



Trevor Hastie

John A. Overdeck Professor, Professor of Statistics and of Biomedical Data Sciences, Emeritus

 NIH Biosketch available Online

 Resume available Online

Bio

BIO

Trevor Hastie is the John A Overdeck Professor of Statistics at Stanford University. Hastie is known for his research in applied statistics, particularly in the fields of statistical modeling, bioinformatics and machine learning. He has published six books and over 200 research articles in these areas. Prior to joining Stanford University in 1994, Hastie worked at AT&T Bell Laboratories for nine years, where he contributed to the development of the statistical modeling environment popular in the R computing system. He received a B.Sc. (hons) in statistics from Rhodes University in 1976, a M.Sc. from the University of Cape Town in 1979, and a Ph.D from Stanford in 1984. In 2018 he was elected to the U.S. National Academy of Sciences. He is a dual citizen of the United States and South Africa.

ACADEMIC APPOINTMENTS

- Emeritus (Active) Professor, Statistics
- Emeritus (Active) Professor, Department of Biomedical Data Science
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Institute for Computational and Mathematical Engineering (ICME)
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Chair, Department of Statistics, (2006-2009)

HONORS AND AWARDS

- C.R and Bhargavi Rao prize, Penn State University (2025)
- Founders of Statistics prize, International Statistics Institute (2025)
- Chief convocation speaker, Indian Statistics Institute, Kolkata, India (2023)

- Honorary Doctorate of Mathematics, University of Waterloo, Canada (2023)
- Myles Hollander Distinguished Lecturer, Florida State University (2022)
- Breiman Award (senior), American Statistical Association (2020)
- Elected Member, The Royal Netherlands Academy of Arts and Science. (2019)
- Sigillum Magnum, Bologna University (2019)
- Elected Member, United States National Academy of Sciences (2018)
- Honorary Doctorate, Leuphana University of Luneburg, Germany (2018)
- The Emmanuel and Carol Parzen prize for Statistical Innovation, Texas A&M University. (2014)
- Bernard G. Greenberg distinguished lecturer, Department of Biostatistics, University of North Carolina (2013)
- Fellow, South African Statistical Association (2011)
- Fellow, American Statistical Association (1998)
- Craig Award, University of Iowa (1996)
- Fellow, Institute of Mathematical Statistics (1996)
- Myrto Lefkopolou award, Harvard School of Public Health (1996)
- Elected Member, International Statistics Institute (1994)
- Fellow, Royal Statistical Society (1979)

PROFESSIONAL EDUCATION

- Ph.D., Stanford University , Statistics (1984)
- M.Sc, University of Cape Town , Statistics (1979)
- B.Sc (hons), Rhodes University , Statistics (1976)

LINKS

- Personal Web site: <https://web.stanford.edu/~hastie>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Trevor Hastie specializes in applied statistical modeling, and he has written five books in this area:

"Generalized Additive Models" (with R. Tibshirani, Chapman and Hall, 1991), "Elements of Statistical Learning (second edition)"

(with R. Tibshirani and J. Friedman, Springer 2009),

"An Introduction to Statistical Learning" (with G. James, D. Witten and R. Tibshirani, Springer 2013),

"Statistical Learning with Sparsity" (with R. Tibshirani and M. Wainwright, CRC Press 2015)

and "Computer Age Statistical Inference" (with B. Efron, Cambridge, 2016). He has also made contributions in

statistical computing, co-editing (with J. Chambers) a large software

library on modeling tools in the S language used in the R computing environment

("Statistical Models in S", Wadsworth, 1992). His current research

focuses on applied problems in biology and genomics, medicine and

industry, in particular data modeling, prediction and classification

problems.

Teaching

COURSES

2025-26

- Applied Statistics I: STATS 305A (Aut)

2024-25

- Applied Statistics I: STATS 305A (Aut)

2023-24

- Applied Statistics III: STATS 305C (Spr)

2022-23

- Applied Multivariate Analysis: STATS 206 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Vidal Arroyo, Luis Chumpitaz Diaz, Hannah Heigold, Jing Shang, Bob Junyi Zou

Master's Program Advisor

Xinyi Ai, Arjun Anna, Khadijah Anwar, Trent Bellinger, Krishna Bhatraju, Jon Bjornsson, Amelia Bloom, Cam Burton, Veronica Chang, Evelyn Chou, Alma Cooper, Paul Creavin, Neil Damle, Luke Duthie, Olivia Fan, Xinyu Feng, Ariel Flahaut, Xianya Fu, Ye He, Jack Hlavka, Scott Hwang, Charlotte Imbert, Ru Wen, Louis de Germain de Cirfontaine

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biomedical Data Science (Phd Program)

Publications

PUBLICATIONS

- **Estimating heterogeneous treatment effects for general responses.** *Biometrics*
Gao, Z., Hastie, T.
2025; 81 (4)
- **A statistical view of column subset selection.** *Journal of the Royal Statistical Society. Series B, Statistical methodology*
Sood, A., Hastie, T.
2025
- **FITTING MULTILEVEL FACTOR MODELS** *SIAM JOURNAL ON MATRIX ANALYSIS AND APPLICATIONS*
Parshakova, T., Hastie, T., Boyd, S.
2025; 46 (3): 1930-1963
- **Note on the Equivalence of Orthogonalizing EM and Proximal Gradient Descent** *TECHNOMETRICS*
Yang, J., Hastie, T.
2024
- **Modeling longitudinal data using matrix completion.** *Journal of computational and graphical statistics : a joint publication of American Statistical Association, Institute of Mathematical Statistics, Interface Foundation of North America*
Kidziński, Ł., Hastie, T.
2024; 33 (2): 551-566
- **Cross-Validation: What Does It Estimate and How Well Does It Do It?** *JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION*
Bates, S., Hastie, T., Tibshirani, R.

2023

- **Elastic Net Regularization Paths for All Generalized Linear Models.** *Journal of statistical software*
Tay, J. K., Narasimhan, B., Hastie, T.
2023; 106
- **Elastic Net Regularization Paths for All Generalized Linear Models** *JOURNAL OF STATISTICAL SOFTWARE*
Tay, J., Narasimhan, B., Hastie, T.
2023; 106 (1): 1-31
- **LARGE-SCALE MULTIVARIATE SPARSE REGRESSION WITH APPLICATIONS TO UK BIOBANK.** *The annals of applied statistics*
Qian, J., Tanigawa, Y., Li, R., Tibshirani, R., Rivas, M. A., Hastie, T.
2022; 16 (3): 1891-1918
- **LARGE-SCALE MULTIVARIATE SPARSE REGRESSION WITH APPLICATIONS TO UK BIOBANK** *ANNALS OF APPLIED STATISTICS*
Qian, J., Tanigawa, Y., Li, R., Tibshirani, R., Rivas, M. A., Hastie, T.
2022; 16 (3): 1891-1918
- **SURPRISES IN HIGH-DIMENSIONAL RIDGELESS LEAST SQUARES INTERPOLATION.** *Annals of statistics*
Hastie, T., Montanari, A., Rosset, S., Tibshirani, R. J.
2022; 50 (2): 949-986
- **Significant sparse polygenic risk scores across 813 traits in UK Biobank.** *PLoS genetics*
Tanigawa, Y., Qian, J., Venkataraman, G., Justesen, J. M., Li, R., Tibshirani, R., Hastie, T., Rivas, M. A.
2022; 18 (3): e1010105
- **LinCDE: Conditional Density Estimation via Lindsey's Method** *JOURNAL OF MACHINE LEARNING RESEARCH*
Gao, Z., Hastie, T.
2022; 23: 1-55
- **Generalized Matrix Factorization: efficient algorithms for fitting generalized linear latent variable models to large data arrays** *JOURNAL OF MACHINE LEARNING RESEARCH*
Kidzinski, L., Hui, F. K. C., Warton, D. I., Hastie, T. J.
2022; 23
- **Transparency and reproducibility in artificial intelligence.** *Nature*
Haibe-Kains, B., Adam, G. A., Hosny, A., Khodakarami, F., Massive Analysis Quality Control (MAQC) Society Board of Directors, Waldron, L., Wang, B., McIntosh, C., Goldenberg, A., Kundaje, A., Greene, C. S., Broderick, T., Hoffman, M. M., et al
2020; 586 (7829): E14–E16
- **Ridge Regularization: An Essential Concept in Data Science.** *Technometrics : a journal of statistics for the physical, chemical, and engineering sciences*
Hastie, T.
2020; 62 (4): 426-433
- **A fast and scalable framework for large-scale and ultrahigh-dimensional sparse regression with application to the UK Biobank.** *PLoS genetics*
Qian, J. n., Tanigawa, Y. n., Du, W. n., Aguirre, M. n., Chang, C. n., Tibshirani, R. n., Rivas, M. A., Hastie, T. n.
2020; 16 (10): e1009141
- **Learning Interactions via Hierarchical Group-Lasso Regularization** *JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS*
Lim, M., Hastie, T.
2015; 24 (3): 627-654
- **Bias correction in species distribution models: pooling survey and collection data for multiple species** *METHODS IN ECOLOGY AND EVOLUTION*
Fithian, W., Elith, J., Hastie, T., Keith, D. A.
2015; 6 (4): 424-438
- **Learning the Structure of Mixed Graphical Models** *JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS*
Lee, J. D., Hastie, T. J.

2015; 24 (1): 230-253

- **Statistical Learning with Sparsity: The Lasso and Generalizations**

Hastie, T., Tibshirani, R., Wainwright, M.
CRC Press.2015

- **An Introduction to Statistical Learning, with Applications in R** *Springer Texts in Statistics*

James, G., Witten, D., Hastie, T. J., Tibshirani, R.
Springer.2013

- **Elements of Statistical Learning: datamining, inference, and prediction (second edition)** *Springer*

T. Hastie, R. Tibshirani, J. Friedman
2009

- **PATHWISE COORDINATE OPTIMIZATION** *ANNALS OF APPLIED STATISTICS*

Friedman, J., Hastie, T., Hoefling, H., Tibshirani, R.
2007; 1 (2): 302-332

- **Regularization and variable selection via the elastic net** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*

Zou, H., Hastie, T.
2005; 67: 301-320

- **The entire regularization path for the support vector machine** *JOURNAL OF MACHINE LEARNING RESEARCH*

Hastie, T., Rosset, S., Tibshirani, R., Zhu, J.
2004; 5: 1391-1415

- **Boosting as a regularized path to a maximum margin classifier** *JOURNAL OF MACHINE LEARNING RESEARCH*

Rosset, S., Ji, Z., Hastie, T.
2004; 5: 941-973

- **Least angle regression** *ANNALS OF STATISTICS*

Efron, B., Hastie, T., Johnstone, I., Tibshirani, R.
2004; 32 (2): 407-451

- **Bayesian backfitting - Comments and rejoinder** *STATISTICAL SCIENCE*

Cook, R. D., Pardoe, L., Gelfand, A. E., Green, P. J., Hastie, T., Tibshirani, R.
2000; 15 (3): 213-223

- **Additive logistic regression: A statistical view of boosting** *ANNALS OF STATISTICS*

Friedman, J., Hastie, T., Tibshirani, R.
2000; 28 (2): 337-374

- **Discriminant analysis by Gaussian mixtures** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-METHODOLOGICAL*

Hastie, T., Tibshirani, R.
1996; 58 (1): 155-176

- **VARYING-COEFFICIENT MODELS** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*

Hastie, T., Tibshirani, R.
1993; 55 (4): 757-796

- **Generalized Additive Models --**

Hastie TJ, Chapman, Hall (with R. Tibshirani)
1990

- **Quantifying Anterior Cruciate Ligament Injury Resilience: A Screening and Composite Score Framework.** *Orthopaedic journal of sports medicine*

Seagers, K., Swaminathan, K., Kolesar, J., Hamner, S., Muccini, J., Hicks, J., Myer, G., Hastie, T., Delp, S.
2026; 14 (5): 23259671261433009

- **Multi-omic identification of key transcriptional regulatory programs during endurance exercise training in rats.** *Nature communications*

- Smith, G. R., Zhao, B., Lindholm, M. E., Raja, A., Viggars, M., Pincas, H., Gay, N. R., Sun, Y., Vangeti, S., Ge, Y., Nair, V. D., Sanford, J. A., Amper, et al
2026
- **A semi-supervised clustering approach for prediction and inference with multidimensional longitudinal outcomes** *HEALTH SERVICES AND OUTCOMES RESEARCH METHODOLOGY*
Jo, B., Hastie, T. J., Li, Z., Ma, Q., Foland-Ross, L. C., Mauras, N., Reiss, A. L.
2025
 - **Using pre-training and interaction modeling for ancestry-specific disease prediction using multiomics data from the UK Biobank.** *PLoS one*
Le Menestrel, T., Craig, E., Tibshirani, R., Hastie, T., Rivas, M.
2025; 20 (12): e0336861
 - **Automated Segmentation of Forearm Muscles: Clinical Associations With Hand Function, Muscle Volume and Intramuscular Fat.** *JCSM communications*
Fundaun, J., Oliva, V., Bédard, S., Wesselink, E. O., Lynn, B. P., Pai S, A., Pfyffer, D., Kaptan, M., Berhe, N., Ratliff, J., Hu, S. S., Smith, Z. A., Hastie, et al
2025; 8 (2): e70015
 - **Annotation-free discovery of disease-relevant cells in single-cell datasets.** *Science advances*
Craig, E., Keyes, T. J., Sarno, J., D'Silva, J. P., Domizi, P., Zaslavsky, M., Tsai, A., Glass, D., Nolan, G. P., Hastie, T., Tibshirani, R., Davis, K. L.
2025; 11 (35): eadv5019
 - **From Data Deficient to Big Data in Shark Conservation** *FISH AND FISHERIES*
Ferretti, F., Jenrette, J., Moro, S., Butner, C., Fox, E., Haddock, S. D., Jorgensen, S. J., Hastie, T., Micheli, F.
2025
 - **Thematic Investing: A Risk-Based Perspective** *FINANCIAL ANALYSTS JOURNAL*
Candes, E., Hastie, T., Hogan, K., Kahn, R. N., Luo, R., Spector, A.
2025
 - **A statistical view of column subset selection** *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY*
Sood, A., Hastie, T.
2025
 - **Genetics of cardiometabolic disease progression.** *medRxiv : the preprint server for health sciences*
Justesen, J. M., Venkataraman, G., Tanigawa, Y., Li, R., Hastie, T., Tibshirani, R., Knowles, J. W., Rivas, M. A.
2025
 - **Scalable solutions for crossed random-effect models with random slopes** *ELECTRONIC JOURNAL OF STATISTICS*
Ghandwani, D., Ghosh, S., Hastie, T., Owen, A.
2025; 19 (2): 5368-5408
 - **STATISTICAL CURVE MODELS FOR INFERRING 3D CHROMATIN ARCHITECTURE** *ANNALS OF APPLIED STATISTICS*
Uzhilina, L., Astie, T., Segal, M.
2024; 18 (4): 2979-3006
 - **The South African Statistical Association and its role in science in South Africa** *SOUTH AFRICAN JOURNAL OF SCIENCE*
Fabris-Rotelli, I., Smit, N., Potgieter, C. J., Fatti, P., Blignaut, R. J., Hastie, T., Coetzer, R., Chhana, Y., le Roux, N., Lubbe, S., Reddy, T., Debba, P., Ferreira, et al
2024; 120
 - **A randomized clinical trial testing digital mindset intervention for knee osteoarthritis pain and activity improvement.** *NPJ digital medicine*
Boswell, M. A., Evans, K. M., Ghandwani, D., Hastie, T., Zion, S. R., Moya, P. L., Giori, N. J., Hicks, J. L., Crum, A. J., Delp, S. L.
2024; 7 (1): 285
 - **Psychiatric Symptoms, Cognition, and Symptom Severity in Children.** *JAMA psychiatry*
Pines, A., Tozzi, L., Bertrand, C., Keller, A. S., Zhang, X., Whitfield-Gabrieli, S., Hastie, T., Larsen, B., Leikauf, J., Williams, L. M.
2024
 - **PathGPS: discover shared genetic architecture using GWAS summary data.** *Biometrics*

- Gao, Z., Zhao, Q., Hastie, T.
2024; 80 (3)
- **The impact of exercise on gene regulation in association with complex trait genetics.** *Nature communications*
Vetr, N. G., Gay, N. R., MoTrPAC Study Group, Montgomery, S. B., Adkins, J. N., Albertson, B. G., Amar, D., Amper, M. A., Armenteros, J. J., Ashley, E., Avila-Pacheco, J., Bae, D., Balci, A. T., et al
2024; 15 (1): 3346
 - **Temporal dynamics of the multi-omic response to endurance exercise training.** *Nature*
2024; 629 (8010): 174-183
 - **A DIGITAL MINDSET INTERVENTION TO IMPROVE PAIN AND EXERCISE PARTICIPATION IN INDIVIDUALS WITH KNEE OSTEOARTHRITIS: A RANDOMIZED CLINICAL TRIAL**
Boswell, M., Evans, K., Ghnadwani, D., Hastie, T., Zion, S., Moya, P., Giori, N., Crum, A., Delp, S.
ELSEVIER SCI LTD.2024: S7-S8
 - **In silico identification of putative causal genetic variants.** *bioRxiv : the preprint server for biology*
He, Z., Chu, B., Yang, J., Gu, J., Chen, Z., Liu, L., Morrison, T., Belloy, M. E., Qi, X., Hejazi, N., Mathur, M., Le Guen, Y., Tang, et al
2024
 - **A modified Michaelis-Menten equation estimates growth from birth to 3 years in healthy babies in the USA.** *BMC medical research methodology*
Walters, W. A., Ley, C., Hastie, T., Ley, R. E., Parsonnet, J.
2024; 24 (1): 27
 - **Smooth multi-period forecasting with application to prediction of COVID-19 cases.** *Journal of computational and graphical statistics : a joint publication of American Statistical Association, Institute of Mathematical Statistics, Interface Foundation of North America*
Tuzhilina, E., Hastie, T. J., McDonald, D. J., Tay, J. K., Tibshirani, R.
2024; 33 (3): 955-967
 - **Smooth Multi-Period Forecasting With Application to Prediction of COVID-19 Cases** *JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS*
Tuzhilina, E., Hastie, T. J., Mcdonald, D. J., Tay, J., Tibshirani, R.
2024
 - **Modeling Longitudinal Data Using Matrix Completion** *JOURNAL OF COMPUTATIONAL AND GRAPHICAL STATISTICS*
Kidzinski, L., Hastie, T.
2023
 - **Defining Usual Oral Temperature Ranges in Outpatients Using an Unsupervised Learning Algorithm.** *JAMA internal medicine*
Ley, C., Heath, F., Hastie, T., Gao, Z., Protsiv, M., Parsonnet, J.
2023
 - **A modified Michaelis-Menten equation estimates growth from birth to 3 years in healthy babies in the US.** *Research square*
Walters, W., Ley, C., Hastie, T., Ley, R., Parsonnet, J.
2023
 - **Canonical correlation analysis in high dimensions with structured regularization.** *Statistical modelling*
Tuzhilina, E., Tozzi, L., Hastie, T.
2023; 23 (3): 203-227
 - **Reorienting Latent Variable Modeling for Supervised Learning.** *Multivariate behavioral research*
Jo, B., Hastie, T. J., Li, Z., Youngstrom, E. A., Findling, R. L., Horwitz, S. M.
2023: 1-15
 - **A tissue atlas of ulcerative colitis revealing evidence of sex-dependent differences in disease-driving inflammatory cell types and resistance to TNF inhibitor therapy** *SCIENCE ADVANCES*
Mayer, A. T., Holman, D. R., Sood, A., Tandon, U., Bhate, S. S., Bodapati, S., Barlow, G. L., Chang, J., Black, S., Crenshaw, E. C., Koron, A. N., Streett, S. E., Gambhir, et al
2023; 9 (3)

- **Comparing spatial patterns of marine vessels between vessel-tracking data and satellite imagery** *FRONTIERS IN MARINE SCIENCE*
Nakayama, S., Dong, W., Corroero, R. G. G., Selig, E. R. R., Wabnitz, C. C. C., Hastie, T. J. J., Leape, J., Yeung, S., Micheli, F.
2023; 9
- **A tissue atlas of ulcerative colitis revealing evidence of sex-dependent differences in disease-driving inflammatory cell types and resistance to TNF inhibitor therapy.** *Science advances*
Mayer, A. T., Holman, D. R., Sood, A., Tandon, U., Bhate, S. S., Bodapati, S., Barlow, G. L., Chang, J., Black, S., Crenshaw, E. C., Koron, A. N., Streett, S. E., Gambhir, et al
2023; 9 (3): eadd1166
- **Feature-weighted elastic net: using "features of features" for better prediction.** *Statistica Sinica*
Tay, J. K., Aghaeepour, N., Hastie, T., Tibshirani, R.
2023; 33 (1): 259-279
- **Principal component analysis** *NATURE REVIEWS METHODS PRIMERS*
Greenacre, M., Groenen, P. J. F., Hastie, T., D'Enza, A., Markos, A., Tuzhilina, E.
2022; 2 (1)
- **Confounds in neuroimaging: A clear case of sex as a confound in brain-based prediction.** *Frontiers in neurology*
Weber, K. A., Teplin, Z. M., Wager, T. D., Law, C. S., Prabhakar, N. K., Ashar, Y. K., Gilam, G., Banerjee, S., Delp, S. L., Glover, G. H., Hastie, T. J., Mackey, S.
2022; 13: 960760
- **Generalized Matrix Factorization: efficient algorithms for fitting generalized linear latent variable models to large data arrays.** *Journal of machine learning research : JMLR*
Kidzinski, L., Hui, F. K., Warton, D. I., Hastie, T.
2022; 23
- **Shark detection and classification with machine learning** *ECOLOGICAL INFORMATICS*
Jenrette, J., Liu, Z., Chimote, P., Hastie, T., Fox, E., Ferretti, F.
2022; 69
- **Multiclass-penalized logistic regression** *COMPUTATIONAL STATISTICS & DATA ANALYSIS*
Nibbering, D., Hastie, T. J.
2022; 169
- **SURPRISES IN HIGH-DIMENSIONAL RIDGELESS LEAST SQUARES INTERPOLATION** *ANNALS OF STATISTICS*
Hastie, T., Montanari, A., Rosset, S., Tibshirani, R. J.
2022; 50 (2): 949-986
- **BACKFITTING FOR LARGE SCALE CROSSED RANDOM EFFECTS REGRESSIONS** *ANNALS OF STATISTICS*
Ghosh, S., Hastie, T., Owen, A. B.
2022; 50 (1): 560-583
- **Scalable logistic regression with crossed random effects** *ELECTRONIC JOURNAL OF STATISTICS*
Ghosh, S., Hastie, T., Owen, A. B.
2022; 16 (2): 4604-4635
- **Author Correction: Genetics of 35 blood and urine biomarkers in the UK Biobank.** *Nature genetics*
Sinnott-Armstrong, N., Tanigawa, Y., Amar, D., Mars, N., Benner, C., Aguirre, M., Venkataraman, G. R., Wainberg, M., Ollila, H. M., Kiiskinen, T., Havulinna, A. S., Pirruccello, J. P., Qian, et al
2021
- **Canonical correlation analysis in high dimensions with structured regularization** *STATISTICAL MODELLING*
Tuzhilina, E., Tozzi, L., Hastie, T.
2021
- **Prediction of Cognitive Function with Multimodal Brain MRI**
Weber, K., Wager, T. D., Rosen, A., Ashar, Y. K., Law, C. S., Gilam, G., Upadhyayula, P. A., Zhu, S., Banerjee, S., Glover, G. H., Hastie, T. J., Mackey, S.

WILEY.2021: S42

- **Author Correction: An inflammatory aging clock (iAge) based on deep learning tracks multimorbidity, immunosenescence, frailty and cardiovascular aging.** *Nature aging*
Sayed, N., Huang, Y., Nguyen, K., Krejciova-Rajaniemi, Z., Grawe, A. P., Gao, T., Tibshirani, R., Hastie, T., Alpert, A., Cui, L., Kuznetsova, T., Rosenberg-Hasson, Y., Ostan, et al
2021; 1 (8): 748
- **Corrigendum to: Fast Lasso method for large-scale and ultrahigh-dimensional Cox model with applications to UK Biobank.** *Biostatistics (Oxford, England)*
Li, R., Chang, C., Justesen, J. M., Tanigawa, Y., Qian, J., Hastie, T., Rivas, M. A., Tibshirani, R.
2021
- **An inflammatory aging clock (iAge) based on deep learning tracks multimorbidity, immunosenescence, frailty and cardiovascular aging.** *Nature aging*
Sayed, N., Huang, Y., Nguyen, K., Krejciova-Rajaniemi, Z., Grawe, A. P., Gao, T., Tibshirani, R., Hastie, T., Alpert, A., Cui, L., Kuznetsova, T., Rosenberg-Hasson, Y., Ostan, et al
2021; 1: 598-615
- **Fast Numerical Optimization for Genome Sequencing Data in Population Biobanks.** *Bioinformatics (Oxford, England)*
Li, R., Chang, C., Tanigawa, Y., Narasimhan, B., Hastie, T., Tibshirani, R., Rivas, M. A.
2021
- **Wearable sensors enable personalized predictions of clinical laboratory measurements.** *Nature medicine*
Dunn, J., Kidzinski, L., Runge, R., Witt, D., Hicks, J. L., Schussler-Fiorenza Rose, S. M., Li, X., Bahmani, A., Delp, S. L., Hastie, T., Snyder, M. P.
2021
- **Relating whole-brain functional connectivity to self-reported negative emotion in a large sample of young adults using group regularized canonical correlation analysis.** *NeuroImage*
Tozzi, L., Tuzhilina, E., Glasser, M. F., Hastie, T. J., Williams, L. M.
2021: 118137
- **Multi-Muscle Deep Learning Segmentation to Automate the Quantification of Muscle Fat Infiltration in Cervical Spine Conditions**
Weber, K., Abbott, R., Bojilov, V., Smith, A., Wasielewski, M., Hastie, T., Parrish, T., Mackey, S., Elliott, J.
CHURCHILL LIVINGSTONE.2021: 600-601
- **Assessment of heterogeneous treatment effect estimation accuracy via matching.** *Statistics in medicine*
Gao, Z., Hastie, T., Tibshirani, R.
2021
- **Survival Analysis on Rare Events Using Group-Regularized Multi-Response Cox Regression.** *Bioinformatics (Oxford, England)*
Li, R., Tanigawa, Y., Justesen, J. M., Taylor, J., Hastie, T., Tibshirani, R., Rivas, M. A.
2021
- **Polygenic risk modeling with latent trait-related genetic components.** *European journal of human genetics : EJHG*
Aguirre, M., Tanigawa, Y., Venkataraman, G. R., Tibshirani, R., Hastie, T., Rivas, M. A.
2021
- **Genetics of 35 blood and urine biomarkers in the UK Biobank.** *Nature genetics*
Sinnott-Armstrong, N., Tanigawa, Y., Amar, D., Mars, N., Benner, C., Aguirre, M., Venkataraman, G. R., Wainberg, M., Ollila, H. M., Kiiskinen, T., Havulinna, A. S., Pirruccello, J. P., Qian, et al
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