

Harsimran Kaur

67 Promenade
Irvine, CA 92612
(209) 662 – 9261
sktoor6699@gmail.com

EDUCATION

University of California Irvine, Irvine
B.A., Criminology Law and Society
Minor in **Biological Science**

June 2021

WORK EXPERIENCE

UCI Medical Center, Mukherjee Lab, Irvine, CA

March 2019 – Present

Research Student, Department of Radiological Sciences

- Conduct research on drugs used for detection of Alzheimer's and Parkinson's Disease and improve detection by creating new, modified versions of drugs by altering the methods used to create the drugs such as heating more or use different starting materials, in order to increase reactivity
- Cutting rat brain slices in order to test drugs and view them through PET imaging
- Create posters on current research and publicly present at conferences such as the annual Society of Nuclear Medicine and Molecular Imaging meeting
- Take data and create the needed diagrams for the research papers
- Use chemdraw and chem3d in order to construct and test drug binding abilities

Subway, Stockton, CA

June 2014 – Present

Part Time Sandwich Artist, Seasonal Worker

- Develop bonds with regular customer through excellent customer service by listening to the customers' requests and memorizing their personalized sandwich orders
- Memorize all formulas for the different sandwiches and their prices
- Type up phone orders and make sure to have everything written correctly
- Train new employees through hand-on training on how to greet customers and make sandwiches

VOLUNTEER EXPERIENCE

St. Joseph Hospital, Orange, CA

October 2018 – June 2020

Cope Health Scholar: Emergency Department, Pulmonary Renal, General Surgery, Oncology, MICU, DSU

- Check in patients at triage emergency room during COVID-19 by checking temperature and symptoms to identify if patient is a Person under Inspection (PUI) or not
- Helped nurse complete tasks such as cleaning patients, feeding patients, actively listening to patient concerns and helping them solve issues
- Observing procedure and shadowing doctors during their rounds

Karate For All, Occupational Therapy based Martial Arts, Tustin, CA

September 2019 – June 2020

Volunteer

- Help teach small groups of 3-4 students precise karate movements with hands on training and encourage safe competition
- Promote an equal and loving environment for children with special needs through providing comfort and security

- Build bonds with students through active listening and learning about their individual needs and disabilities in order to provide the best personalized help they need during training
- Work with other volunteers to make sure the children are safe and improving through having one person lead the moves while other volunteers make sure the children are following along

AWARDED FELLOWSHIPS

2019 Summer Undergraduate Research Program (SURP) Honorary Fellowship
June-September 2019 (<http://www.urop.uci.edu/SURP.html>)

SKILLS

Computer: Python, Matlab, ChemDraw, Chem3d, Microsoft Office

Language: Fluent in English, Punjabi, Hindi, and Urdu

Imaging Software: Optiquant for analysis of brain autoradiographs (Perkin Elmer), INVEON research workplace for PET/CT image analysis (IRW, Siemens)

Laboratory: Cryostat, Brandel harvester and assays, mass spectrometry, radioactive material handling, human tissue handling, high performance liquid chromatography, UV/VIS spectrophotometry, thin layer chromatography

PUBLICATIONS and PRESENTATIONS PEER-REVIEWED

Campoy, A., Danh, T., Patel, K.K., **Harsimran Kaur**, Liang, C., Mukherjee J. [¹⁸F]Nifene binding to Nicotinic $\alpha 4\beta 2^*$ receptors in anterior cingulate of postmortem human Alzheimer's disease brain. *Journal of Nuclear Medicine*, Vol. 61, Supplement 1, 1537, 2020. Presented at the 67th Annual Meeting of Society of Nuclear Medicine and Molecular Imaging, New Orleans, Louisiana, July 11-14, 2020 (Virtual Meeting).

Harsimran Kaur, Felix, M.R., Liang, C., Mukherjee, J. [¹⁸F]Flotaza: A New β -Amyloid PET Imaging Agent in Post-Mortem Human Alzheimer's Disease Brain. Presented at the World Molecular Imaging Congress 2020, October 7-10, 2020 (Virtual Meeting).

Mukherjee, J., Liang, C., Campoy, A., **Harsimran Kaur**, Syed, A.U., Danh, T.B. Human hippocampal [¹⁸F]nifene binding to nicotinic acetylcholinergic $\alpha 4\beta 2^*$ receptors is reduced in postmortem Alzheimer's disease brains. To be presented at the Annual Society of Nuclear Medicine and Molecular Imaging Meeting, June 13-16, 2021 (Virtual Meeting).

Harsimran Kaur, Felix, M.R., Nguyen, A.N., Syed, A.U., Liang, C., Mukherjee, J. Evaluation of [¹⁸F]Flotaza, a new β -amyloid PET imaging agent in post-mortem human Alzheimer's disease brain and 5XFAD transgenic mice. To be presented at the Annual Society of Nuclear Medicine and Molecular Imaging Meeting, June 13-16, 2021 (Virtual Meeting).

Harsimran Kaur, Felix, M.R., Liang, C., Mukherjee, J. Development and evaluation of [¹⁸F]Flotaza for A β plaque imaging in post-mortem human Alzheimer's disease brain. *Bioorganic Medicinal Chemistry Letters*, manuscript accepted, May 2021.