



Yufan (Fred) Wu

- Affiliate, Dean's Office Operations - Dean Other
- Resident in Radiation Oncology - Radiation Therapy

Bio

BIO

Fred (Yufan) Wu is a PGY-5 chief resident physician at the Stanford University Department of Radiation Oncology. He attended medical school at Stanford School of Medicine and completed his intern year in Internal Medicine at Baylor College of Medicine / MD Anderson Cancer Center. During medical school, he completed concentrations in clinical research methodology and cancer biology, establishing the foundational skills for conducting sound clinical oncologic research.

He is passionate about leveraging new technologies to improve the patient experience and patient outcomes. His primary research interests include the development of virtual reality tools for patient education, and clinical translation of FLASH radiotherapy systems. He also leads clinical research projects on the topics of prostate HDR brachytherapy, lung SBRT, and pancreas SBRT, which have led to numerous peer-reviewed manuscript publications, research awards, and invited presentations with honoraria. He is also a resident peer reviewer for the International Journal of Radiation Oncology*Biology*Physics.

In addition, Fred serves on the leadership committee of the GME Diversity Committee, where he plans and executes large-scale initiatives to promote diversity, equity, and inclusion among the graduate medical community, an undertaking that he resonates deeply with. He was also the co-president of the Radiation Oncology Interest Group at Stanford. In his spare time, he enjoys traveling, playing/watching basketball, tennis, swimming, and going on hikes to capture landscape photography that is shared on an online photo album.

CLINICAL FOCUS

- HDR Brachytherapy
- CyberKnife
- Stereotactic Radiosurgery
- SBRT
- MIM Software
- Aria/Eclipse Software
- Accuray Precision Software
- Radiation Oncology
- Residency

HONORS AND AWARDS

- NCCN Oncology Fellows Educational Grant, National Comprehensive Cancer Network (NCCN) (2023)
- Best E-Poster Presentation Award, FLASH Radiotherapy and Particle Therapy Conference 2022 (FRPT) (2022)

- Top Influencer Award, FLASH Radiotherapy and Particle Therapy Conference 2022 (FRPT) (2022)
- Invited Presenter Honorarium, American Association of Medical Dosimetrists 2022 Fall Virtual Symposium (2022)
- Alpha Omega Alpha Honor Medical Society, Stanford University School of Medicine (2022)
- Research Travel Grant for Oral Presentation, American Radium Society (ARS) Annual Meeting 2022 (2022)
- Travel Award (for General Session Presenter), American Association of Medical Dosimetry 47th Annual Meeting (2022)
- Best Poster Award, American Radium Society (ARS) Annual Meeting 2021 (2021)
- Medical Scholars Research Fellowship (funding for promising research projects), Stanford University School of Medicine (2017)
- Medical Scholars Research Fellowship, Stanford University School of Medicine (2016)
- Medical Scholars Research Fellowship, Stanford University School of Medicine (2015)
- Medical Scholars Research Fellowship, Stanford University School of Medicine (2014)
- Stanford Society of Physician Scientists Research Grant, Stanford University School of Medicine (2013)
- Federal NSERC Research Award, NSERC (Natural Sciences and Engineering Research Council) (2013)
- Pioneer Energy LP Leadership Award (for strong leadership skills and community service), McMaster University (2012)
- Top Oral Presentation, Canadian Undergraduate Conference on Healthcare (CUCOH) 2012 (2012)
- Federal NSERC Research Award, NSERC (Natural Sciences and Engineering Research Council) (2011)
- Dr. Harry Lyman Scholarship, McMaster University (2011)
- Top Campus Director (for running the most successful marketing campaign), AGFA Healthcare Challenge (2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- 2020, American College of Radiology (ACR) (2022 - present)
- 2021, Northern California Radiation Oncology Society (NorCROS) (2022 - present)
- Member, Radiological Society of North American (RSNA) (2022 - present)
- Member, American Society of Clinical Oncology (ASCO) (2022 - present)
- Member, Alpha Omega Alpha (A#A) Honor Medical Society (2022 - present)
- Instructor, American Heart Association (AHA) Instructor Network (2019 - present)
- Member, American College of Radiation Oncology (ACRO) (2014 - present)
- Member, American Society for Radiation Oncology (ASTRO) (2014 - present)
- Alumnus, McMaster Alumni Association (2013 - present)

PROFESSIONAL EDUCATION

- Doctor of Medicine (MD), Stanford University School of Medicine (2019)
- Bachelor of Health Sciences, McMaster University (2013)

COMMUNITY AND INTERNATIONAL WORK

- GME Diversity Committee Leadership Council
- Co-Social Media Manager
- Inclusion, Diversity, Health Equity (IDHE) Departmental Cabinet
- President of Radiation Oncology Interest Group, Stanford, CA
- Head Teaching Assistant for medical school course EMED 201: Basic Cardiac Life Support, Stanford, CA
- Executive Member and Medical Volunteer, Santa Fe, Panama
- Lead Instructor of Anatomy & Physiology Course, Stanford, CA

- Free Clinic Volunteer, San Jose and Redwood City, CA

PERSONAL INTERESTS

- Athletics: Basketball, Tennis, Snowboarding, Hiking, Swim team (and lifeguard & swim instructor), Track & field team, Badminton team
- Music: Piano (Royal Conservatory of Music Grade 8), Cello (School Orchestra and String Sextet)
- Photography: Landscape photography with online photo-album

INTERNET LINKS

- Google Scholar Profile: <https://scholar.google.com/citations?user=scgY1ecAAAAJ&hl=en>
- Twitter Page: <https://twitter.com/FredYufanWuMD>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Peer review:

- International Journal of Radiation Oncology, Biology, Physics (Red Journal) resident peer reviewer
- Ad hoc reviewer for journal manuscripts, Muscle & Nerve Journal
- Peer reviewer for conference abstracts, UCSF Department of Family & Community Medicine Rodnick Colloquium

Google Scholar profile (list of publications):

<https://scholar.google.com/citations?hl=en&user=scgY1ecAAAAJ>

Publications

PUBLICATIONS

- **Clinical LINAC-based electron FLASH: Pathway for practical translation to FLASH clinical trials: LINAC electron FLASH.** *International journal of radiation oncology, biology, physics*
No, H. J., Wu, Y. F., Dworkin, M. L., Manjappa, R., Skinner, L., Ashraf, M. R., Lau, B., Melemenidis, S., Viswanathan, V., Yu, A. S., Surucu, M., Schüler, E., Graves, et al
2023
- **Dosimetric Predictors of Local Control after Stereotactic Ablative Radiotherapy (SABR) for Lung Tumors: A Secondary Analysis of a Phase II Prospective Trial of Individualized SABR (iSABR)**
Wu, Y., Lau, B., Fu, J., Skinner, L., Gensheimer, M., Gee, H., Diehn, M., Loo, B., Chin, A., Vitzthum, L.
LIPPINCOTT WILLIAMS & WILKINS.2022: S16
- **Sarcopenia and Abdominal Fat Distribution Are Prognostic for Overall Survival in Patients with Unresectable Pancreatic Cancer Undergoing Stereotactic Body Radiotherapy**
Wu, Y., Nwachukwu, C., Toesca, D., Liu, Y., Koong, A., von Eyben, R., Koong, A., Chang, D.
LIPPINCOTT WILLIAMS & WILKINS.2021: S58
- **Pulmonary Hemorrhage in Patients Treated with Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Lau, B., Wu, Y. F., No, H. J., Ko, R. B., Devine, M., Das, M. S., Neal, J. W., Wakelee, H. A., Ramchandran, K., Gensheimer, M. F., Diehn, M., Chin, A. L., Loo, et al
2023
- **Intracranial Control With Combination BRAF and MEK Inhibitor Therapy in Patients With Metastatic Melanoma.** *Cureus*
Hui, C., Wu, Y. F., Liu, K., Sandhu, N., Blomain, E., Binkley, M. S., Gephart, M. H., Chang, S. D., Li, G. H., Reddy, S. A., Soltys, S. G., Pollom, E.
2022; 14 (11): e31838
- **Measures of Body Composition Obtainable from a Computed Tomography Scan Are Predictive of Overall Survival in Patients with Unresectable Pancreatic Cancer Undergoing Stereotactic Body Radiotherapy**

- Wu, Y., Nwachukwu, C., Toesca, D., Liu, Y., Koong, A., Von Eyben, R., Koong, A., Chang, D.
LIPPINCOTT WILLIAMS & WILKINS.2022: S3-S4
- **Design and validation of a dosimetric comparison scheme tailored for ultra-high dose-rate electron beams to support multicenter FLASH preclinical studies.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
Gonçalves Jorge, P., Melemenidis, S., Grilj, V., Buchillier, T., Manjappa, R., Viswanathan, V., Gondré, M., Vozenin, M. C., Germond, J. F., Bochud, F., Moeckli, R., Limoli, C., Skinner, et al
2022
 - **A Randomized Split-Body Feasibility Trial of Single-Fraction FLASH Vs Conventional Electron Radiotherapy Using a Standard Clinical Linear Accelerator for Adults with Multilesional Primary Cutaneous Lymphomas** *Physica Medica*
Dworkin, M. L., No, H. J., Wu, Y. F., Binkley, M., Rieger, K., Graves, E., Barcellos-Hoff, M., von Eyben, R., Ashraf, R., Manjappa, R., Yu, A., Skinner, L., Surucu, et al
2022: S94-S95
 - **A Six Minute Brachytherapy Waste Audit: A Feasible, Efficient Method for Identifying Opportunities to Enhance the Environmental Sustainability of a Radiation Oncology Department Practices** *American Brachytherapy Society (ABS) Annual Meeting*
Baniel, C., Lichter, K., Frick, M., Oladipo, E., Wu, Y., Blomain, E., Chan, J., Lee, M., Kimball, E., Singer, L., Kidd, E., Buyyounouski, M., Mohamad, et al
2022
 - **Implementing Environmentally Sustainable Practices in an Outpatient Oncology Clinic** *Vizient Connections Summit*
Frick, M., Baniel, C., Blomain, E., Yu, A., Skinner, L., Chin, A., Oladipo, E., Wu, Y., Shieh, L., Bagshaw, H.
2022
 - **FLASH Radiation Therapy Principles, Technology, and Clinical Translation** *American Association of Medical Dosimetrists 47th Meeting*
Wu, Y., No, H., Loo, B., et al
2022
 - **FLASH Radiation Therapy Principles, Technology, and Clinical Translation** *American Association of Medical Dosimetrists Fall Virtual Symposium*
Wu, Y., No, H., Breikreutz, D., Mascia, A., Moeckli, R., Bourhis, J., Schuler, E., Maxim, P., Loo, B.
2022
 - **Chest Wall Toxicity after Individualized Stereotactic Ablative Radiotherapy for Lung Tumors** *IASLC World Conference on Lung Cancer*
Lau, B., Wu, Y., Fu, J., Cui, S., Pham, D., Gee, H., Skinner, L., Shirato, H., Taguchi, H., Chin, A., Gensheimer, M., Diehn, M., Loo, et al
2022
 - **Dosimetric predictors of local control after SABR for lung tumors: a secondary analysis of a phase II prospective trial of individualized SABR** *American Radium Society (ARS) Annual Meeting*
Wu, Y., Lau, B., Fu, J., Skinner, L., Gensheimer, M., Gee, H., Diehn, M., Loo, B., Chin, A., Vitzthum, L.
2022
 - **Intracranial Control With Combination BRAF and MEK Inhibitor Therapy in Patients With Metastatic Melanoma** *Cureus*
Hui, C., Wu, Y., et al
2022; 14 (11)
 - **Pulmonary Hemorrhage in Patients Treated With Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents**
Lau, B., No, H. J., Wu, Y. F., Ko, R. B., Devine, M., Das, M., Neal, J. W., Ramchandran, K. J., Wakelee, H. A., Shaheen, S., Diehn, M., Chin, A. L., Loo, et al
ELSEVIER SCIENCE INC.2021: E423
 - **Feasibility of Clinically Practical Ultra-High Dose Rate (FLASH) Radiation Delivery by a Reversible Configuration of a Standard Clinical-Use Linear Accelerator**
No, H. J., Wu, Y. F., Manjappa, R., Skinner, L., Lau, B., Melemenidis, S., Yu, S. J., Surucu, M., Schueler, E., Bush, K., Graves, E. E., Maxim, P. G., Loo, et al
ELSEVIER SCIENCE INC.2021: S32
 - **Validation of a Novel Cone-Less Set-up for Electron FLASH Radiation Delivery on a Clinical-Use Linear Accelerator**
Wu, Y. F., No, H. J., Manjappa, R., Skinner, L., Yu, S. J., Lau, B., Surucu, M., Schueler, E., Bush, K., Graves, E. E., Maxim, P. G., Loo, B. W.
ELSEVIER SCIENCE INC.2021: S139
 - **Intracranial Response to Combination BRAF and MEK Inhibitor Therapy in Patients with Metastatic Melanoma**
Hui, C., Wu, Y., Liu, K., Sandhu, N., Blomain, E., Binkley, M., Gephart, M., Chang, S., Li, G., Reddy, S., Gibbs, I., Soltys, S., Pollom, et al
LIPPINCOTT WILLIAMS & WILKINS.2021: S48-S49

- **Pulmonary Hemorrhage in Patients Treated with Thoracic Stereotactic Ablative Radiotherapy and Anti-Angiogenic Agents**
Lau, B., No, H., (Fred) Wu, Y., Devine, M., Ko, R., Loo, B., Diehn, M., Chin, A., Vitzthum, L.
LIPPINCOTT WILLIAMS & WILKINS.2021: S105
- **Radiation Therapy for Primary Cutaneous Gamma Delta Lymphoma Prior to Stem Cell Transplantation.** *Cancer investigation*
Wu, Y. F., Skinner, L., Lewis, J., Khodadoust, M. S., Kim, Y. H., Kwong, B. Y., Weng, W., Hoppe, R. T., Sodzi, Q., Hui, C., Kastelowitz, N., Fernandez-Pol, S., Hiniker, et al
2021: 1–11
- **Technological Basis for Clinical Trials in FLASH Radiation Therapy: A Review** *Applied Radiation Oncology*
Wu, Y., No, H. J., Breitzkreutz, D. Y., Mascia, A. E., Moeckli, R., Bourhis, J., Schöler, E., Maxim, P. G., Loo Jr., B. W.
2021; 10 (2): 6-14
- **A Lung Mass that Vanishes** *Journal of Hospital Medicine (2020 Virtual Competition)*
Crawford, D. L., Wu, Y. F., Peng, F. B., Musher, D. M.
2020
- **The impact of postoperative therapy on primary cardiac sarcoma.** *The Journal of thoracic and cardiovascular surgery*
Wu, Y., Million, L., Moding, E. J., Scott, G., Berry, M., Ganjoo, K. N.
2018; 156 (6): 2194-2203
- **Worsening of Child-Pugh Score after Stereotactic Body Radiation Therapy Significantly Impacts Survival of Patients Treated for Hepatocellular Carcinoma**
Toesca, D. S., Wu, Y., Koong, A., Von Eyben, R., Osmundson, E. C., Shaffer, J., Koong, A. C., Chang, D. T.
ELSEVIER SCIENCE INC.2018: E64
- **The Impact of Post-Operative Therapy on Primary Cardiac Sarcoma** *The Journal of Thoracic and Cardiovascular Surgery*
Wu, Y., Million, L., Moding, E. J., Scott, G., Berry, M., Ganjoo, K. N.
2018
- **Patient-Centered Care Challenges and Surprises: Through the Clerkship Students' Eyes.** *Family medicine*
Boggiano, V. L., Wu, Y., Bruce, J. S., Merrell, S. B., Schillinger, E.
2017; 49 (1): 57-61
- **Patient-Centered Care Challenges and Surprises** *FAMILY MEDICINE*
Boggiano, V. L., Wu, Y., Bruce, J. S., Merrell, S. B., Schillinger, E.
2017; 49 (1): 57-61
- **Predictors of Toxicity Associated With Stereotactic Body Radiation Therapy to the Central Hepatobiliary Tract** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Osmundson, E. C., Wu, Y., Luxton, G., Bazan, J. G., Koong, A. C., Chang, D. T.
2015; 91 (5): 986-994
- **Dosimetric Modeling of Central Liver Toxicity After SBRT to the Liver** *56th Annual Meeting of the American-Society-for-Radiation-Oncology*
Osmundson, E., Wu, Y., Bazan, J. G., Koong, A. C., Chang, D. T.
ELSEVIER SCIENCE INC.2014: S382–S382
- **Statin-associated Autoimmune Myopathies: A Pathophysiologic Spectrum** *CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES*
Wu, Y., Lach, B., Provias, J. P., Tarnopolsky, M. A., Baker, S. K.
2014; 41 (5): 638-647
- **Practice-Based Challenges and Improvement Opportunities: Clerkship Students' Perceptions** *Western Group on Educational Affairs Regional Conference*
Wu, Y., Boggiano, V., Bereckney, S., Bruce, J., Rydel, T., Schillinger, E.
2014
- **Six novel mutations in the myophosphorylase gene in patients with McArdle disease and a family with pseudo-dominant inheritance pattern** *MOLECULAR GENETICS AND METABOLISM*
Wu, Y., Weber, J. L., Vladutiu, G. D., Tarnopolsky, M. A.
2011; 104 (4): 587-591

- **Age-Related Effects of Diet-Induced Obesity on Skeletal Muscle Regeneration** *Ontario Exercise Physiology Conference*
Trajcevski, K., Wang, D., Wu, Y., Hawke, T.
2011