

# Stanford

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## Kip E. Guja, MD PhD

Clinical Instructor, Radiology - Rad/Nuclear Medicine

### CLINICAL OFFICE (PRIMARY)

- **Nuclear Medicine**
- 300 Pasteur Dr Rm H0101
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- Stanford, CA 94305
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### ACADEMIC CONTACT INFORMATION

- **Administrative Contact**
- Brandon Asprer - Administrative Associate
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## Bio

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### CLINICAL FOCUS

- PET Imaging
- Theragnostics
- Diagnostic Radiology
- Pediatric Radiology
- Nuclear Radiology

### ACADEMIC APPOINTMENTS

- Clinical Instructor, Radiology - Rad/Nuclear Medicine
- Member, Maternal & Child Health Research Institute (MCHRI)

### ADMINISTRATIVE APPOINTMENTS

- Member, Molecular Imaging Program at Stanford (MIPS), (2023- present)
- Chief Resident, Nuclear Medicine and Diagnostic Radiology (NM/DR), Stanford University School of Medicine, (2022-2023)
- Clinical Administrator, Outpatient MRI Clinic Injection Shifts, 732 Welch Road, Stanford Children's Health, (2023- present)
- Project Leader, Contrast Extravasation Workflows, 52-in-52 Quality Improvement Initiative, (2021-2022)
- Chief Resident, Nuclear Medicine and Diagnostic Radiology (NM/DR), Stanford University School of Medicine, (2019-2020)
- Representative, Radiology IT Operations Committee, Stanford University Hospital, (2019- present)

### HONORS AND AWARDS

- One to Watch Award, Society of Nuclear Medicine and Molecular Imaging (2023)
- Resident Researcher Award, Nuclear Medicine and Molecular Imaging, Stanford University Hospital (2023)
- Intern of the Year Award, Department of Medicine, Stony Brook University Hospital (2018)
- Julian David Baumert PhD Thesis Award, Brookhaven National Laboratory (2016)

- Student Travel Stipend Award, Radiological Society of North America (2016)
- Ruth L. Kirschstein National Research Service Award, National Institutes of Health (2013-2015)

## BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Intern, Pediatric Imaging Council, Society of Nuclear Medicine and Molecular Imaging (2023 - present)
- Member, Nuclear Medicine Committee, Society of Pediatric Radiology (2023 - present)
- Editorial Board Member, Frontiers in Oncology: Cancer Imaging and Image-directed Interventions (2023 - present)
- Resident Representative for Nuclear Medicine, Radiological Society of North America (2021 - 2022)
- Member, Stanford Medicine Abilities Coalition (2019 - present)
- Fellow, Medical Scientist Training Program, National Institutes of Health (2008 - 2017)

## PROFESSIONAL EDUCATION

- Board Certification: Nuclear Medicine, American Board of Nuclear Medicine (2023)
- Fellowship, Stanford University School of Medicine , Nuclear Medicine (2019)
- Fellowship, Stanford University School of Medicine , Pediatric Radiology (2023)
- Residency: Stanford University Radiology Residency (2023) CA
- Internship: Stony Brook University Dept of Medicine (2018) NY
- Medical Education: Stony Brook University School of Medicine (2017) NY
- M.D., Stony Brook University School of Medicine (2017)
- Ph.D., Stony Brook University Department of Pharmacology , Biochemistry and Structural Biology (2015)
- M.S., Johns Hopkins University , Molecular and Cellular Biology (2007)
- B.S., Johns Hopkins University , Molecular and Cellular Biology (2006)

## LINKS

- Protein Data Bank: <https://tinyurl.com/kipguja-pdb-entries>
- ResearchGate: <https://www.researchgate.net/profile/Kip-Guja>
- Stanford Nuclear Medicine and Molecular Imaging: <https://med.stanford.edu/nuclearmedicine.html>
- Molecular Imaging Program at Stanford (MIPS): <https://med.stanford.edu/mips>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

My current research interests include:

- 1) PET/MR and PET/CT imaging in children and adults, for oncologic and non-oncologic indications
- 2) Targeted radionuclide therapy and theragnostics
- 3) Pre-clinical development and clinical translation of novel radiopharmaceuticals

### CLINICAL TRIALS

- [177Lu]-NeoB in Patients With Advanced Solid Tumors and With [68Ga]-NeoB Lesion Uptake, Recruiting
- Development of Radiation Free Whole Body Magnetic Resonance (MR) Imaging Technique for Staging Children With Cancer, Recruiting
- Pediatric PET/MR Image Registry, Recruiting
- Safety, PK and Biodistribution of 18F-OP-801 in Patients With ALS, AD, MS, PD and Healthy Volunteers, Recruiting
- Zanubrutinib in Patients With IgG4-Related Disease, Recruiting

- 99mTc Sestamibi SPECT/CT vs 18F Fluorocholine PET/CT, Not Recruiting
- Quantitative 13N-Ammonia Cardiac Rest/Stress Digital PET/CT, Not Recruiting

## Publications

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### PUBLICATIONS

- **Molecular Imaging in Soft-tissue Sarcoma: Evolving Role of FDG PET.** *Seminars in nuclear medicine*  
Guja, K. E., Ganjoo, K. N., Iagaru, A.  
2024
- **Molecular Imaging with PET/CT and PET/MRI in Pediatric Musculoskeletal Diseases** *Seminars in Nuclear Medicine*  
Guja, K. E., Behr, G., Bedmutha, A., Kuhn, M., Nadel, H. R., Pandit-Taskar, N.  
2024
- **Overview and Recent Advances in 18F-FDG PET/CT for Evaluation of Pediatric Lymphoma** *Seminars in Nuclear Medicine*  
Guja, K. E., Nadel, H., Iagaru, A.  
2023; 53 (3): 400-412
- **Flip-flop: Two tracers are better than one in pediatric PET/MRI for neuroendocrine neoplasms** *Journal of Nuclear Medicine*  
Guja, K. E., Nadel, H. R.  
2023; 64 (1)
- **Test Yourself: 7-month-old female with an enlarging left axillary mass.** *Skeletal radiology*  
Guja, K. E., Hazard, F. K., Fadell, M.  
2022
- **PSMA theragnostics for metastatic castration resistant prostate cancer.** *Translational oncology*  
Song, H., Guja, K. E., Iagaru, A.  
2022; 22: 101438
- **Phantom study of SPECT/CT augmented reality for intraoperative localization of sentinel lymph nodes in head and neck melanoma.** *Oral oncology*  
Nakamoto, R., Zhuo, J., Guja, K. E., Duan, H., Perkins, S. L., Leuze, C., Daniel, B. L., Franc, B. L.  
1800; 125: 105702
- **64Cu-DOTATATE Uptake in a Pulmonary Hamartoma** *Clinical Nuclear Medicine*  
Song, H., Guja, K. E., Yang, E. J., Guo, H. H.  
2022; 48 (1): 58-60
- **18F-FDG PET/CT for Evaluation of Post-Transplant Lymphoproliferative Disorder (PTLD).** *Seminars in nuclear medicine*  
Song, H., Guja, K. E., Iagaru, A.  
2021
- **The Clinical Utility of 18F-Fluciclovine PET/CT in Biochemically Recurrent Prostate Cancer: an Academic Center Experience Post FDA Approval.** *Molecular imaging and biology*  
Nakamoto, R. n., Harrison, C. n., Song, H. n., Guja, K. E., Hatami, N. n., Nguyen, J. n., Moradi, F. n., Franc, B. L., Aparici, C. M., Davidzon, G. n., Iagaru, A. n.  
2021
- **Prospective evaluation of F-18-DCFPyL PET/CT in biochemically recurrent prostate cancer: Analysis of lesion localization and distribution.**  
Song, H., Duan, H., Harrison, C., Guja, K., Hatami, N., Franc, B., Moradi, F., Aparici, C., Davidzon, G., Srinivas, S., Iagaru, A.  
AMER SOC CLINICAL ONCOLOGY.2020
- **Peptide receptor radionuclide therapy (PRRT) for neuroendocrine tumors (NET): A two-year single institution experience**  
Duan, H., Ninatti, G., Girod, B., Ferri, V., Guja, K., Song, H., Kunz, P., Fisher, G., Iagaru, A., Aparici, C.  
SOC NUCLEAR MEDICINE INC.2020
- **Fungal endocarditis resembling primary cardiac malignancy in a patient with B-cell ALL with culture confirmation.** *Radiology case reports*  
Girod, B. J., Guja, K. E., Davidzon, G., Chan, F., Zucker, E., Franc, B. L., Moradi, F., Iagaru, A., Aparici, C. M.  
2020; 15 (2): 117-19

- **An unusual presentation of recurrent T cell lymphoma: angiocentric pattern of cutaneous uptake on [18F]FDG PET/CT.** *European journal of nuclear medicine and molecular imaging*  
Guja, K. E., Brown, R. n., Girod, B. n., Song, H. n., Harrison, C. n., Franc, B. L., Moradi, F. n., Davidzon, G. n., Iagaru, A. n., Aparici, C. M.  
2020
- **Prospective Evaluation in an Academic Center of 18F-DCFPyL PET/CT in Biochemically Recurrent Prostate Cancer: A Focus on Localizing Disease and Changes in Management.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*  
Song, H., Harrison, C., Duan, H., Guja, K., Hatami, N., Franc, B., Moradi, F., Mari Aparici, C., Davidzon, G., Iagaru, A.  
2019
- **HnRNPA2 is a novel histone acetyltransferase that mediates mitochondrial stress-induced nuclear gene expression (vol 2, 16045, 2016) CELL DISCOVERY**  
Guha, M., Srinivasan, S., Guja, K., Mejia, E., Garcia-Diaz, M., Johnson, F., Ruthel, G., Kaufman, B. A., Rappaport, E. F., Glineburg, M., Fang, J., Klein-Szanto, A. J., Nakagawa, et al  
2019; 5: 28
- **Prospective Evaluation of F-18-DCFPyL PET/CT and Conventional Imaging in Patients with Biochemically Recurrent Prostate Cancer**  
Song, H., Harrison, C., Guja, K., Franc, B., Moradi, F., Davidzon, G., Aparici, C., Iagaru, A.  
SOC NUCLEAR MEDICINE INC.2019
- **Prospective evaluation of F-18- DCFPyL in Patients with Biochemically Recurrent Prostate Cancer: Positivity Rate and Correlation with PSA levels**  
Harrison, C., Song, H., Franc, B. L., Guja, K., Moradi, F., Davidzon, G., Aparici, C., Iagaru, A.  
SOC NUCLEAR MEDICINE INC.2019
- **Quantification of uptake in Ga-68-DOTATATE PET: Correlation between standardized uptake values and patient factors**  
Moradi, F., Guja, K., Aparici, C., Iagaru, A.  
SOC NUCLEAR MEDICINE INC.2019
- **hnRNPA2 mediated acetylation reduces telomere length in response to mitochondrial dysfunction.** *PLoS one*  
Guha, M., Srinivasan, S., Johnson, F. B., Ruthel, G., Guja, K., Garcia-Diaz, M., Kaufman, B. A., Glineburg, M. R., Fang, J., Nakagawa, H., Basha, J., Kundu, T., Avadhani, et al  
2018; 13 (11): e0206897
- **Response to Nazarian et al regarding: "Cost-effectiveness of magnetic resonance imaging versus ultrasound for the detection of symptomatic full-thickness supraspinatus tendon tears"** *JOURNAL OF SHOULDER AND ELBOW SURGERY*  
Gyftopoulos, S., Guja, K. E., Subhas, N., Virk, M. S., Gold, H. T.  
2018; 27 (10): E320-E321
- **Cost-effectiveness of magnetic resonance imaging versus ultrasound for the detection of symptomatic full-thickness supraspinatus tendon tears.** *Journal of shoulder and elbow surgery*  
Gyftopoulos, S., Guja, K. E., Subhas, N., Virk, M. S., Gold, H. T.  
2017; 26 (12): 2067-2077
- **Structure of human nSMase2 reveals an interdomain allosteric activation mechanism for ceramide generation.** *Proceedings of the National Academy of Sciences of the United States of America*  
Airola, M. V., Shanbhogue, P., Shamseddine, A. A., Guja, K. E., Senkal, C. E., Maini, R., Bartke, N., Wu, B. X., Obeid, L. M., Garcia-Diaz, M., Hannun, Y. A.  
2017; 114 (28): E5549-E5558
- **HnRNPA2 is a novel histone acetyltransferase that mediates mitochondrial stress-induced nuclear gene expression.** *Cell discovery*  
Guha, M., Srinivasan, S., Guja, K., Mejia, E., Garcia-Diaz, M., Johnson, F. B., Ruthel, G., Kaufman, B. A., Rappaport, E. F., Glineburg, M. R., Fang, J. K., Klein-Szanto, A. J., Klein Szanto, et al  
2016; 2: 16045
- **Structural and Biochemical Basis for Intracellular Kinase Inhibition by Src-specific Peptidic Macrocycles.** *Cell chemical biology*  
Aleem, S., Georghiou, G., Kleiner, R. E., Guja, K., Craddock, B. P., Lyczek, A., Chan, A. I., Garcia-Diaz, M., Miller, W. T., Liu, D. R., Seeliger, M. A.  
2016; 23 (9): 1103-1112
- **A fidelity mechanism in DNA polymerase lambda promotes error-free bypass of 8-oxo-dG.** *The EMBO journal*  
Burak, M. J., Guja, K. E., Hambardjieva, E., Derkunt, B., Garcia-Diaz, M.  
2016; 35 (18): 2045-59
- **Reviewing the Reviewers: The Timeliness of Peer Review in Radiology Journals**

Guja, K. E., Janardhanan, A., Stavro, J., Castillo, M., Schweitzer, M. E.  
Radiological Society of North America.2016

- **Nucleotide binding interactions modulate dNTP selectivity and facilitate 8-oxo-dGTP incorporation by DNA polymerase lambda.** *Nucleic acids research*  
Burak, M. J., Guja, K. E., Garcia-Diaz, M.  
2015; 43 (16): 8089-99
- **Completing the specificity swap: Single-stranded DNA recognition by F and R100 TraI relaxase domains.** *Plasmid*  
Guja, K. E., Schildbach, J. F.  
2015; 80: 1-7
- **Unraveling Cholesterol Catabolism in Mycobacterium tuberculosis: ChsE4-ChsE5 #2#2 Acyl-CoA Dehydrogenase Initiates #-Oxidation of 3-Oxo-cholest-4-en-26-oyl CoA.** *ACS infectious diseases*  
Yang, M., Lu, R., Guja, K. E., Wipperman, M. F., St Clair, J. R., Bonds, A. C., Garcia-Diaz, M., Sampson, N. S.  
2015; 1 (2): 110-125
- **A distinct MaoC-like enoyl-CoA hydratase architecture mediates cholesterol catabolism in Mycobacterium tuberculosis.** *ACS chemical biology*  
Yang, M., Guja, K. E., Thomas, S. T., Garcia-Diaz, M., Sampson, N. S.  
2014; 9 (11): 2632-45
- **Organization of the human mitochondrial transcription initiation complex.** *Nucleic acids research*  
Yakubovskaya, E., Guja, K. E., Eng, E. T., Choi, W. S., Mejia, E., Beglov, D., Lukin, M., Kozakov, D., Garcia-Diaz, M.  
2014; 42 (6): 4100-12
- **Non-stop mRNA decay: a special attribute of trans-translation mediated ribosome rescue.** *Frontiers in microbiology*  
Venkataraman, K., Guja, K. E., Garcia-Diaz, M., Karzai, A. W.  
2014; 5: 93
- **A remote palm domain residue of RB69 DNA polymerase is critical for enzyme activity and influences the conformation of the active site.** *PloS one*  
Jacewicz, A., Trzemecka, A., Guja, K. E., Plochocka, D., Yakubovskaya, E., Bebenek, A., Garcia-Diaz, M.  
2013; 8 (10): e76700
- **Structural basis for Sadenosylmethionine binding and methyltransferase activity by mitochondrial transcription factor B1.** *Nucleic acids research*  
Guja, K. E., Venkataraman, K., Yakubovskaya, E., Shi, H., Mejia, E., Hambardjieva, E., Karzai, A. W., Garcia-Diaz, M.  
2013; 41 (16): 7947-59
- **Structure of the essential MTERF4:NSUN4 protein complex reveals how an MTERF protein collaborates to facilitate rRNA modification.** *Structure (London, England : 1993)*  
Yakubovskaya, E., Guja, K. E., Mejia, E., Castano, S., Hambardjieva, E., Choi, W. S., Garcia-Diaz, M.  
2012; 20 (11): 1940-7
- **Hitting the brakes: termination of mitochondrial transcription.** *Biochimica et biophysica acta*  
Guja, K. E., Garcia-Diaz, M.  
2011; 1819 (9-10): 939-47
- **An intrastrand three-DNA-base interaction is a key specificity determinant of F transfer initiation and of F TraI relaxase DNA recognition and cleavage.** *Nucleic acids research*  
Hekman, K., Guja, K., Larkin, C., Schildbach, J. F.  
2008; 36 (14): 4565-72
- **Using fluorophore-labeled oligonucleotides to measure affinities of protein-DNA interactions.** *Methods in enzymology*  
Anderson, B. J., Larkin, C., Guja, K., Schildbach, J. F.  
2008; 450: 253-72

## PRESENTATIONS

- Pediatric PET MR: Oncology and Beyond, GE HealthCare SIGNA Masters PET MR Summit 2023 (6/29/2023)