



## Sylvia K. Plevritis, PhD

Professor of Biomedical Data Science and of Radiology (Integrative Biomedical Imaging Informatics at Stanford)

### CONTACT INFORMATION

- **Alternate Contact**

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### Bio

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#### 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

## 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

- My Lab Site: <http://plevritis.stanford.edu>

## Research & Scholarship

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### 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

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### COURSES

#### 2019-20

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

#### 2017-18

- Principles of Cancer Systems Biology: CBIO 243 (Spr)

#### 2016-17

- Lecture Series in Cancer Systems Biology: CBIO 244 (Win)
- Principles of Cancer Systems Biology: CBIO 243 (Spr)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Asiri Ediriwickrema, Noah Greenwald, Maggie Martins, Katherine McNamara

#### Postdoctoral Faculty Sponsor

Mehrad Bastani, Gina Bouchard, Iakovos Toumazis

#### Doctoral Dissertation Advisor (AC)

Irene Li, Alice Yu

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

Reema Baskar, Gautam Machiraju

**Master's Program Advisor**

Sophia Wang

**Postdoctoral Research Mentor**

Zina Good

**Doctoral (Program)**

Rosie Sowers

**GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS**

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

**Publications**

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**PUBLICATIONS**

- **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)
- **Prediction of EGFR and KRAS mutation in non-small cell lung cancer using quantitative 18F FDG-PET/CT metrics.** *Oncotarget*  
Minamimoto, R., Jamali, M., Gevaert, O., Echegaray, S., Khuong, A., Hoang, C. D., Shrager, J. B., Plevritis, S. K., Rubin, D. L., Leung, A. N., Napel, S., Quon, A.  
2017
- **Risk prediction models for selection of lung cancer screening candidates: A retrospective validation study** *PLOS MEDICINE*  
ten Haaf, K., Jeon, J., Tammemagi, M. C., Han, S. S., Kong, C. Y., Plevritis, S. K., Feuer, E. J., de Koning, H. J., Steyerberg, E. W., Meza, R.  
2017; 14 (4)
- **Predictive radiogenomics modeling of EGFR mutation status in lung cancer** *SCIENTIFIC REPORTS*  
Gevaert, O., Echegaray, S., Khuong, A., Hoang, C. D., Shrager, J. B., Jensen, K. C., Berry, G. J., Guo, H. H., Lau, C., Plevritis, S. K., Rubin, D. L., Napel, S.,  
Leung, et al  
2017; 7
- **The impact of overdiagnosis on the selection of efficient lung cancer screening strategies.** *International journal of cancer*  
Han, S. S., ten Haaf, K., Hazelton, W. D., Munshi, V. N., Jeon, J., Erdogan, S. A., Johanson, C., McMahon, P. M., Meza, R., Kong, C. Y., Feuer, E. J., de Koning,  
H. J., Plevritis, et al  
2017
- **Intestinal Enteroendocrine Lineage Cells Possess Homeostatic and Injury-Inducible Stem Cell Activity** *Cell Stem Cell*  
Yan, K., Gevaert, O., Zheng, G., Anchang, B., Probert, C., et al  
2017; 21 (1): 78 - 90.e6
- **Visualization and cellular hierarchy inference of single-cell data using SPADE.** *Nature protocols*  
Anchang, B., Hart, T. D., Bendall, S. C., Qiu, P., Bjornson, Z., Linderman, M., Nolan, G. P., Plevritis, S. K.  
2016; 11 (7): 1264-1279
- **Collaborative Modeling of the Benefits and Harms Associated With Different US Breast Cancer Screening Strategies** *ANNALS OF INTERNAL MEDICINE*  
Mandelblatt, J. S., Stout, N. K., Schechter, C. B., van den Broek, J. J., Miglioretti, D. L., Krapcho, M., Trentham-Dietz, A., Munoz, D., Lee, S. J., Berry, D. A., van  
Ravesteyn, N. T., Alagoz, O., Kerlikowske, et al  
2016; 164 (4): 215-?

- **Integrating Tumor and Stromal Gene Expression Signatures With Clinical Indices for Survival Stratification of Early-Stage Non-Small Cell Lung Cancer.** *Journal of the National Cancer Institute*  
Gentles, A. J., Bratman, S. V., Lee, L. J., Harris, J. P., Feng, W., Nair, R. V., Shultz, D. B., Nair, V. S., Hoang, C. D., West, R. B., Plevritis, S. K., Alizadeh, A. A., Diehn, et al  
2015; 107 (10)
- **Integrating Tumor and Stromal Gene Expression Signatures With Clinical Indices for Survival Stratification of Early-Stage Non-Small Cell Lung Cancer.** *Journal of the National Cancer Institute*  
Gentles, A. J., Bratman, S. V., Lee, L. J., Harris, J. P., Feng, W., Nair, R. V., Shultz, D. B., Nair, V. S., Hoang, C. D., West, R. B., Plevritis, S. K., Alizadeh, A. A., Diehn, et al  
2015; 107 (10)
- **ARF: Connecting senescence and innate immunity for clearance** *AGING-US*  
Kearney, A. Y., Anchang, B., Plevritis, S., Felsher, D. W.  
2015; 7 (9): 613-615
- **The prognostic landscape of genes and infiltrating immune cells across human cancers** *NATURE MEDICINE*  
Gentles, A. J., Newman, A. M., Liu, C. L., Bratman, S. V., Feng, W., Kim, D., Nair, V. S., Xu, Y., Khuong, A., Hoang, C. D., Diehn, M., West, R. B., Plevritis, et al  
2015; 21 (8): 938-945
- **Mutations in early follicular lymphoma progenitors are associated with suppressed antigen presentation.** *Proceedings of the National Academy of Sciences of the United States of America*  
Green, M. R., Kihira, S., Liu, C. L., Nair, R. V., Salari, R., Gentles, A. J., Irish, J., Stehr, H., Vicente-Dueñas, C., Romero-Camarero, I., Sanchez-Garcia, I., Plevritis, S. K., Arber, et al  
2015; 112 (10): E1116-25
- **Mutations in early follicular lymphoma progenitors are associated with suppressed antigen presentation.** *Proceedings of the National Academy of Sciences of the United States of America*  
Green, M. R., Kihira, S., Liu, C. L., Nair, R. V., Salari, R., Gentles, A. J., Irish, J., Stehr, H., Vicente-Dueñas, C., Romero-Camarero, I., Sanchez-Garcia, I., Plevritis, S. K., Arber, et al  
2015; 112 (10): E1116-25
- **p19ARF is a critical mediator of both cellular senescence and an innate immune response associated with MYC inactivation in mouse model of acute leukemia** *ONCOTARGET*  
Yetil, A., Anchang, B., Gouw, A. M., Adam, S. J., Zabuawala, T., Parameswaran, R., van Riggelen, J., Plevritis, S., Felsher, D. W.  
2015; 6 (6): 3563-3577
- **Molecular subtyping for clinically defined breast cancer subgroups** *BREAST CANCER RESEARCH*  
Zhao, X., Rodland, E. A., Tibshirani, R., Plevritis, S.  
2015; 17
- **Pancancer analysis of DNA methylation-driven genes using MethylMix.** *Genome biology*  
Gevaert, O., Tibshirani, R., Plevritis, S. K.  
2015; 16: 17-?
- **Multi-target drug combinations from single drug responses measured at the level of single cells using Mixture Nested Effects Models (MNEMs) applied to cancer.** *Special Conference on Computational and Systems Biology of Cancer*  
Anchang, B., Fienberg, H., et al  
2015
- **Effects of Screening and Systemic Adjuvant Therapy on ER-Specific US Breast Cancer Mortality** *JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE*  
Munoz, D., Near, A. M., van Ravesteyn, N. T., Lee, S. J., Schechter, C. B., Alagoz, O., Berry, D. A., Burnside, E. S., Chang, Y., Chisholm, G., de Koning, H. J., Ergun, M. A., Heijnsdijk, et al  
2014; 106 (11)
- **Glioblastoma Multiforme: Exploratory Radiogenomic Analysis by Using Quantitative Image Features** *RADIOLOGY*  
Gevaert, O., Mitchell, L. A., Achrol, A. S., Xu, J., Echegaray, S., Steinberg, G. K., Cheshier, S. H., Napel, S., Zaharchuk, G., Plevritis, S. K.  
2014; 273 (1): 168-174

- **Oncogenic transformation of diverse gastrointestinal tissues in primary organoid culture** *NATURE MEDICINE*  
Li, X., Nadauld, L., Ootani, A., Corney, D. C., Pai, R. K., Gevaert, O., Cantrell, M. A., Rack, P. G., Neal, J. T., Chan, C. W., Yeung, T., Gong, X., Yuan, et al  
2014; 20 (7): 769-777
- **CCAST: A Model-Based Gating Strategy to Isolate Homogeneous Subpopulations in a Heterogeneous Population of Single Cells** *PLOS COMPUTATIONAL BIOLOGY*  
Anchang, B., Do, M. T., Zhao, X., Plevritis, S. K.  
2014; 10 (7)
- **Comparing Benefits from Many Possible Computed Tomography Lung Cancer Screening Programs: Extrapolating from the National Lung Screening Trial Using Comparative Modeling** *PLOS ONE*  
McMahon, P. M., Meza, R., Plevritis, S. K., Black, W. C., Tammemagi, C. M., Erdogan, A., ten Haaf, K., Hazelton, W., Holford, T. R., Jeon, J., Clarke, L., Kong, C. Y., Choi, et al  
2014; 9 (6)
- **Comparative Analysis of 5 Lung Cancer Natural History and Screening Models That Reproduce Outcomes of the NLST and PLCO Trials** *CANCER*  
Meza, R., ten Haaf, K., Kong, C. Y., Erdogan, A., Black, W. C., Tammemagi, M. C., Choi, S. E., Jeon, J., Han, S. S., Munshi, V., van Rosmalen, J., Pinsky, P., McMahon, et al  
2014; 120 (11): 1713-1724
- **Benefits and Harms of Computed Tomography Lung Cancer Screening Strategies: A Comparative Modeling Study for the US Preventive Services Task Force** *ANNALS OF INTERNAL MEDICINE*  
de Koning, H. J., Meza, R., Plevritis, S. K., ten Haaf, K., Munshi, V. N., Jeon, J., Erdogan, S. A., Kong, C. Y., Han, S. S., van Rosmalen, J., Choi, S. E., Pinsky, P. F., de Gonzalez, et al  
2014; 160 (5): 311-?
- **NF- $\kappa$ B protein expression associates with (18)F-FDG PET tumor uptake in non-small cell lung cancer: A radiogenomics validation study to understand tumor metabolism.** *Lung cancer*  
Nair, V. S., Gevaert, O., Davidzon, G., Plevritis, S. K., West, R.  
2014; 83 (2): 189-196
- **Ly6d marks the earliest stage of B-cell specification and identifies the branchpoint between B-cell and T-cell development.** *Genes & development*  
Inlay, M. A., Bhattacharya, D., Sahoo, D., Serwold, T., Seita, J., Karsunky, H., Plevritis, S. K., Dill, D. L., Weissman, I. L.  
2013; 27 (18): 2063-?
- **Improvements in observed and relative survival in follicular grade 1-2 lymphoma during 4 decades: the Stanford University experience.** *Blood*  
Tan, D., Horning, S. J., Hoppe, R. T., Levy, R., Rosenberg, S. A., Sigal, B. M., Warnke, R. A., Natkunam, Y., Han, S. S., Yuen, A., Plevritis, S. K., Advani, R. H.  
2013; 122 (6): 981-987
- **Identification of ovarian cancer driver genes by using module network integration of multi-omics data** *INTERFACE FOCUS*  
Gevaert, O., Villalobos, V., Sikic, B. I., Plevritis, S. K.  
2013; 3 (4)
- **Feasibility evaluation of an online tool to guide decisions for BRCA1/2 mutation carriers** *FAMILIAL CANCER*  
Schackmann, E. A., Munoz, D. F., Mills, M. A., Plevritis, S. K., Kurian, A. W.  
2013; 12 (1): 65-73
- **Hierarchy in somatic mutations arising during genomic evolution and progression of follicular lymphoma.** *Blood*  
Green, M. R., Gentles, A. J., Nair, R. V., Irish, J. M., Kihira, S., Liu, C. L., Kela, I., Hopmans, E. S., Myklebust, J. H., Ji, H., Plevritis, S. K., Levy, R., Alizadeh, et al  
2013; 121 (9): 1604-1611
- **Identifying master regulators of cancer and their downstream targets by integrating genomic and epigenomic features.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*  
Gevaert, O., Plevritis, S.  
2013: 123-134
- **TreeVis: A MATLAB-based tool for tree visualization** *COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE*  
Qiu, P., Plevritis, S. K.  
2013; 109 (1): 74-76

- **Cross-Species Functional Analysis of Cancer-Associated Fibroblasts Identifies a Critical Role for CLCF1 and IL-6 in Non-Small Cell Lung Cancer In Vivo** *CANCER RESEARCH*  
Vicent, S., Sayles, L. C., Vaka, D., Khatri, P., Gevaert, O., Chen, R., Zheng, Y., Gillespie, A. K., Clarke, N., Xu, Y., Shrager, J., Hoang, C. D., Plevritis, et al  
2012; 72 (22): 5744-5756
- **CytoSPADE: high-performance analysis and visualization of high-dimensional cytometry data** *BIOINFORMATICS*  
Linderman, M. D., Bjornson, Z., Simonds, E. F., Qiu, P., Bruggner, R. V., Sheode, K., Meng, T. H., Plevritis, S. K., Nolan, G. P.  
2012; 28 (18): 2400-2401
- **Prognostic PET F-18-FDG Uptake Imaging Features Are Associated with Major Oncogenomic Alterations in Patients with Resected Non-Small Cell Lung Cancer** *CANCER RESEARCH*  
Nair, V. S., Gevaert, O., Davidzon, G., Napel, S., Graves, E. E., Hoang, C. D., Shrager, J. B., Quon, A., Rubin, D. L., Plevritis, S. K.  
2012; 72 (15): 3725-3734
- **Non-Small Cell Lung Cancer: Identifying Prognostic Imaging Biomarkers by Leveraging Public Gene Expression Microarray Data-Methods and Preliminary Results** *RADIOLOGY*  
Gevaert, O., Xu, J., Hoang, C. D., Leung, A. N., Xu, Y., Quon, A., Rubin, D. L., Napel, S., Plevritis, S. K.  
2012; 264 (2): 387-396
- **A Simulation Model to Predict the Impact of Prophylactic Surgery and Screening on the Life Expectancy of BRCA1 and BRCA2 Mutation Carriers** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*  
Sigal, B. M., Munoz, D. F., Kurian, A. W., Plevritis, S. K.  
2012; 21 (7): 1066-1077
- **Quantitative Proteomic Profiling Identifies Protein Correlates to EGFR Kinase Inhibition** *MOLECULAR CANCER THERAPEUTICS*  
Kani, K., Faca, V. M., Hughes, L. D., Zhang, W., Fang, Q., Shahbaba, B., Luethy, R., Erde, J., Schmidt, J., Pitteri, S. J., Zhang, Q., Katz, J. E., Gross, et al  
2012; 11 (5): 1071-1081
- **Online Tool to Guide Decisions for BRCA1/2 Mutation Carriers** *JOURNAL OF CLINICAL ONCOLOGY*  
Kurian, A. W., Munoz, D. F., Rust, P., Schackmann, E. A., Smith, M., Clarke, L., Mills, M. A., Plevritis, S. K.  
2012; 30 (5): 497-506
- **Comparing the benefits of screening for breast cancer and lung cancer using a novel natural history model** *CANCER CAUSES & CONTROL*  
Lin, R. S., Plevritis, S. K.  
2012; 23 (1): 175-185
- **Reconstructing Directed Signed Gene Regulatory Network From Microarray Data** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*  
Qiu, P., Plevritis, S. K.  
2011; 58 (12): 3518-3521
- **Lymphomas that recur after MYC suppression continue to exhibit oncogene addiction** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Choi, P. S., van Riggelen, J., Gentles, A. J., Bachireddy, P., Rakhra, K., Adam, S. J., Plevritis, S. K., Felsher, D. W.  
2011; 108 (42): 17432-17437
- **Modeling the impact of population screening on breast cancer mortality in the United States** *BREAST*  
Mandelblatt, J. S., Cronin, K. A., Berry, D. A., Chang, Y., de Koning, H. J., Lee, S. J., Plevritis, S. K., Schechter, C. B., Stout, N. K., van Ravesteyn, N. T., Zelen, M., Feuer, E. J.  
2011; 20: S75-S81
- **Extracting a cellular hierarchy from high-dimensional cytometry data with SPADE** *NATURE BIOTECHNOLOGY*  
Qiu, P., Simonds, E. F., Bendall, S. C., Gibbs, K. D., Bruggner, R. V., Linderman, M. D., Sachs, K., Nolan, G. P., Plevritis, S. K.  
2011; 29 (10): 886-U181
- **Prediction of survival in diffuse large B-cell lymphoma based on the expression of 2 genes reflecting tumor and microenvironment** *BLOOD*  
Alizadeh, A. A., Gentles, A. J., Alencar, A. J., Liu, C. L., Kohrt, H. E., Houot, R., Goldstein, M. J., Zhao, S., Natkunam, Y., Advani, R. H., Gascoyne, R. D., Briones, J., Tibshirani, et al  
2011; 118 (5): 1350-1358
- **Single-Cell Mass Cytometry of Differential Immune and Drug Responses Across a Human Hematopoietic Continuum** *SCIENCE*

- Bendall, S. C., Simonds, E. F., Qiu, P., Amir, E. D., Krutzik, P. O., Finck, R., Bruggner, R. V., Melamed, R., Trejo, A., Ornatsky, O. I., Balderas, R. S., Plevritis, S. K., Sachs, et al  
2011; 332 (6030): 687-696
- **Discovering Biological Progression Underlying Microarray Samples** *PLOS COMPUTATIONAL BIOLOGY*  
Qiu, P., Gentles, A. J., Plevritis, S. K.  
2011; 7 (4)
  - **Bayesian gene set analysis for identifying significant biological pathways** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES C-APPLIED STATISTICS*  
Shahbaba, B., Tibshirani, R., Shachaf, C. M., Plevritis, S. K.  
2011; 60: 541-557
  - **Association of a Leukemic Stem Cell Gene Expression Signature With Clinical Outcomes in Acute Myeloid Leukemia** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*  
Gentles, A. J., Plevritis, S. K., Majeti, R., Alizadeh, A. A.  
2010; 304 (24): 2706-2715
  - **A Simulation Model Investigating the Impact of Tumor Volume Doubling Time and Mammographic Tumor Detectability on Screening Outcomes in Women Aged 40-49 Years** *JOURNAL OF THE NATIONAL CANCER INSTITUTE*  
Bailey, S. L., Sigal, B. M., Plevritis, S. K.  
2010; 102 (16): 1263-1271
  - **Incidental Extracardiac Findings at Coronary CT: Clinical and Economic Impact** *AMERICAN JOURNAL OF ROENTGENOLOGY*  
Lee, C. I., Tsai, E. B., Sigal, B. M., Plevritis, S. K., Garber, A. M., Rubin, G. D.  
2010; 194 (6): 1531-1538
  - **MiDReG: A method of mining developmentally regulated genes using Boolean implications** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Sahoo, D., Seita, J., Bhattacharya, D., Inlay, M. A., Weissman, I. L., Plevritis, S. K., Dill, D. L.  
2010; 107 (13): 5732-5737
  - **Reducing the Computational Complexity of Information Theoretic Approaches for Reconstructing Gene Regulatory Networks** *JOURNAL OF COMPUTATIONAL BIOLOGY*  
Qiu, P., Gentles, A. J., Plevritis, S. K.  
2010; 17 (2): 169-176
  - **Survival Analysis of Cancer Risk Reduction Strategies for BRCA1/2 Mutation Carriers** *JOURNAL OF CLINICAL ONCOLOGY*  
Kurian, A. W., Sigal, B. M., Plevritis, S. K.  
2010; 28 (2): 222-231
  - **Effects of Mammography Screening Under Different Screening Schedules: Model Estimates of Potential Benefits and Harms** *ANNALS OF INTERNAL MEDICINE*  
Mandelblatt, J. S., Cronin, K. A., Bailey, S., Berry, D. A., de Koning, H. J., Draisma, G., Huang, H., Lee, S. J., Munsell, M., Plevritis, S. K., Ravdin, P., Schechter, C. B., Sigal, et al  
2009; 151 (10): 738-W247
  - **Modeling the transition of lung cancer from early to advanced stage** *CANCER CAUSES & CONTROL*  
Pashkevich, M. A., Sigal, B. M., Plevritis, S. K.  
2009; 20 (9): 1559-1569
  - **Ly6d marks the earliest stage of B-cell specification and identifies the branchpoint between B-cell and T-cell development** *GENES & DEVELOPMENT*  
Inlay, M. A., Bhattacharya, D., Sahoo, D., Serwold, T., Seita, J., Karsunky, H., Plevritis, S. K., Dill, D. L., Weissman, I. L.  
2009; 23 (20): 2376-2381
  - **Simultaneous Class Discovery and Classification of Microarray Data Using Spectral Analysis** *JOURNAL OF COMPUTATIONAL BIOLOGY*  
Qiu, P., Plevritis, S. K.  
2009; 16 (7): 935-944
  - **Fast calculation of pairwise mutual information for gene regulatory network reconstruction** *COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE*  
Qiu, P., Gentles, A. J., Plevritis, S. K.

2009; 94 (2): 177-180

- **A Bayesian nonparametric method for model evaluation: application to genetic studies** *JOURNAL OF NONPARAMETRIC STATISTICS*  
Shahbaba, B., Gentles, A. J., Beyene, J., Plevritis, S. K., Greenwood, C. M.  
2009; 21 (3): 379-396
- **Characterization of Patient Specific Signaling via Augmentation of Bayesian Networks with Disease and Patient State Nodes** *Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society*  
Sachs, K., Gentles, A. J., Youland, R., Itani, S., Irish, J., Nolan, G. P., Plevritis, S. K.  
IEEE.2009: 6624-6627
- **Genomic and proteomic analysis reveals a threshold level of MYC required for tumor maintenance** *CANCER RESEARCH*  
Shachaf, C. M., Gentles, A. J., Elchuri, S., Sahoo, D., Soen, Y., Sharpe, O., Perez, O. D., Chang, M., Mitchel, D., Robinson, W. H., Dill, D., Nolan, G. P., Plevritis, et al  
2008; 68 (13): 5132-5142
- **Boolean implication networks derived from large scale, whole genome microarray datasets** *GENOME BIOLOGY*  
Sahoo, D., Dill, D. L., Gentles, A. J., Tibshirani, R., Plevritis, S. K.  
2008; 9 (10)
- **Extracting binary signals from microarray time-course data** *NUCLEIC ACIDS RESEARCH*  
Sahoo, D., Dill, D. L., Tibshirani, R., Plevritis, S. K.  
2007; 35 (11): 3705-3712
- **Ductal pattern enhancement on magnetic resonance imaging of the breast due to ductal lavage** *BREAST JOURNAL*  
Ghanouni, P., Kurian, A. W., Margolis, D., Hartman, A., Mills, M. A., Plevritis, S. K., Ford, J. M., Daniel, B. L.  
2007; 13 (3): 281-286
- **A natural history model of stage progression applied to breast cancer** *STATISTICS IN MEDICINE*  
Plevritis, S. K., Salzman, P., Sigal, B. M., Glynn, P. W.  
2007; 26 (3): 581-595
- **Cost-effectiveness of screening BRCA1/2 mutation carriers with breast magnetic resonance imaging** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*  
Plevritis, S. K., Kurian, A. W., Sigal, B. M., Daniel, B. L., Ikeda, D. M., Stockdale, F. E., Garber, A. M.  
2006; 295 (20): 2374-2384
- **A stochastic simulation model of U.S. breast cancer mortality trends from 1975 to 2000.** *Journal of the National Cancer Institute. Monographs*  
Plevritis, S. K., Sigal, B. M., Salzman, P., Rosenberg, J., Glynn, P.  
2006: 86-95
- **A comparative review of CISNET breast models used to analyze U.S. breast cancer incidence and mortality trends.** *Journal of the National Cancer Institute. Monographs*  
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