



Hieu Nguyen

Postdoctoral Scholar, Radiation Physics

Bio

HONORS AND AWARDS

- Research Seed Funding Grant, AAPM (2025)
- T32 Stanford Molecular Imaging Program, NIH (2023-2025)
- Bio-X Travel Award, Stanford University (2023, 2024, 2025)
- Jack Krohmer Early-Career Investigator Award, AAPM Annual Meeting (2023)
- Expanding Horizons Travel Award, AAPM (2022)
- Radiation Oncology Trainee Seed Grant, Stanford University School of Medicine (2022)
- School of Medicine Dean's Postdoctoral Fellowship, Stanford University (2022)
- Presidential Fellowship in Biomedical Engineering, The University of Texas at Austin (2020)
- Professional Development Award, The University of Texas at Austin (2020)
- Graduate Fellowship, The University of Texas at Austin (2019)
- Singapore Government Scholarship, Singapore Ministry of Foreign Affairs (2007-2011)

PROFESSIONAL EDUCATION

- Master of Science in Engr, University of Texas Austin (2019)
- Doctor of Philosophy, University of Texas Austin (2020)

STANFORD ADVISORS

- Guillem Pratx, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **In vivo Positron Emission Particle Tracking (PEPT) of Single Cells Using an Expectation Maximization Algorithm.** *IEEE transactions on medical imaging*
Nguyen, H. T., Das, N., Nasiri, R., Pratx, G.
2025; PP
- **Ultrasensitive and multiplexed tracking of single cells using whole-body PET/CT.** *Science advances*
Nguyen, H. T., Das, N., Ricks, M., Zhong, X., Takematsu, E., Wang, Y., Ruvalcaba, C., Mehadji, B., Roncali, E., Chan, C. K., Pratx, G.
2024; 10 (24): eadk5747
- **A lung tumor-on-a-chip model recapitulates the effect of hypoxia on radiotherapy response and FDG-PET imaging.** *Lab on a chip*
Nasiri, R., Kurosu Jalil, M., Ibanez Gaspar, V., Flores Perez, A. S., Nguyen, H. T., Khan, S., Tang, S. K., Yang, Y. P., Pratx, G.

2025

- **Diffusion-aware compartment model of the cellular uptake of ^{18}F -fluorodeoxyglucose.** *Physical review. E*
Zhong, X., Nguyen, H. T., Takematsu, E., Pratz, G.
2025; 111 (4-1): 044409
- **Color variation in radio-luminescence of P-dots doped with thermally activated delayed fluorescence molecules.** *Physical chemistry chemical physics : PCCP*
Su, Z., Nguyen, H. T., Liu, Z., Asanuma, D., Yamaji, M., Koshimizu, M., Shigemitsu, H., Tojo, S., Mori, T., Kida, T., Pratz, G., Fujitsuka, M., Osakada, et al
2025
- **Increased ^{18}F FDG uptake of radiation-induced giant cells: a single-cell study in lung cancer models.** *Npj imaging*
Das, N., Nguyen, H. T., Lu, W. J., Natarajan, A., Khan, S., Pratz, G.
2024; 2 (1): 14
- **Radioluminescence from polymer dots based on thermally activated delayed fluorescence** *NANOSCALE ADVANCES*
Asanuma, D., Nguyen, H., Liu, Z., Tojo, S., Shigemitsu, H., Yamaji, M., Kawai, K., Mori, T., Kida, T., Pratz, G., Fujitsuka, M., Osakada, Y.
2023
- **Red, green, and blue radio-luminescent polymer dots doped with heteroleptic tris-cyclometalated iridium complexes.** *RSC advances*
Liu, Z., Nguyen, H. T., Asanuma, D., Tojo, S., Yamaji, M., Kawai, K., Pratz, G., Fujitsuka, M., Osakada, Y.
2023; 13 (22): 15126-15131
- **Preclinical evaluation of ^{89}Zr -Panitumumab for biology-guided radiotherapy.** *International journal of radiation oncology, biology, physics*
Natarajan, A., Khan, S., Liang, X., Nguyen, H., Das, N., Anders, D., Malik, N., Oderinde, O. M., Chin, F., Rosenthal, E., Pratz, G.
2023
- **Characterization of Ex Vivo Nonmelanoma Skin Tissue Using Raman Spectroscopy** *PHOTONICS*
Nguyen, H. T. M., Zhang, Y., Moy, A. J., Feng, X., Sebastian, K. R., Reichenberg, J. S., Fox, M. C., Markey, M. K., Tunnell, J. W.
2021; 8 (7)
- **Laser nanobubbles induce immunogenic cell death in breast cancer.** *Nanoscale*
Nguyen, H. T., Katta, N., Widman, J. A., Takematsu, E., Feng, X., Torres-Hurtado, S. A., Betancourt, T., Baker, A. B., Suggs, L. J., Milner, T. E., Tunnell, J. W.
2021; 13 (6): 3644-3653
- **Assessment of Raman Spectroscopy for Reducing Unnecessary Biopsies for Melanoma Screening.** *Molecules (Basel, Switzerland)*
Zhang, Y., Moy, A. J., Feng, X., Nguyen, H. T., Sebastian, K. R., Reichenberg, J. S., Wilke, C. O., Markey, M. K., Tunnell, J. W.
2020; 25 (12)
- **Diffuse reflectance spectroscopy as a potential method for nonmelanoma skin cancer margin assessment** *Translational Biophotonics*
Zhang, Y., Moy, A. J., Nguyen, H. T., Sebastian, K. R., Reichenberg, J. S., Markey, M. K., Tunnell, J. W.
2020; 2
- **Physiological model using diffuse reflectance spectroscopy for nonmelanoma skin cancer diagnosis.** *Journal of biophotonics*
Zhang, Y., Moy, A. J., Feng, X., Nguyen, H. T., Reichenberg, J. S., Markey, M. K., Tunnell, J. W.
2019; 12 (12): e201900154
- **Raman biophysical markers in skin cancer diagnosis.** *Journal of biomedical optics*
Feng, X., Moy, A. J., Nguyen, H. T., Zhang, Y., Zhang, J., Fox, M. C., Sebastian, K. R., Reichenberg, J. S., Markey, M. K., Tunnell, J. W.
2018; 23 (5): 1-10
- **Raman active components of skin cancer.** *Biomedical optics express*
Feng, X., Moy, A. J., Nguyen, H. T., Zhang, J., Fox, M. C., Sebastian, K. R., Reichenberg, J. S., Markey, M. K., Tunnell, J. W.
2017; 8 (6): 2835-2850