



Alexander Tolas

Clinical Research Coordinator, Medicine - Med/Cardiovascular Medicine

📄 Curriculum Vitae available Online

Bio

BIO

My research focuses on the scalable measurement and validation of cardiorespiratory fitness and physical activity using wearable and mobile technologies. I am particularly interested in integrating physiological assessment, digital phenotyping, and epidemiologic modeling to improve cardiovascular risk stratification across diverse populations. My work spans device validation, predictive modeling, and translation of exercise physiology metrics into clinically meaningful digital health applications.

EDUCATION AND CERTIFICATIONS

- B.S, California Polytechnic State University - San Luis Obispo , Kinesiology (2021)

Publications

PUBLICATIONS

- **Fine-tuning LLMs in behavioral psychology for scalable health coaching.** *NPJ cardiovascular health*
Mantena, S., Johnson, A., Opezzo, M., Schütz, N., Tolas, A., Doijad, R., Mattson, C. M., Lawrie, A., Ramirez-Posada, M., Schriedmayer, P., Linos, E., King, A. C., Rodriguez, et al
2025; 2 (1): 48
- **Fine-tuning Large Language Models in Behavioral Psychology for Scalable Physical Activity Coaching.** *medRxiv : the preprint server for health sciences*
Mantena, S., Johnson, A., Opezzo, M., Schuetz, N., Tolas, A., Doijad, R., Mattson, C. M., Lawrie, A., Ramirez-Posada, M., Linos, E., King, A. C., Rodriguez, F., Kim, et al
2025
- **Unlocking insights: Clinical associations from the largest 6-minute walk test collection via the my Heart Counts Cardiovascular Health Study, a fully digital smartphone platform.** *Progress in cardiovascular diseases*
Kim, D. S., Schuetz, N., Johnson, A., Tolas, A., Mantena, S., O'Sullivan, J. W., Hershman, S. G., Myers, J. N., Christle, J. W., Opezzo, M., Linos, E., Rodriguez, F., Mattsson, et al
2025
- **StandUPTV: Preparation and optimization phases of a mHealth intervention to reduce sedentary screen time in adults.** *Contemporary clinical trials*
Keadle, S., Hasanaj, K., Leonard-Corzo, K., Tolas, A., Crosley-Lyons, R., Pfisterer, B., Legato, M., Fernandez, A., Lowell, E., Hollingshead, K., Yu, T. Y., Phelan, S., Phillips, et al
2023: 107402
- **Personalized digital behaviour interventions increase short-term physical activity: a randomized control crossover trial substudy of the MyHeart Counts Cardiovascular Health Study.** *European heart journal. Digital health*
Javed, A., Kim, D. S., Hershman, S. G., Shcherbina, A., Johnson, A., Tolas, A., O'Sullivan, J. W., McConnell, M. V., Lazzeroni, L., King, A. C., Christle, J. W., Opezzo, M., Mattsson, et al

2023; 4 (5): 411-419

- **Evaluation of Within- and Between-Site Agreement for Direct Observation of Physical Behavior Across Four Research Groups** *JOURNAL FOR THE MEASUREMENT OF PHYSICAL BEHAVIOUR*

Keadle, S., Martinez, J., Strath, S. J., Sirard, J., John, D., Intille, S., Arguello, D., Amalbert-Birriel, M., Barnett, R., Thapa-Chhetry, B., Cox, M., Chase, J., Dooley, et al

2023; 6 (3): 176-184