57
- **Individualized drug combination based on single-cell drug perturbations**
Anchang, B., Davis, K., Fienberg, H., Bendall, S., Karacosta, L., Nolan, G., Plevritis, S. K.
AMER ASSOC CANCER RESEARCH.2018

- **Development of plasma cell-free DNA (cfDNA) assays for early cancer detection: first insights from the Circulating Cell-Free Genome Atlas Study (CCGA)**
Aravanis, A. A., Oxnard, G. R., Maddala, T., Hubbell, E., Venn, O., Jamshidi, A., Shen, L., Amini, H., Beausang, J. A., Betts, C., Civello, D., Davydov, K., Fazullina, et al
AMER ASSOC CANCER RESEARCH.2018
- **Studying tumor metabolic reprogramming through integration of metabolomics and transcriptomics**
Zhang, W., Plevritis, S.
AMER ASSOC CANCER RESEARCH.2018
- **Identifying dynamic EMT states and constructing a proteomic EMT landscape of lung cancer using single cell multidimensional analysis**
Karacosta, L. G., Anchang, B., Kimmey, S., van de Rijn, M., Shrager, J. B., Bendall, S. C., Plevritis, S. K.
AMER ASSOC CANCER RESEARCH.2018
- **Genome-wide sequencing for early stage lung cancer detection from plasma cell-free DNA (cfDNA): The Circulating Cancer Genome Atlas (CCGA) study.**
Oxnard, G. R., Maddala, T., Hubbell, E., Aravanis, A., Zhang, N., Venn, O., Valouev, A., Shen, L., Patel, S., Jamshidi, A., Jagadeesh, K., Gross, S., Filippova, et al
AMER SOC CLINICAL ONCOLOGY.2018
- **Contributions of Screening and Treatment to Mortality From Breast Cancer Reply *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION***
Plevritis, S. K., Berry, D. A., Mandelblatt, J. S.
2018; 319 (22): 2336
- **GFPT2-expressing cancer-associated fibroblasts mediate metabolic reprogramming in human lung adenocarcinoma. *Cancer research***
Zhang, W., Bouchard, G., Yu, A., Shafiq, M., Jamali, M., Shrager, J. B., Ayers, K., Bakr, S., Gentles, A. J., Diehn, M., Quon, A., West, R. B., Nair, et al
2018
- **Comparing CISNET Breast Cancer Models Using the Maximum Clinical Incidence Reduction Methodology *MEDICAL DECISION MAKING***
van den Broek, J. J., van Ravesteyn, N. T., Mandelblatt, J. S., Cevik, M., Schechter, C. B., Lee, S. J., Huang, H., Li, Y., Munoz, D. F., Plevritis, S. K., de Koning, H. J., Stout, N. K., van Ballegooijen, et al
2018; 38: 112S–125S
- **Estimating Breast Cancer Survival by Molecular Subtype in the Absence of Screening and Adjuvant Treatment *MEDICAL DECISION MAKING***
Munoz, D. F., Plevritis, S. K.
2018; 38: 32S–43S
- **Re: Think before you leap *INTERNATIONAL JOURNAL OF CANCER***
Han, S. S., ten Haaf, K., Hazelton, W. D., Jeon, J., Meza, R., Kong, C., Feuer, E. J., de Koning, H. J., Plevritis, S. K.
2018; 142 (7): 1507–9
- **Comparing CISNET Breast Cancer Incidence and Mortality Predictions to Observed Clinical Trial Results of Mammography Screening from Ages 40 to 49 *MEDICAL DECISION MAKING***
van den Broek, J. J., van Ravesteyn, N. T., Mandelblatt, J. S., Huang, H., Ergun, M., Burnside, E. S., Xu, C., Li, Y., Alagoz, O., Lee, S. J., Stout, N. K., Song, J., Trentham-Dietz, et al
2018; 38: 140S–150S
- **A Molecular Subtype-Specific Stochastic Simulation Model of US Breast Cancer Incidence, Survival, and Mortality Trends from 1975 to 2010 *MEDICAL DECISION MAKING***
Munoz, D. F., Xu, C., Plevritis, S. K.
2018; 38: 89S–98S
- **Introduction to the Cancer Intervention and Surveillance Modeling Network (CISNET) Breast Cancer Models *MEDICAL DECISION MAKING***
Alagoz, O., Berry, D. A., de Koning, H. J., Feuer, E. J., Lee, S. J., Plevritis, S. K., Schechter, C. B., Stout, N. K., Trentham-Dietz, A., Mandelblatt, J. S., CISNET Breast Canc Working Grp
2018; 38: 3S–8S
- **Distinguishing Between CISNET Model Results Versus CISNET Models *CANCER***
Berry, D. A., de Koning, H. J., Lee, S. J., Mandelblatt, J. S., Plevritis, S. K., Schechter, C. B., Stout, N. K., Trentham-Dietz, A., CISNET Breast Working Grp
2018; 124 (5): 1083–84
- **Association of Screening and Treatment With Breast Cancer Mortality by Molecular Subtype in US Women, 2000-2012. *JAMA***

- Plevritis, S. K., Munoz, D. n., Kurian, A. W., Stout, N. K., Alagoz, O. n., Near, A. M., Lee, S. J., van den Broek, J. J., Huang, X. n., Schechter, C. B., Sprague, B. L., Song, J. n., de Koning, et al
2018; 319 (2): 154–64
- **Change in survival in metastatic breast cancer with treatment advances: meta-analysis and systematic review** *JNCI Cancer Spectrum*
Caswell-Jin, J. L., Plevritis, S. K., Tian, L., Cadham, C. J., Xu, C., Stout, N. K., Sledge, G. W., Mandelblatt, J. S., Kurian, A. W.
2018; 2 (4)
 - **DRUG-NEM: Optimizing drug combinations using single-cell perturbation response to account for intratumoral heterogeneity.** *Proceedings of the National Academy of Sciences of the United States of America*
Anchang, B. n., Davis, K. L., Fienberg, H. G., Williamson, B. D., Bendall, S. C., Karacosta, L. G., Tibshirani, R. n., Nolan, G. P., Plevritis, S. K.
2018; 115 (18): E4294–E4303
 - **Common Model Inputs Used in CISNET Collaborative Breast Cancer Modeling.** *Medical decision making : an international journal of the Society for Medical Decision Making*
Mandelblatt, J. S., Near, A. M., Miglioretti, D. L., Munoz, D. n., Sprague, B. L., Trentham-Dietz, A. n., Gangnon, R. n., Kurian, A. W., Weedon-Fekjaer, H. n., Cronin, K. A., Plevritis, S. K.
2018; 38 (1_suppl): 9S–23S
 - **Non-Small Cell Lung Cancer Radiogenomics Map Identifies Relationships between Molecular and Imaging Phenotypes with Prognostic Implications.** *Radiology*
Zhou, M. n., Leung, A. n., Echegaray, S. n., Gentles, A. n., Shrager, J. B., Jensen, K. C., Berry, G. J., Plevritis, S. K., Rubin, D. L., Napel, S. n., Gevaert, O. n.
2018; 286 (1): 307–15
 - **Risk Stratification for Second Primary Lung Cancer** *JOURNAL OF CLINICAL ONCOLOGY*
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