

# Stanford

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## Madeleine Scott

- MD Student, expected graduation Spring 2023
- Ph.D. Student in Biophysics, admitted Autumn 2017
- MSTP Student
- Stanford Student Employee, Pathology Sponsored Projects

### Bio

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#### EDUCATION AND CERTIFICATIONS

- Doctor of Philosophy, Stanford University , BIOPH-PHD (2022)
- Bachelor of Science, Massachusetts Institute of Technology , Biological Engineering (2014)

### Publications

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#### PUBLICATIONS

- **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
- **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
- **Histologic subtype of cutaneous immune-related adverse events predicts overall survival in patients receiving immune checkpoint inhibitors.** *Journal of the American Academy of Dermatology*  
Hirotsu, K. E., Scott, M. K., Marquez, C., Tran, A. T., Rieger, K. E., Novoa, R. A., Robinson, W. H., Kwong, B. Y., Zaba, L. C.  
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
- **N-Propargylglycine: a unique suicide inhibitor of proline dehydrogenase with anticancer activity and brain-enhancing mitohormesis properties.** *Amino acids*  
Scott, G. K., Mahoney, S., Scott, M., Loureiro, A., Lopez-Ramirez, A., Tanner, J. J., Ellerby, L. M., Benz, C. C.  
2021
- **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
- **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
- **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

- **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
- **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
- **CD22 blockade restores homeostatic microglial phagocytosis in ageing brains** *NATURE*  
Pluvinage, 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-+
- **Assessment of Validity of a Blood-Based 3-Gene Signature Score for Progression and Diagnosis of Tuberculosis, Disease Severity, and Treatment Response.** *JAMA network open*  
Warsinske, H. C., Rao, A. M., Moreira, F. M., Santos, P. C., Liu, A. B., Scott, M., Malherbe, S. T., Ronacher, K., Walzl, G., Winter, J., Sweeney, T. E., Croda, J., Andrews, et al  
2018; 1 (6): e183779
- **Higher Baseline Monocyte Count Is Associated with More Extensive Skin Involvement and Higher Mortality in Systemic Sclerosis**  
Mohan, V., Khatri, P., Theodore, S., Charles, J., Hau Pham, Nair, D., Scott, M., Reveille, J. D., Mayes, M. D., Assassi, S.  
WILEY.2017
- **META-ANALYSIS OF CONTINUOUS PHENOTYPES IDENTIFIES A GENE SIGNATURE THAT CORRELATES WITH COPD DISEASE STATUS.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*  
Scott, M., Vallania, F., Khatri, P.  
2016; 22: 266-275