



Stanford



Purvesh Khatri

Associate Professor (Research) of Medicine (Biomedical Informatics - Research Institute for Immunity, Transplantation and Infection) and of Biomedical Data Science

 NIH Biosketch available Online

 Curriculum Vitae available Online

CONTACT INFORMATION

• Alternate Contact

Natasha Haulman - Administrative Assistant

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Bio

ACADEMIC APPOINTMENTS

- Associate Professor (Research), Medicine
- Associate Professor (Research), Biomedical Data Science
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Assistant Professor, Institute for Immunity, Transplantation and Infection, (2014- present)

Research & Scholarship

CLINICAL TRIALS

- Longitudinal Gene Expression Profiling in Adults After Traumatic Injury, Not Recruiting

Teaching

COURSES

2021-22

- Essential Methods in Computational and Systems Immunology: IMMUNOL 207 (Spr)
- Seminars in Computational and Systems Immunology: IMMUNOL 310 (Sum)

2020-21

- Essential Methods in Computational and Systems Immunology: IMMUNOL 207 (Spr)
- Seminars in Computational and Systems Immunology: IMMUNOL 310 (Sum)

2019-20

- Essential Methods in Computational and Systems Immunology: IMMUNOL 207 (Spr)
- Seminars in Computational and Systems Immunology: IMMUNOL 310 (Sum)

2018-19

- Essential Methods in Computational and Systems Immunology: IMMUNOL 207 (Spr)
- Seminars in Computational and Systems Immunology: IMMUNOL 310 (Sum)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Jason Nideffer

Postdoctoral Faculty Sponsor

Sanjana Gupta, Lara Jones

Doctoral Dissertation Advisor (AC)

Ananthakrishnan Ganesan, Hacer Umay Geyikci, Larry Kalesinskas, Yiran Liu, Madeleine Scott

Doctoral Dissertation Co-Advisor (AC)

Kalani Ratnasiri, Jiaying Toh

Postdoctoral Research Mentor

Sanjana Gupta, Lara Jones, Krishna Martinez-Singh

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biomedical Informatics (Phd Program)
- Immunology (Phd Program)

Publications

PUBLICATIONS

- **Increasing reproducibility, robustness, and generalizability of biomarker selection from meta-analysis using Bayesian methodology.** *PLoS computational biology*
Kalesinskas, L., Gupta, S., Khatri, P.
2022; 18 (6): e1010260
- **Host protease activity classifies pneumonia etiology.** *Proceedings of the National Academy of Sciences of the United States of America*
Anahtar, M., Chan, L. W., Ko, H., Rao, A., Soleimany, A. P., Khatri, P., Bhatia, S. N.
2022; 119 (25): e2121778119
- **An 8-gene machine learning model improves clinical prediction of severe dengue progression.** *Genome medicine*
Liu, Y. E., Saul, S., Rao, A. M., Robinson, M. L., Agudelo Rojas, O. L., Sanz, A. M., Verghese, M., Solis, D., Sibai, M., Huang, C. H., Sahoo, M. K., Gelvez, R. M., Bueno, et al
2022; 14 (1): 33
- **Increases in ambient air pollutants during pregnancy are linked to increases in methylation of IL4, IL10, and IFN γ .** *Clinical epigenetics*
Aguilera, J., Han, X., Cao, S., Balmes, J., Lurmann, F., Tyner, T., Lutzker, L., Noth, E., Hammond, S. K., Sampath, V., Burt, T., Utz, P. J., Khatri, et al
2022; 14 (1): 40
- **Mechanisms of innate and adaptive immunity to the Pfizer-BioNTech BNT162b2 vaccine.** *Nature immunology*
Li, C., Lee, A., Grigoryan, L., Arunachalam, P. S., Scott, M. K., Trisal, M., Wimmers, F., Sanyal, M., Weidenbacher, P. A., Feng, Y., Adamska, J. Z., Valore, E., Wang, et al
2022
- **Author Correction: The immunoregulatory landscape of human tuberculosis granulomas.** *Nature immunology*
McCaffrey, E. F., Donato, M., Keren, L., Chen, Z., Delmastro, A., Fitzpatrick, M. B., Gupta, S., Greenwald, N. F., Baranski, A., Graf, W., Kumar, R., Bosse, M., Fullaway, et al
2022

- **Serum proteome analysis of systemic JIA and related lung disease identifies distinct inflammatory programs and biomarkers.** *Arthritis & rheumatology (Hoboken, N.J.)*
Chen, G., Deutsch, G. H., Schulert, G., Zheng, H., Jang, S., Trapnell, B., Lee, P., Macaubas, C., Ho, K., Schneider, C., Saper, V. E., de Jesus, A. A., Krasnow, et al
2022
- **A GMR-based assay for quantification of the human response to influenza.** *Biosensors & bioelectronics*
Ravi, N., Chang, S. E., Franco, L. M., Nagamani, S. C., Khatri, P., Utz, P. J., Wang, S. X.
2022; 205: 114086
- **A robust gene expression signature for NASH in liver expression data.** *Scientific reports*
Hasin-Brumshtein, Y., Sakaram, S., Khatri, P., He, Y. D., Sweeney, T. E.
2022; 12 (1): 2571
- **Cytokine signatures differentiate systemic sclerosis patients at high versus low risk for pulmonary arterial hypertension.** *Arthritis research & therapy*
Kolstad, K. D., Khatri, A., Donato, M., Chang, S. E., Li, S., Steen, V. D., Utz, P. J., Khatri, P., Chung, L.
2022; 24 (1): 39
- **The Single Cell Transcriptomic and Epigenomic Map of the Innate Immune Response to Vaccination in Lymph Nodes**
Scott, M., Lee, A., Wimmers, F., Arunachalam, P., Fox, C., Tomai, M., Khatri, P., Pulendran, B.
MOSBY-ELSEVIER.2022: AB316
- **A molecular atlas of innate immunity to adjuvanted and live attenuated vaccines, in mice.** *Nature communications*
Lee, A., Scott, M. K., Wimmers, F., Arunachalam, P. S., Luo, W., Fox, C. B., Tomai, M., Khatri, P., Pulendran, B.
1800; 13 (1): 549
- **A 6-mRNA host response classifier in whole blood predicts outcomes in COVID-19 and other acute viral infections.** *Scientific reports*
Buturovic, L., Zheng, H., Tang, B., Lai, K., Kuan, W. S., Gillett, M., Santram, R., Shojaei, M., Almansa, R., Nieto, J. A., Munoz, S., Herrero, C., Antonakos, et al
1800; 12 (1): 889
- **Disease characteristics and serological responses in patients with differing severity of COVID-19 infection: A longitudinal cohort study in Dhaka, Bangladesh.** *PLoS neglected tropical diseases*
Akter, A., Ahmed, T., Tauheed, I., Akhtar, M., Rahman, S. I., Khaton, F., Ahmmed, F., Ferdous, J., Afrad, M. H., Kawser, Z., Hossain, M., Khondaker, R., Hasnat, et al
2022; 16 (1): e0010102
- **The immunoregulatory landscape of human tuberculosis granulomas.** *Nature immunology*
McCaffrey, E. F., Donato, M., Keren, L., Chen, Z., Delmastro, A., Fitzpatrick, M. B., Gupta, S., Greenwald, N. F., Baranski, A., Graf, W., Kumar, R., Bosse, M., Fullaway, et al
2022
- **Comparison of the Transcriptomic Signatures in Pediatric and Adult CML.** *Cancers*
Youn, M., Smith, S. M., Lee, A. G., Chae, H., Spiteri, E., Erdmann, J., Galperin, I., Jones, L. M., Donato, M., Abidi, P., Bittencourt, H., Lacayo, N., Dahl, et al
1800; 13 (24)
- **Identification of a LAMC2-regulated network featuring targetable effectors for dual therapies in pancreatic cancer.**
Narayanan, S., Erice, O., Feliu, I., Vicentini, C., Entrialgo-Cadierno, R., Valencia, K., Guruceaga, E., Khatri, P., Corbo, V., Cambra, S., Ponz-Sarvisé, M.
AMER ASSOC CANCER RESEARCH.2021: 59-60
- **A Multi-mRNA Prognostic Signature for Anti-TNFalpha Therapy Response in Patients with Inflammatory Bowel Disease.** *Diagnostics (Basel, Switzerland)*
Sakaram, S., Hasin-Brumshtein, Y., Khatri, P., He, Y. D., Sweeney, T. E.
2021; 11 (10)
- **Functional Consequences of Memory Inflation after Solid Organ Transplantation.** *Journal of immunology (Baltimore, Md. : 1950)*
Higdon, L. E., Schaffert, S., Cohen, R. H., Montez-Rath, M. E., Lucia, M., Saligrama, N., Margulies, K. B., Martinez, O. M., Tan, J. C., Davis, M. M., Khatri, P., Maltzman, J. S.
2021
- **Evolution of Cytomegalovirus-Responsive T Cell Clonality following Solid Organ Transplantation.** *Journal of immunology (Baltimore, Md. : 1950)*
Higdon, L. E., Schaffert, S., Huang, H., Montez-Rath, M. E., Lucia, M., Jha, A., Saligrama, N., Margulies, K. B., Martinez, O. M., Davis, M. M., Khatri, P., Maltzman, J. S.

2021

- **Computational drug repositioning of atorvastatin for ulcerative colitis.** *Journal of the American Medical Informatics Association : JAMIA*
Bai, L., Scott, M. K., Steinberg, E., Kalesinskas, L., Habtezion, A., Shah, N. H., Khatri, P.
2021
- **Macrophage-derived IL-6 trans-signaling as a novel target in the pathogenesis of bronchopulmonary dysplasia.** *The European respiratory journal*
Hirani, D., Alvira, C. M., Danopoulos, S., Milla, C., Donato, M., Tian, L., Mohr, J., Dinger, K., Vohlen, C., Selle, J., Koningsbruggen-Rietschel, S. V., Barbarino, V., Pallasch, et al
2021
- **The single-cell epigenomic and transcriptional landscape of immunity to influenza vaccination in humans**
Wimmers, F., Donato, M., Kuo, A., Ashuach, T., Gupta, S., Li, C., Dvorak, M., Foecke, M., Chang, S. E., Hagan, T., De Jong, S. E., Maecker, H. T., Van der Most, et al
WILEY.2021: 31
- **A novel blood-based assay for treatment monitoring of tuberculosis.** *BMC research notes*
Zimmer, A. J., Schumacher, S. G., Sodersten, E., Mantsoki, A., Wyss, R., Persing, D. H., Banderby, S., Stromqvist Meuzelaar, L., Prieto, J., Gnanashanmugam, D., Khatri, P., Ongarello, S., Ruhwald, et al
2021; 14 (1): 247
- **Prospective validation of an 11-gene mRNA host response score for mortality risk stratification in the intensive care unit.** *Scientific reports*
Moore, A. R., Roque, J., Shaller, B. T., Asuni, T., Rimmel, M., Rawling, D., Liesenfeld, O., Khatri, P., Wilson, J. G., Levitt, J. E., Sweeney, T. E., Rogers, A. J.
2021; 11 (1): 13062
- **The single-cell epigenomic and transcriptional landscape of immunity to influenza vaccination.** *Cell*
Wimmers, F., Donato, M., Kuo, A., Ashuach, T., Gupta, S., Li, C., Dvorak, M., Foecke, M. H., Chang, S. E., Hagan, T., De Jong, S. E., Maecker, H. T., van der Most, et al
2021
- **Repression of CTSG, ELANE and PRTN3-mediated histone H3 proteolytic cleavage promotes monocyte-to-macrophage differentiation.** *Nature immunology*
Cheung, P., Schaffert, S., Chang, S. E., Dvorak, M., Donato, M., Macaubas, C., Foecke, M. H., Li, T., Zhang, L., Coan, J. P., Schulert, G. S., Grom, A. A., Henderson, et al
2021
- **Diversity in immunogenomics: the value and the challenge.** *Nature methods*
Peng, K., Safonova, Y., Shugay, M., Popejoy, A. B., Rodriguez, O. L., Breden, F., Brodin, P., Burkhardt, A. M., Bustamante, C., Cao-Lorreau, V., Corcoran, M. M., Duffy, D., Fuentes-Guajardo, et al
2021
- **iPSC-endothelial cell phenotypic drug screening and in silico analyses identify tyrphostin-AG1296 for pulmonary arterial hypertension.** *Science translational medicine*
Gu, M., Donato, M., Guo, M., Wary, N., Miao, Y., Mao, S., Saito, T., Otsuki, S., Wang, L., Harper, R. L., Sa, S., Khatri, P., Rabinovitch, et al
2021; 13 (592)
- **Gene Expression-Based Diagnosis of Infections in Critically Ill Patients-Prospective Validation of the SepsisMetaScore in a Longitudinal Severe Trauma Cohort.** *Critical care medicine*
Thair, S., Mewes, C., Hinz, J., Bergmann, I., Buttner, B., Schmisch, S., Meissner, K., Quintel, M., Sweeney, T. E., Khatri, P., Mansur, A.
2021
- **Multisystem inflammatory syndrome in children: a microcosm of challenges and opportunities for translational bioinformatics in pediatric research.** *Current opinion in pediatrics*
Murphy Jones, L., Khatri, P.
2021
- **Multi-cohort analysis of host immune response identifies conserved protective and detrimental modules associated with severity across viruses.** *Immunity*
Zheng, H., Rao, A. M., Dermadi, D., Toh, J., Murphy Jones, L., Donato, M., Liu, Y., Su, Y., Dai, C. L., Kornilov, S. A., Karagiannis, M., Marantos, T., Hasin-Brumshtein, et al
2021

- **Transcriptomic similarities and differences in host response between SARS-CoV-2 and other viral infections.** *iScience*
Thair, S. A., He, Y. D., Hasin-Brumshtein, Y., Sakaram, S., Pandya, R., Toh, J., Rawling, D., Rimmel, M., Coyle, S., Dalekos, G. N., Koutsodimitropoulos, I., Vlachogianni, G., Gkeka, et al
2021; 24 (1): 101947
- **SIMON: Open-Source Knowledge Discovery Platform.** *Patterns (New York, N.Y.)*
Tomic, A., Tomic, I., Waldron, L., Geistlinger, L., Kuhn, M., Spreng, R. L., Dahora, L. C., Seaton, K. E., Tomaras, G., Hill, J., Duggal, N. A., Pollock, R. D., Lazarus, et al
2021; 2 (1): 100178
- **A multi-scale integrated analysis identifies KRT8 as a pan-cancer early biomarker.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
Scott, M. K., Limaye, M., Schaffert, S., West, R., Ozawa, M. G., Chu, P., Nair, V. S., Koong, A. C., Khatri, P.
2021; 26: 297–308
- **Multicohort Analysis Identifies Monocyte Gene Signatures to Accurately Monitor Subset-Specific Changes in Human Diseases.** *Frontiers in immunology*
Vallania, F., Zisman, L., Macaubas, C., Hung, S., Rajasekaran, N., Mason, S., Graf, J., Nakamura, M., Mellins, E. D., Khatri, P.
2021; 12: 659255
- **A multi-scale integrated analysis identifies KRT8 as a pan-cancer early biomarker**
Scott, M. D., Ozawa, M. G., Chu, P., Limaye, M., Nair, V. S., Schaffert, S., Koong, A. C., West, R., Khatri, P., Altman, R. B., Dunker, A. K., Hunter, L., Ritchie, et al
WORLD SCIENTIFIC PUBL CO PTE LTD.2021: 297-308
- **Systems vaccinology of the BNT162b2 mRNA vaccine in humans.** *Nature*
Arunachalam, P. S., Scott, M. K., Hagan, T., Li, C., Feng, Y., Wimmers, F., Grigoryan, L., Trisal, M., Edara, V. V., Lai, L., Chang, S. E., Feng, A., Dhingra, et al
2021
- **Formulating a Gene Signature for Diagnosis of Autoimmune and Infectious Diseases**
Gupta, R., Rao, A. M., Jones, L., Khatri, P., ASSOC COMP MACHINERY
ASSOC COMPUTING MACHINERY.2021
- **Signatures of immune dysfunction in HIV and HCV infection share features with chronic inflammation in aging and persist after viral reduction or elimination.** *Proceedings of the National Academy of Sciences of the United States of America*
Lopez Angel, C. J., Pham, E. A., Du, H. n., Vallania, F. n., Fram, B. J., Perez, K. n., Nguyen, T. n., Rosenberg-Hasson, Y. n., Ahmed, A. n., Dekker, C. L., Grant, P. M., Khatri, P. n., Maecker, et al
2021; 118 (14)
- **Blood-based host biomarker diagnostics in active case finding for pulmonary tuberculosis:** *EClinicalMedicine, published by The Lancet*
Martinez, F., Verma, R., Cesar, P., Leite, A., Santos, ., Rafaele, Bruna, Persing, D., Södersten, E., Gnanashanmugam, D., Khatri, P., Croda, J., Andrews, J., et al
2021
- **Diagnostic accuracy study of a novel blood-based assay for identification of TB in people living with HIV.** *Journal of clinical microbiology*
Sodersten, E., Ongarello, S., Mantsoki, A., Wyss, R., Persing, D. H., Banderby, S., Meuzelaar, L. S., Prieto, J., Gnanashanmugam, D., Khatri, P., Schumacher, S. G., Denking, C. M.
2020
- **Data Heterogeneity: The Enzyme to Catalyze Translational Bioinformatics?** *Journal of medical Internet research*
Cahan, E. M., Khatri, P.
2020; 22 (8): e18044
- **Systems biological assessment of immunity to mild versus severe COVID-19 infection in humans.** *Science (New York, N.Y.)*
Arunachalam, P. S., Wimmers, F., Mok, C. K., Perera, R. A., Scott, M., Hagan, T., Sigal, N., Feng, Y., Bristow, L., Tak-Yin Tsang, O., Wagh, D., Collier, J., Pellegrini, et al
2020
- **Cellular senescence impairs the reversibility of pulmonary arterial hypertension.** *Science translational medicine*
van der Feen, D. E., Bossers, G. P., Hagdorn, Q. A., Moonen, J., Kurakula, K., Szulcek, R., Chappell, J., Vallania, F., Donato, M., Kok, K., Kohli, J. S., Petersen, A. H., van Leusden, et al
2020; 12 (554)

- **Response to: 'Successful treatment of plasma exchange for refractory systemic juvenile idiopathic arthritis complicated with macrophage activation syndrome and severe lung disease' by Sato et al.** *Annals of the rheumatic diseases*
Saper, V. E., Chen, G., Guillerman, R. P., Khatri, P., Cron, R. Q., Mellins, E. D.
2020
- **A generalizable 29-mRNA neural-network classifier for acute bacterial and viral infections.** *Nature communications*
Mayhew, M. B., Buturovic, L., Luethy, R., Midic, U., Moore, A. R., Roque, J. A., Shaller, B. D., Asuni, T., Rawling, D., Rimmel, M., Choi, K., Wacker, J., Khatri, et al
2020; 11 (1): 1177
- **Response to: 'Effectiveness and safety of ruxolitinib for the treatment of refractory systemic idiopathic juvenile arthritis like associated with interstitial lung disease: case report' by Bader-Meunier et al.** *Annals of the rheumatic diseases*
Saper, V. E., Chen, G. n., Khatri, P. n., Mellins, E. D.
2020
- **High-throughput quantitative histology in systemic sclerosis skin disease using computer vision.** *Arthritis research & therapy*
Correia, C. n., Mawe, S. n., Lofgren, S. n., Marangoni, R. G., Lee, J. n., Saber, R. n., Aren, K. n., Cheng, M. n., Teaw, S. n., Hoffmann, A. n., Goldberg, I. n., Cowper, S. E., Khatri, et al
2020; 22 (1): 48
- **T cell-inducing vaccine durably prevents mucosal SHIV infection even with lower neutralizing antibody titers.** *Nature medicine*
Arunachalam, P. S., Charles, T. P., Joag, V. n., Bollimpelli, V. S., Scott, M. K., Wimmers, F. n., Burton, S. L., Labranche, C. C., Petitdemange, C. n., Gangadhara, S. n., Styles, T. M., Quarnstrom, C. F., Walter, et al
2020
- **Integrated, multicohort analysis reveals unified signature of systemic lupus erythematosus.** *JCI insight*
Haynes, W. A., Haddon, D. J., Diep, V. K., Khatri, A. n., Bongen, E. n., Yiu, G. n., Balboni, I. n., Bolen, C. R., Mao, R. n., Utz, P. J., Khatri, P. n.
2020; 5 (4)
- **Pilot study of a novel serum mRNA gene panel for diagnosis of acute septic arthritis.** *World journal of orthopedics*
Schultz, B. J., Sweeney, T., DeBaun, M. R., Rimmel, M., Midic, U., Khatri, P., Gardner, M. J.
2019; 10 (12): 424-33
- **Sex Differences in the Blood Transcriptome Identify Robust Changes in Immune Cell Proportions with Aging and Influenza Infection.** *Cell reports*
Bongen, E., Lucian, H., Khatri, A., Fragiadakis, G. K., Bjornson, Z. B., Nolan, G. P., Utz, P. J., Khatri, P.
2019; 29 (7): 1961
- **Multiplex Serum Analysis Identifies Potential Biomarkers of Systemic Juvenile Idiopathic Arthritis, Macrophage Activation Syndrome, and Associated Pulmonary Alveolar Proteinosis: Evidence for Independently-regulated Hyperinflammatory and Eosinophilic Inflammation**
Chen, G., Schulert, G., De Jesus, A., Saper, V., Schneider, C., Trapnell, B., Grom, A. A., Goldbach-Mansky, R., Mellins, E., Khatri, P., Canna, S.
WILEY.2019
- **Cytokine Signatures Differentiate Systemic Sclerosis Patients at High versus Low Risk for Pulmonary Arterial Hypertension**
Kolstad, K., Khatri, A., Donato, M., Chang, S., Li, S., Steen, V., Utz, P., Khatri, P., Chung, L.
WILEY.2019
- **Transplantation Alters Function and Clonality of Cytomegalovirus-Responsive T Cells**
Higdon, L. E., Schaffert, S., Saligrama, N., Davis, M. M., Khatri, P., Maltzman, J. S.
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Computational and Systems Immunology: A Student's Perspective.** *Trends in immunology*
Good, Z., Glanville, J., Gee, M. H., Davis, M. M., Khatri, P.
2019
- **Increased monocyte count as a cellular biomarker for poor outcomes in fibrotic diseases: a retrospective, multicentre cohort study** *LANCET RESPIRATORY MEDICINE*
Scott, M. D., Quinn, K., Li, Q., Carroll, R., Warsinske, H., Vallania, F., Chen, S., Carns, M. A., Aren, K., Sun, J., Koloms, K., Lee, J., Baral, et al
2019; 7 (6): 497-508
- **Single-cell technologies - studying rheumatic diseases one cell at a time** *NATURE REVIEWS RHEUMATOLOGY*
Cheung, P., Khatri, P., Utz, P. J., Kuo, A. J.

2019; 15 (6): 340–54

- **Single cell immune profiling in transplantation research** *AMERICAN JOURNAL OF TRANSPLANTATION*
Higdon, L. E., Schaffert, S., Khatri, P., Maltzman, J. S.
2019; 19 (5): 1278–87
- **CD22 blockade restores homeostatic microglial phagocytosis in ageing brains** *NATURE*
Pluvinaige, J. V., Haney, M. S., Smith, B. H., Sun, J., Iram, T., Bonanno, L., Li, L., Lee, D. P., Morgens, D. W., Yang, A. C., Shuken, S. R., Gate, D., Scott, et al
2019; 568 (7751): 187–+
- **CD22 blockade restores homeostatic microglial phagocytosis in ageing brains.** *Nature*
Pluvinaige, J. V., Haney, M. S., Smith, B. A., Sun, J., Iram, T., Bonanno, L., Li, L., Lee, D. P., Morgens, D. W., Yang, A. C., Shuken, S. R., Gate, D., Scott, et al
2019
- **Host-response-based gene signatures for tuberculosis diagnosis: A systematic comparison of 16 signatures** *PLOS MEDICINE*
Warsinske, H., Vashisht, R., Khatri, P.
2019; 16 (4)
- **Increased monocyte count as a cellular biomarker for poor outcomes in fibrotic diseases: a retrospective, multicentre cohort study.** *The Lancet. Respiratory medicine*
Scott, M. K., Quinn, K., Li, Q., Carroll, R., Warsinske, H., Vallania, F., Chen, S., Carns, M. A., Aren, K., Sun, J., Koloms, K., Lee, J., Baral, et al
2019
- **Discovery of Distinct Immune Phenotypes Using Machine Learning in Pulmonary Arterial Hypertension** *CIRCULATION RESEARCH*
Sweatt, A. J., Hedlin, H. K., Balasubramanian, V., Hsi, A., Blum, L. K., Robinson, W. H., Haddad, F., Hickey, P. M., Condliffe, R., Lawrie, A., Nicolls, M. R., Rabinovitch, M., Khatri, et al
2019; 124 (6): 904–19
- **A clinically meaningful metric of immune age derived from high-dimensional longitudinal monitoring.** *Nature medicine*
Alpert, A., Pickman, Y., Leipold, M., Rosenberg-Hasson, Y., Ji, X., Gaujoux, R., Rabani, H., Starosvetsky, E., Kveler, K., Schaffert, S., Furman, D., Caspi, O., Rosenschein, et al
2019
- **A clinically meaningful metric of immune age derived from high-dimensional longitudinal monitoring** *NATURE MEDICINE*
Alpert, A., Pickman, Y., Leipold, M., Rosenberg-Hasson, Y., Ji, X., Gaujoux, R., Rabani, H., Starosvetsky, E., Kveler, K., Schaffert, S., Furman, D., Caspi, O., Rosenschein, et al
2019; 25 (3): 487–+
- **Single cell immune profiling in transplantation research.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
Higdon, L. E., Schaffert, S., Khatri, P., Maltzman, J. S.
2019
- **A 20-Gene Set Predictive of Progression to Severe Dengue.** *Cell reports*
Robinson, M., Sweeney, T. E., Barouch-Bentov, R., Sahoo, M. K., Kalesinskas, L., Vallania, F., Sanz, A. M., Ortiz-Lasso, E., Albornoz, L. L., Rosso, F., Montoya, J. G., Pinsky, B. A., Khatri, et al
2019; 26 (5): 1104
- **A 20-Gene Set Predictive of Progression to Severe Dengue** *CELL REPORTS*
Robinson, M., Sweeney, T. E., Barouch-Bentov, R., Sahoo, M., Kalesinskas, L., Vallania, F., Maria Sanz, A., Ortiz-Lasso, E., Luis Albornoz, L., Rosso, F., Montoya, J. G., Pinsky, B. A., Khatri, et al
2019; 26 (5): 1104–+
- **Single-cell technologies - studying rheumatic diseases one cell at a time.** *Nature reviews. Rheumatology*
Cheung, P. n., Khatri, P. n., Utz, P. J., Kuo, A. J.
2019
- **FHIT, a Novel Modifier Gene in Pulmonary Arterial Hypertension** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
Prosseda, S., Tian, X., Kuramoto, K., Boehm, M., Sudheendra, D., Miyagawa, K., Zhang, F., Solow-Cordero, D., Saldivar, J. C., Austin, E. D., Loyd, J. E., Wheeler, L., Andruska, et al
2019; 199 (1): 83-98

- **Data analytics for precision medicine** *GENOMIC AND PRECISION MEDICINE: INFECTIOUS AND INFLAMMATORY DISEASE, 3RD EDITION*
Sweeney, T. E., Khatri, P., Tsalik, E. L., Woods, C. W.
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