

Stanford

Allis Chien

Director, SUMS, Mass Spectrometry Center

Bio

BIO

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CURRENT ROLE AT STANFORD

Director, Stanford University Mass Spectrometry (SUMS) core resource laboratory

INSTITUTE AFFILIATIONS

- Member, Cardiovascular Institute
- Member, Stanford Cancer Institute

EDUCATION AND CERTIFICATIONS

- PhD, Stanford University , Chemistry (2000)
- BS, University of San Francisco , Chemistry, Biochemistry (1994)

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Chair, ABRF Nominations Committee (2022 - present)
- Chair, ABRF 2022 Program Committee (2020 - 2022)
- Executive Board, Association of Biomolecular Resource Facilities (ABRF) (2015 - 2019)
- Coordinator, ASMS Analytical Lab Managers Interest Group (2015 - 2017)
- Member, ABRF (2000 - present)
- Member, American Society for Mass Spectrometry (ASMS) (2000 - present)
- Member, American Chemical Society (ACS) (1992 - present)

Publications

PUBLICATIONS

- **A multipathway phosphopeptide standard for rapid phosphoproteomics assay development.** *Molecular & cellular proteomics : MCP* Searle, B. C., Chien, A., Koller, A., Hawke, D., Herren, A. W., Kim, J., Lee, K. A., Leib, R. D., Nelson, A. J., Patel, P., Ren, J. M., Stemmer, P. M., Zhu, et al 2023: 100639
- **The Performance of an Artificial Neural Network Model in Predicting the Early Distribution Kinetics of Propofol in Morbidly Obese and Lean Subjects.** *Anesthesia and analgesia* Ingrande, J., Gabriel, R. A., McAuley, J., Krasinska, K., Chien, A., Lemmens, H. J. 2020; 131 (5): 1500-1509
- **The Performance of an Artificial Neural Network Model in Predicting the Early Distribution Kinetics of Propofol in Morbidly Obese and Lean Subjects.** *Anesthesia and analgesia*

Ingrande, J., Gabriel, R. A., McAuley, J., Krasinska, K., Chien, A., Lemmens, H. J.
2020

- **Enhancing Data Reliability in TOMAHAQ for Large-Scale Protein Quantification.** *Proteomics*
Liu, F. n., Singhal, K. n., Matney, R. n., Acharya, S. n., Akdis, C. A., Nadeau, K. C., Chien, A. S., Leib, R. D.
2020; e1900105

- **Maximizing Flexibility on a High Resolution Open Access LC/MS System.** *Journal of biomolecular techniques : JBT*
McLaughlin, T. n., Chien, A. n.
2020; 31 (Suppl): S24

- **ABRF-sPRG 2020: Single Injection Targeted Data Acquisition of a Stable Isotope Labeled Phosphopeptide Standard.** *Journal of biomolecular techniques : JBT*
Herren, T. n., Searle, B. n., Patel, B. n., Lee, K. n., Hawke, D. n., Chien, A. n., Leib, R. n., Koller, A. n., Neely, B. n.
2020; 31 (Suppl): S25

- **New approaches to phosphoproteomics: Clinical scale characterization of the AKT/mTOR pathway targets.** *Journal of biomolecular techniques : JBT*
Singhal, K. n., Leib, R. n., Matney, R. n., Chen, E. n., Wagh, D. n., Coller, J. n., Liu, F. n., Chien, A. n., Knudtson, K. n., Martin, R. n., Weis-Garcia, F. n.
2020; 31 (Suppl): S28–S29

- **ABRF-sPRG 2018-2019: Development and Characterization of a Stable-Isotope Labeled Phosphopeptide Standard.** *Journal of biomolecular techniques : JBT*
Herren, A., Searle, B., Hawke, D., Lee, K., Koller, A., Leib, R., Phinney, B., Chien, A., Patel, B.
2019; 30 (Suppl): S2–S3

- **Impact of Enrichment Strategy on Observed Expression in Fresh Frozen Tissues.** *Journal of biomolecular techniques : JBT*
Singhal, K., Matney, R., Liu, F., Chien, A., Leib, R.
2019; 30 (Suppl): S21

- **Data Independent Acquisition in Practice: Foundations and Resources for Implementing DIA.** *Journal of biomolecular techniques : JBT*
Neely, B. n., Kirkpatrick, J. n., Midha, M. n., Stemmer, P. n., Martin, L. n., Wang, Y. n., Herring, L. n., Phinney, B. n., Shan, B. n., Chien, A. n., Jagtap, P. n.
2019; 30 (Suppl): S46

- **Identification of widespread antibiotic exposure in cholera patients correlates with clinically relevant microbiota changes.** *The Journal of infectious diseases*
Alexandrova, L. n., Haque, F. n., Rodriguez, P. n., Marrazzo, A. C., Grembi, J. A., Ramachandran, V. n., Hryckowian, A. J., Adams, C. M., Siddique, M. S., Khan, A. I., Qadri, F. n., Andrews, J. R., Rahman, et al
2019

- **Plasma anandamide concentrations are lower in children with autism spectrum disorder** *MOLECULAR AUTISM*
Karhson, D. S., Krasinska, K. M., Dallaire, J., Libove, R. A., Phillips, J. M., Chien, A. S., Garner, J. P., Hardan, A. Y., Parker, K. J.
2018; 9: 18

- **Proteomics of Primary Cilia by Proximity Labeling** *DEVELOPMENTAL CELL*
Mick, D. U., Rodrigues, R. B., Leib, R. D., Adams, C. M., Chien, A. S., Gygi, S. P., Nachury, M. V.
2015; 35 (4): 497-512

- **Neural Precursor Cell-expressed Developmentally Down-regulated Protein 4-2 (Nedd4-2) Regulation by 14-3-3 Protein Binding at Canonical Serum and Glucocorticoid Kinase 1 (SGK1) Phosphorylation Sites** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Chandran, S., Li, H., Dong, W., Krasinska, K., Adams, C., Alexandrova, L., Chien, A., Hallows, K. R., Bhalla, V.
2011; 286 (43): 37830-37840

- **The ABRF Proteomics Research Group Studies: Educational exercises for qualitative and quantitative proteomic analyses** *PROTEOMICS*
Friedman, D. B., Andacht, T. M., Bunger, M. K., Chien, A. S., Hawke, D. H., Krijgsveld, J., Lane, W. S., Lilley, K. S., MacCoss, M. J., Moritz, R. L., Settlage, R. E., Sherman, N. E., Weintraub, et al
2011; 11 (8): 1371-1381

- **Detecting Reaction Intermediates in Liquids on the Millisecond Time Scale Using Desorption Electrospray Ionization** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*
Perry, R. H., Splendore, M., Chien, A., Davis, N. K., Zare, R. N.
2011; 50 (1): 250-254

- **Azetidine-2-carboxylic acid in the food chain** *PHYTOCHEMISTRY*
Rubenstein, E., McLaughlin, T., Winant, R. C., Sanchez, A., Eckart, M., Krasinska, K. M., Chien, A.
2009; 70 (1): 100-104

- **ANYL 23-Proteomic investigations using a double-vented tetraphasic continuous column approach to MudPIT analysis**
Guzzetta, A., Chien, A.
AMER CHEMICAL SOC.2006

- **Azetidine-2-carboxylic acid in garden beets (*Beta vulgaris*)** *PHYTOCHEMISTRY*
Rubenstein, E., Zhou, H., Krasinska, K. M., Chien, A., Becker, C. H.
2006; 67 (9): 898-903

- **A double-vented tetraphasic continuous column approach to MuDPIT analysis on long capillary columns demonstrates superior proteomic coverage** *JOURNAL OF PROTEOME RESEARCH*
Guzzetta, A. W., Chien, A. S.
2005; 4 (6): 2412-2419

- **Multiple active oxidants in cytochrome P-450 model oxidations** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Collman, J. P., Chien, A. S., Eberspacher, T. A., Brauman, J. I.
2000; 122 (45): 11098-11100

- **Competitive reaction of axial ligands during biomimetic oxygenations** *INORGANIC CHEMISTRY*
Collman, J. P., Chien, A. S., Eberspacher, T. A., Zhong, M., Brauman, J. I.
2000; 39 (20): 4625-4629

- **An agostic alternative to the P-450 rebound mechanism** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Collman, J. P., Chien, A. S., Eberspacher, T. A., Brauman, J. I.
1998; 120 (2): 425-426