

Thanaphong Phongpreecha

Instructor, Pathology

Bio

ACADEMIC APPOINTMENTS

- Instructor, Pathology
- Member, Wu Tsai Neurosciences Institute

Publications

PUBLICATIONS

- **Prediction of neuropathologic lesions from clinical data.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
Phongpreecha, T., Cholerton, B., Bhukari, S., Chang, A. L., De Francesco, D., Thuraiappah, M., Godrich, D., Perna, A., Becker, M. G., Ravindra, N. G., Espinosa, C., Kim, Y., Berson, et al
2023
- **In-Silico Generation of High-Dimensional Immune Response Data in Patients using a Deep Neural Network.** *Cytometry. Part A : the journal of the International Society for Analytical Cytology*
Fallahzadeh, R., Bidoki, N. H., Stelzer, I. A., Becker, M., Mari#, I., Chang, A. L., Culos, A., Phongpreecha, T., Xenochristou, M., De Francesco, D., Espinosa, C., Berson, E., Verdonk, et al
2022
- **A data-driven health index for neonatal morbidities.** *iScience*
De Francesco, D., Blumenfeld, Y. J., Maric, I., Mayo, J. A., Chang, A. L., Fallahzadeh, R., Phongpreecha, T., Butwick, A. J., Xenochristou, M., Phibbs, C. S., Bidoki, N. H., Becker, M., Culos, et al
2022; 25 (4): 104143
- **Revealing the impact of lifestyle stressors on the risk of adverse pregnancy outcomes with multitask machine learning.** *Frontiers in pediatrics*
Becker, M., Dai, J., Chang, A. L., Feyaerts, D., Stelzer, I. A., Zhang, M., Berson, E., Saarunya, G., De Francesco, D., Espinosa, C., Kim, Y., Maric, I., Mataraso, et al
2022; 10: 933266
- **Single-synapse analyses of Alzheimer's disease implicate pathologic tau, DJ1, CD47, and ApoE.** *Science advances*
Phongpreecha, T., Gajera, C. R., Liu, C. C., Vijayaragavan, K., Chang, A. L., Becker, M., Fallahzadeh, R., Fernandez, R., Postupna, N., Sherfield, E., Tebaykin, D., Latimer, C., Shively, et al
1800; 7 (51): eabk0473
- **Data-Driven Modeling of Pregnancy-Related Complications.** *Trends in molecular medicine*
Espinosa, C. n., Becker, M. n., Mari#, I. n., Wong, R. J., Shaw, G. M., Gaudilliere, B. n., Aghaeepour, N. n., Stevenson, D. K.
2021
- **Objective Activity Parameters Track Patient-Specific Physical Recovery Trajectories After Surgery and Link With Individual Preoperative Immune States.** *Annals of surgery*
Fallahzadeh, R., Verdonk, F., Ganio, E., Culos, A., Stanley, N., Mari#, I., Chang, A. L., Becker, M., Phongpreecha, T., Xenochristou, M., De Francesco, D., Espinosa, C., Gao, et al
2021
- **Single-cell peripheral immunoprofiling of Alzheimer's and Parkinson's diseases.** *Science advances*
Phongpreecha, T., Fernandez, R., Mrdjen, D., Culos, A., Gajera, C. R., Wawro, A. M., Stanley, N., Gaudilliere, B., Poston, K. L., Aghaeepour, N., Montine, T. J.
2020; 6 (48)

- **Integration of mechanistic immunological knowledge into a machine learning pipeline improves predictions** *NATURE MACHINE INTELLIGENCE*
Culos, A., Tsai, A. S., Stanley, N., Becker, M., Ghaemi, M. S., McIlwain, D. R., Fallahzadeh, R., Tanada, A., Nassar, H., Espinosa, C., Xenochristou, M., Ganio, E., Peterson, et al
2020
- **Integration of mechanistic immunological knowledge into a machine learning pipeline improves predictions.** *Nature machine intelligence*
Culos, A., Tsai, A. S., Stanley, N., Becker, M., Ghaemi, M. S., McIlwain, D. R., Fallahzadeh, R., Tanada, A., Nassar, H., Espinosa, C., Xenochristou, M., Ganio, E., Peterson, et al
2020; 2 (10): 619-628
- **Effect of catalyst and reaction conditions on aromatic monomer yields, product distribution, and sugar yields during lignin hydrogenolysis of silver birch wood.** *Bioresource technology*
Phongpreecha, T., Christy, K. F., Singh, S. K., Hao, P., Hodge, D. B.
2020; 316: 123907
- **Impact of dilute acid pretreatment conditions on p-coumarate removal in diverse maize lines.** *Bioresource technology*
Saulnier, B. K., Phongpreecha, T., Singh, S. K., Hodge, D. B.
2020; 314: 123750
- **VoPo leverages cellular heterogeneity for predictive modeling of single-cell data.** *Nature communications*
Stanley, N. n., Stelzer, I. A., Tsai, A. S., Fallahzadeh, R. n., Ganio, E. n., Becker, M. n., Phongpreecha, T. n., Nassar, H. n., Ghaemi, S. n., Maric, I. n., Culos, A. n., Chang, A. L., Xenochristou, et al
2020; 11 (1): 3738
- **Multivariate prediction of dementia in Parkinson's disease.** *NPJ Parkinson's disease*
Phongpreecha, T. n., Cholerton, B. n., Mata, I. F., Zabetian, C. P., Poston, K. L., Aghaeepour, N. n., Tian, L. n., Quinn, J. F., Chung, K. A., Hiller, A. L., Hu, S. C., Edwards, K. L., Montine, et al
2020; 6: 20
- **Systematic Immunophenotyping Reveals Sex-Specific Responses After Painful Injury in Mice.** *Frontiers in immunology*
Tawfik, V. L., Huck, N. A., Baca, Q. J., Ganio, E. A., Haight, E. S., Culos, A. n., Ghaemi, S. n., Phongpreecha, T. n., Angst, M. S., Clark, J. D., Aghaeepour, N. n., Gaudilliere, B. n.
2020; 11: 1652
- **Multivariate prediction of dementia in Parkinson's disease.** *NPJ Parkinson's disease*
Phongpreecha, T., Cholerton, B., Mata, I. F., Zabetian, C. P., Poston, K. L., Aghaeepour, N., Tian, L., Quinn, J. F., Chung, K. A., Hiller, A. L., Hu, S. C., Edwards, K. L., Montine, et al
2020; 6 (1): 20