

CURRICULUM VITAE

Prepared: 2021-05-04

GENERAL INFORMATION

DANH TRUONG

Postdoctoral Fellow

University of Texas at MD Anderson Cancer Center

Sarcoma Medical Oncology

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EDUCATION

Doctor of Philosophy, Biomedical Engineering

December 2018

Arizona State University

- Overall GPA: 4.0
- Dean's Fellow
- International Foundation for Ethical Research (IFER) Fellow
- Phoenix Chapter of Achievement Rewards for College Scientists (ARCS) Foundation Burton Scholar

Master of Science, Biomedical Engineering

May 2014

University of Texas Southwestern Medical Center and University of Texas at Arlington

- GPA: 3.6/4.0

Bachelor of Science, Biology

May 2014

University of Texas at Arlington

- Major: Biology with Engineering emphasis
- Minor: Chemistry
- GPA: 3.8/4.0

CERTIFICATES AND TRAINING

- Trainee Leadership Certificate May 2021
- High Performance Teams April 2021
- Building an Environment of Trust for Trainees April 2021
- Rigor and Reproducibility Workshop December 2020
- Biomedical Responsible Conduct of Research Course July 2020
- Real Colors September 2019
- Engineering Futures Analytical Problem Solving April 2017
- Engineering Futures People Skills November 2015

RESEARCH EXPERIENCE

Postdoctoral Fellow

January 2019 to Present

SMO at UT MDACC – *Houston, TX*

- Leveraging 3D models to recapitulate adipogenesis and osteogenesis
- Analysis of single-cell RNA seq and single-cell ATAC seq data to understand mesenchymal tissue development using an in vitro MSC differentiation model
- Scoring cell fate in liposarcoma and revealing the underlying gene regulatory networks controlling plasticity
- Understanding EMT in osteosarcoma fate and plasticity
- Effect of targeting EWS-FLI1 in Ewing's sarcoma on ES fate and plasticity using CRISPR-Cas9

Graduate Research Associate
SBHSE at ASU – Tempe, AZ

July 2014 to December 2018

- Fabricated microfluidic platforms to model tumor microenvironment with focus on influence of stromal cells (fibroblasts, endothelial cells, macrophages) on cancer invasion
- Studied effect of anti-cancer drug in 3D culture with multiple cell types using microfluidics
- Utilized RNA-Seq to discover novel gene of targets
- Developed method to evaluate cancer migration in real-time to evaluate invasiveness

Research Assistant
Bioengineering at UTA – Arlington, TX

October 2012 to June 2014

- Established anti-thrombogenic drug-loaded biomaterial for biodegradable vascular prosthesis and characterized the biomaterial for biodegradation, cytotoxicity, and biomechanical properties
- Created and optimized method for fabrication of peripheral nerve conduit for sensory and motor enrichment using molecular guidance cues

TEACHING EXPERIENCE

Graduate Teaching Assistant, Biochemistry of Cancer BCH 598
 Prof. Joshua LaBaer, School of Molecular Sciences at ASU – Tempe, AZ

January 2018 to May 2018

- Generated a curriculum for teaching students the basics of cancer biology.
- Worked with students to improve presentations and presenting skills
- Created a feedback system to help students improve

Lab Instructor, Principles of Stem Cell Technology BME 598
 Prof. David Brafman, SBHSE at ASU – Tempe, AZ

May 2017 to July 2017

- Generated a series of presentations to teach hands-on lab skills for culturing of cells
- Worked with students to improve cell culture skills and taught the basics of many different biological assays

Graduate Teaching Assistant, Principles of Stem Cell Technology BME 598
 Prof. David Brafman, SBHSE at ASU – Tempe, AZ

May 2017 to July 2017

- Gave an example lecture on how to present a scientific article and critically analyze it

- Generated a rubric for students to follow when presenting articles
- Expected students to be able to critically dissect a science paper and be able to present the findings to their colleagues
- Set-up a video recording system to record lectures for students

Guest Speaker, The ASU Experience ASU 101

March 2017

Prof. Thurmon Lockhart, SBHSE at ASU – Tempe, AZ

- Gave an introduction lecture on bioengineering and cancer technologies

Graduate Teaching Assistant, Biomedical Product Design BME 382

January 2017 to May 2017

Prof. Jerry Coursen, SBHSE at ASU – Tempe, AZ

Graduate Teaching Assistant, Biomedical Product Design BME 382

August 2016 to December 2016

Profs. Jerry Coursen and Jeffrey LaBelle, SBHSE at ASU – Tempe, AZ

- Facilitated and mentored students on basic statistics, Design of Experiments, and documentation
- Generated a rubric for assessing student's ability to cost-efficient, functional, and marketable product

Lab Instructor, Biomedical Microdevices BME 598

January 2016 to March 2016

Prof. Mehdi Nikkhah, SBHSE at ASU – Tempe, AZ

February 2017

- Created and led a hands-on workshop for generating microfluidic devices for studying cancer
- Expected students to learn the fundamentals of microfluidic fabrication

MENTORING EXPERIENCE

Graduate Students

Supriya Nagaraju, MS Biomedical Engineering

August 2015 to August 2017

Undergraduate Students

Jes Chauviere, BS Biomedical Engineering

June 2019 to August 2019

Zachary Camacho, BS Biomedical Engineering

January 2018 to December 2018

Alexander Kratz, BS Molecular Science

March 2016 to December 2018

Toan Nguyen, BS Biomedical Engineering

March 2016 to August 2017

Nitish Peela, BS Biomedical Engineering

January 2016 to August 2017

Eric S. Barrientos, BS Biochemistry

August 2015 to December 2018

Allison Llave, BS Biomedical Engineering

August 2014 to May 2016

SCHOLARSHIP

Journal Articles

- Lamhamedi-Cherradi, SE., Maitituoheti, M., Menegaz, BA., Krishnan, S., Vetter, AM., Camacho, P., Wu CC., Beird, HC., Ingram, DR., Ramamoorthy, V., Mohiuddin, S., McCall, D., **Truong, DD.**, Cuglievan, B., Futreal, AP., Velasco, AR., Titus, M., Lazar, AJ., Wang, WL., Ratan, R., Livingston, JA., Rai, KA., MacLeod, R., Hayes-Jordan, A., Ludwig, JA., (2020). The Androgen Receptor: A Therapeutic Target in Desmoplastic Small Round Cell Sarcoma. *In submission*

- Lamhamedi-Cherradi, SE., Mohiuddin, S., Mishra, DK., Velasco, AR., Vetter, AM., Krishnan, S., Pence, K., McCall, D., **Truong, DD.**, Cuglievan, B., Menegaz, BA., Utama, B., Daw, NC., Molina, ER., Livingston, JA., Gorlick, R., Mikos, AG., Kim, MP., Ludwig, JA., (2020). AXL and YAP/TAZ orchestrate dedifferentiation, cell fate, and metastasis in human osteosarcoma. *Cancer Gene Therapy*. Accepted.
- Saini, H., Rahmani, K., Veldhuizen, J., Zare, A., Allam, M., Silva, C., Kratz, A., **Truong, D.**, Mouneimne, G., LaBaer, J. and Ros, R., 2020. The role of tumor-stroma interactions on desmoplasia and tumorigenicity within a microengineered 3D platform. *Biomaterials*, p.119975.
- **Truong, D.**, Kratz, A., Park, J.G., Nguyen, T., Barrientos, E.S., Saini, H., Pockaj, B.A., Mouneimne, G., LaBaer, J., Nikkhah, M., (2019). "A human organotypic microfluidic tumor model permits investigation of the interplay between patient-derived fibroblasts and breast cancer cells", *Cancer research*, 79(12), 3139-3151.
- Xu, C., Kuriakose, AE., **Truong, D.**, Punnakitikashem, P., Nguyen, KT., & Hong, Y., (2018). "Enhancing anti-thrombogenicity of biodegradable polyurethanes through drug molecule incorporation", *Journal of Materials Chemistry B*, 6(44), pp.7288-7297.
- **Truong, D.**, Fiorelli, R., Barrientos, E. S., Luna Melendez, E., Sanai, N., Mehta, S., & Nikkhah, M. (2018) A Three-Dimensional (3D) Organotypic Microfluidic Model for Glioma Stem Cell – Vascular Interactions. *Biomaterials*, 198, 63-77
- Nagaraju, S.*, **Truong, D.***, Mouneimne, G., & Nikkhah, M. (2018). Microfluidic Tumor–Vascular Model to Study Breast Cancer Cell Invasion and Intravasation. *Advanced healthcare materials*. * **indicates equal contribution.**
- Peela, N., Barrientos, E. S., **Truong, D.**, Mouneimne, G., & Nikkhah, M. (2017). Effect of suberoylanilide hydroxamic acid (SAHA) on breast cancer cells within a tumor-stroma microfluidic model. *Integrative Biology*, 9(12), 988-999.
- Migrino, RQ.*, Truran, S., Karamanova, N., Davies, H., Franco, DA., Serrano, G., Beach, T., Madine, J., **Truong, D.**, & Nikkhah, M. (2017). Amyloidogenic Medin Induces Endothelial Dysfunction and Vascular Inflammation through the Receptor for Advanced Glycation Endproducts. *Cardiovascular Research*, 113(11), 1389-1402. * indicates corresponding author.
- Peela, N.*, **Truong, D.***, Saini, H.*, Chu, H., Mashaghi, S., Ham, SL., Singh, S., Tavana, H., Mosadegh, B & Nikkhah, M. (2017). Innovations in Advanced Biomaterials and Microengineering Technologies Towards Recapitulating the Stepwise Process of the Metastatic Cascade. *Biomaterials*, 133, 176-207. * **indicates equal contribution.**
- Navaei, A., Moore, N., Sullivan, R. T., **Truong, D.**, Migrino, R. Q., & Nikkhah, M. (2017). Electrically conductive hydrogel-based micro-topographies for the development of organized cardiac tissues. *RSC Advances*, 7(6), 3302-3312.
- **Truong, D.**, Puleo, J., Llave, A., Mouneimne, G., Kamm, R. D., & Nikkhah, M. (2016). Breast Cancer Cell Invasion into a Three Dimensional Tumor-Stroma Microenvironment. *Scientific Reports*, 6.
- Navaei, A.*, **Truong, D.***, Heffernan, J., Cutts, J., Brafman, D., Sirianni, R. W., ... & Nikkhah, M. (2016). PNIPAAm-based biohybrid injectable hydrogel for cardiac tissue engineering. *Acta biomaterialia*, 32, 10-23. * **indicates equal contribution.**
- Peela, N., Sam, F. S., Christenson, W., **Truong, D.**, Watson, A. W., Mouneimne, G., ... & Nikkhah, M. (2015). A three dimensional micropatterned tumor model for breast cancer cell migration studies. *Biomaterials*, 81, 72-83.
- Gao, G., Schilling, A. F., Hubbell, K., Yonezawa, T., **Truong, D.**, Hong, Y., ... & Cui, X. (2015). Improved properties of bone and cartilage tissue from 3D inkjet-bioprinted human mesenchymal stem cells by

simultaneous deposition and photocrosslinking in PEG-GelMA. *Biotechnology letters*, 37(11), 2349-2355.

- Punnakitakashem, P., **Truong, D.**, Menon, J. U., Nguyen, K. T., & Hong, Y. (2014). Electrospun biodegradable elastic polyurethane scaffolds with dipyrindamole release for small diameter vascular grafts. *Acta biomaterialia*, 10(11), 4618-4628.

Selected Oral Presentations

- **Truong, D.**, Tannenbaum, A., King, BL., Lamhamedi-Cherradi, SE., Somaiah, N., Feig, BW., Ludwig, J. "The Mesenchymal Tissue Landscape: A scRNA-seq based Metric of Liposarcoma Differentiation". 2020 Trainee Symposium on Organoids & Organs-on-Chip. August 11, 2020
- **Truong, D.**, Lamhamedi-Cherradi, SE. & Ludwig, J. "Liposarcoma Research: Targeting the TME". Presentation to Joe and Mary Moeller Foundation. November 5, 2019
- **Truong, D.** "Microfluidic Models of Tumor-Stroma Interactions to Study the Interplay of Cancer Cells with their surrounding microenvironment". UT MDACC Sarcoma Medical Oncology Grand Rounds. December 3, 2018
- **Truong, D.**, Kratz, A., Park, JG., Barrientos, E., Nguyen, T., Saini, H., Pockaj, B., Mouneimne, G., & Nikkhah, M., "Gene-expression Profiling of Patient-Derived Fibroblast and Breast Cancer Interactions in a Three-Dimensional (3D) Organotypic Microfluidic Platform" Annual Biomedical Engineering Society (BMES) Meeting, Atlanta, GA October 15-20, 2018
- **Truong, D.** "Microfluidic Models of Tumor-Stroma Interactions to Study the Interplay of Cancer Cells with their surrounding microenvironment". UCSF Department of Neurological Surgery. October 15, 2018
- **Truong, D.**, Saini, H., Kratz, A., Barrientos, E., Nguyen, T., Pockaj, B., & Nikkhah, M., "The Influence Of Patient-Derived Fibroblasts On Breast Cancer Invasion Profile Within A Microfluidic Platform" Annual Biomedical Engineering Society (BMES) Meeting, Phoenix, AZ October 11-14, 2017
- Nagaraju, S., **Truong, D.**, & Nikkhah, M., "Tri-layer Microfluidic Platform for Studying Tumor Angiogenesis and Cancer Cell Intravasation" Annual Biomedical Engineering Society (BMES) Meeting, Phoenix, AZ October 11-14, 2017
- **Truong, D.**, Nagaraju, S., & Nikkhah, M., "Microfluidic device to study Tumor-Stromal Interactions", Invited Presentation at University of Arizona Cancer Center, Tucson, AZ May 11, 2017
- **Truong, D.**, "Introduction to Bioengineering and Cancer Technologies", Invited Presentation at Arizona State University, Tempe, AZ March, 27 2017
- **Truong, D.**, Barrientos, ES., Puleo, J., Mouneimne, G., & Nikkhah, M., "Microengineered Tumor-Stroma Platform Investigating the Biochemical Influence of Stromal Fibroblasts on Breast Cancer Invasion" Annual Biomedical Engineering Society (BMES) Meeting, Minneapolis, MN October 5-8, 2016
- **Truong, D.**, Puleo, J., Llave, A., Mouneimne, G., Kamm, R. D., & Nikkhah, M., "Three-dimensional (3D) Invasion of Breast Cancer Cells in a Well-Defined Tumor-Stroma Platform," NanoEngineering for Medicine and Biology Conference (ASME NEMB), Houston, TX, February 20-24, 2015

Selected Poster Presentations

- **Danh D. Truong**, Salah-Eddine Lamhamedi-Cherradi, David C. McCall, Allen Tannenbaum, Eric R. Molina, Antonios G. Mikos, and Joseph A. Ludwig. "Elucidating how the tumor microenvironment dysregulates Ewing's sarcoma cell stemness using a scRNA-seq-based differentiation signature". FusOncC2. Washington, D.C.

- Saini, H., Rahmani, K., Allam, M., Silva, C., Veldhuizen, J., **Truong, D.**, Mouneimne, G., Ros, R., Nikkhah, M. "The Role of Paracrine Signaling between Breast Cancer and Stromal Cells on Remodeling of Tumor Microenvironment ECM". Annual Biomedical Engineering Society (BMES) Meeting, Philadelphia, PA October 16-19, 2019
- Salah-Eddine Lamhamedi-Cherradi, Sana Mohiuddin, Dhruva K Mishra, Kristi Pence, Sandhya Krishna1, Brian A. Menegaz, David McCall, Alejandra Ruiz Velasco, **Danh Dinh Truong**, Branko Cuglievan, Amelia Vetter, Budi Utama, Eric R. Molina, Min P Kim, & Joseph, A Ludwig. "EMT-related transcription factors and YAP/TAZ orchestrate cell fate in lab-derived osteosarcoma CTCs". Cancer Research UK-AACR Joint Conference: Engineering and Physical Sciences in Oncology. London, UK. October 15-17, 2019
- Sana Mohiuddin MD, Salah-Eddine Lamhamedi-Cherradi Ph.D, Dhruva K Mishra, Kristi Pence, Sandhya Krishnan, Brian A. Menegaz, David McCall MD, Alejandra Ruiz Velasco, **Danh Dinh Truong Ph.D**, Branko Cuglievan MD, Amelia Vetter, Eric R. Molina Ph.D, Min P Kim MD, and Joseph Ludwig MD. "Role of EMT transcription factors in metastatic potential of osteosarcoma" AACR Advances in Pediatric Cancer Research Montreal, QC, Canada September 17-20, 2019
- **Truong, D.**, Fiorelli, R., Barrientos, E. S., Luna Melendez, E., Sanai, N., Mehta, S., & Nikkhah, M. "Interrogating Glioma Stem Cell – Vascular Interactions Using a Three-Dimensional (3D) Organotypic Microfluidic Model" Annual Biomedical Engineering Society (BMES) Meeting, Atlanta, GA October 15-20, 2018
- Xu, C., Kuriakose, AE., **Truong, D.**, Punnakitakashem, P., Nguyen, KT., & Hong, Y. "Non-Thrombogenic, Biodegradable Elastomeric Polyurethane for Blood Contacting Applications". Annual Biomedical Engineering Society (BMES) Meeting, Atlanta, GA October 15-20, 2018
- **Truong, D.**, Saini, H., Kratz, A., Barrientos, ES., Nguyen, T., Pockaj, BA., & Nikkhah, M., "Microengineered Tumor-Stroma Platform Investigating the Effect of Patient-Derived Stromal Fibroblasts on Breast Cancer Cells", 2017 ARCS Foundation Phoenix Scholar Awards Dinner, Phoenix, AZ, April 21, 2017
- **Truong, D.**, Saini, H., Kratz, A., Barrientos, ES., Nguyen, T., Pockaj, BA., & Nikkhah, M., "Microengineered Tumor-Stroma Platform Investigating the Effect of Patient-Derived Stromal Fibroblasts on Breast Cancer Cells", ASU Molecular, Cellular and Tissue Bioengineering (MCTB) Symposium, Tempe, AZ, April 1, 2017
- **Truong, D.**, Puleo, J., Llave, A., Mouneimne, G., Kamm, R. D., & Nikkhah, M., "Microengineered Breast Cancer Invasion Platform," Annual Biomedical Engineering Society Meeting, Tampa, FL, October 7-10, 2015
- **Truong, D.**, Puleo, J., Llave, A., Mouneimne, G., Kamm, R. D., & Nikkhah, M., "Microengineered Breast Cancer Invasion Platform," AZBIO Awards 2015, Phoenix, AZ, October 1, 2015

PATENTS

- Nikkhah, M. & **Truong, D.** (2018). *U.S. Patent App. 2018/052151*. Washington, DC: U.S. Patent and Trademark Office.
- Nikkhah, M., Kamm, R. D., & **Truong, D.** (2016). *U.S. Patent No. 10,017,724*. Washington, DC: U.S. Patent and Trademark Office.

AWARDS AND FUNDING

- Daniel Benedict Gazan Award in Sarcoma Research April 2021
- Convocation Speaker December 2018
- Graduate College Completion Fellowship April 2018
- March 2018

- GPSA Research Grant February 2018
- Phoenix Chapter of Achievement Rewards for College Scientists (ARCS) Foundation Burton Scholar January 2018
- Graduate College Fellowship October 2017
- International Foundation for Ethical Research (IFER) Graduate Fellowship March 2017
- Outstanding SBHSE Graduate Research Assistant February 2017
- Phoenix Chapter of ARCS Foundation Burton Scholar October 2016
- IFER Graduate Fellowship May 2016
- GPSA Jumpstart Research Grant April 2016
- Molecular, Cellular, & Tissue Bioengineering Symposium Poster Presentation Award January 2016
- GPSA Travel Award Grant October 2015
- SBHSE Block Funding Award August 2014 to December 2018
- Dean's Fellowship

PROFESSIONAL MEMBERSHIPS

- Biomedical Engineering Society August 2014 to Present
- Tau Beta Pi November 2015 to Present
- Alpha Eta Mu Beta August 2016 to Present
- American Association for the Advancement of Science February 2015 to Present
- Sigma Xi March 2018 to Present
- National Postdoctoral Association January 2019 to Present
- American Association for Cancer Research October 2019 to Present
- Diverse Scholar June 2019 to Present
- Society of Asian Scientists and Engineers July 2020 to Present
- Postdoctoral Association Executive Committee Officer August 2020 to Present
- Future of Research August 2020 to Present

REFERENCES

I am happy to supply these upon request.