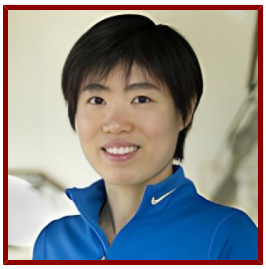
Stanford



Quan Zhou

Instructor, Neurosurgery

Bio

BIO

Quan is an Instructor in the Department of Neurosurgery and the Molecular Imaging Program at Stanford (MIPS), where she leads a Phase I/II clinical trial on molecular targeted fluorescence-guided surgery to improve resection accuracy of brain malignancies. As the Principal Investigator, Quan directs a study aimed at advancing treatment strategies for pediatric high-grade glioma through theranostic imaging and targeted therapy. She has established a clinical theranostic imaging and analysis framework to predict therapeutic distribution in brain tumors from clinical, radiographic and tumor microenvironment features. Her research interests also include molecular imaging of intratumoral immunosuppression of high-grade glioma and enhanced antibody delivery across the blood-brain barrier.

Dr. Zhou studied Applied Biology and Chemistry on a four-year full ride scholarship at Hong Kong Baptist University. She obtained her MS and PhD in Biomedical Engineering at the University of Michigan, Ann Arbor, where she was awarded the Richard and Eleanor Towner Prize for Distinguished Academic Achievement. Dr. Zhou's doctoral research on optical and photoacoustic imaging for early detection of liver and colorectal cancers with molecular targeting probes received the American Gastroenterological Association Research Foundation Award. Her recent work identified factors that influence clinical imaging outcome and was recognized with the Alavi-Mandell Award from the Society of Nuclear Medicine and Molecular Imaging.

Dr. Zhou has served as a mentor and counselor for students of all ages and backgrounds. In 2017 she became the first non-faculty recipient of Willie Hobbs Moore Aspire Advance Achieve Mentoring Award recognizing her outstanding mentorship in multiple academic, outreach and athletic programs, and her leadership roles in the Society of Women Engineers, the engineering honor society (Tau Beta Pi) and the University of Michigan Table Tennis Club. Presently, she chairs the MIPS Trainees Council and co-chairs the Women in Molecular Imaging Network (WIMIN) interest group where she leads the Fundraising/Auction Committee.

In recognition of her contribution and leadership in the realm of molecular imaging, Dr. Zhou was honored with the WIMIN Rising Star Award in 2023 by the World Molecular Imaging Society.

ACADEMIC APPOINTMENTS

- Instructor, Neurosurgery
- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- Pilot Grant (Principal investigator), Maternal & Child Health Research Institute (MCHRI) (2024-2025)
- Rising Star Award, Women in Molecular Imaging Network (WIMIN), World Molecular Imaging Society (2023)
- Editorial Scholar, Society for Neuro-Oncology (SNO) and Oxford University Press (2023-2024)

- Alavi-Mandell Award, Society of Nuclear Medicine and Molecular Imaging (SNMMI) (2023)
- Finalist, SPARK Translational Research Program, Stanford (2023)
- National Cancer Institute (NCI) Travel Grant, World Molecular Imaging Congress (WMIC) (2022)
- Scholar Award, Women in Molecular Imaging Network (WIMIN), World Molecular Imaging Society (2022, 2023)
- Cover Article, July issue of Theranostics (2021)
- Best Scientific Image Award, Molecular Imaging Program at Stanford (MIPS) (2018)
- 1st Prize Poster Award, Molecular Imaging Program at Stanford (MIPS) (2018)
- Research Foundation Award, American Gastroenterological Association (AGA) (2017)
- Richard and Eleanor Towner Prize for Distinguished Academic Achievement, University of Michigan, Ann Arbor (2017)
- Willie Hobbs Moore Aspire, Advance, Achieve Mentoring Award, University of Michigan, Ann Arbor (2017)
- Rackham Graduate Student Research Grant, University of Michigan, Ann Arbor (2017)
- Poster of Distinction, Digestive Disease Week (DDW), Chicago, IL (2017)
- State Champion, National Collegiate Table Tennis Association (NCTTA), MI Division (2015-2017)
- Most Outstanding Active Member, Tau Beta Pi Engineering Honor Society, Michigan Gamma Chapter (2013-2014)
- Rackham International Travel Grant, University of Michigan, Ann Arbor (2011)
- Summer Undergraduate Research Fellowship (SURF), Hong Kong Baptist University (2010)
- Professor Herbert Tsang Scholarships, Hong Kong Baptist University (2008–2010)
- Sir Tseng Chi Lu Scholarship, Hong Kong Baptist University (2007–2008)
- Merit Prize, Short Story Writing Competition, Hong Kong Baptist University (2007)
- President’s Honor Roll, Hong Kong Baptist University (2006–2010)
- Full Ride University Scholarship for Outstanding Mainland Students, Education Bureau, Hong Kong (2006-2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Grant Reviewer, "Emerging Imaging Technologies in Neuroscience (EITN)" Study Section, NIH, USA (2024 - present)
- Chair, Molecular Imaging Program at Stanford (MIPS) Trainees Council (2024 - present)
- Co-Chair, Women in Molecular Imaging Network (WIMIN), World Molecular Imaging Society (2024 - present)
- Co-Chair, WIMIN Fundraising/Auction Committee, World Molecular Imaging Society (2023 - present)
- Guest Editor, Special Issue “Optical and Acoustical Methods for Biomedical Imaging and Sensing”, Sensors (2022 - 2024)
- Grant Reviewer, The Dutch Cancer Society (KWF Kankerbestrijding), the Netherlands (2023 - 2023)
- Co-Lead, Trainees Council, Molecular Imaging Program at Stanford (2022 - 2023)
- Program Committee, Molecular Imaging Program at Stanford (MIPS) Retreat (2020 - 2023)
- Subject Chair & Session Chair, Instrumentation Category, World Molecular Imaging Congress (WMIC) (2022 - 2022)
- Alumni Mentor for Career Development, College of Engineering, University of Michigan, Ann Arbor (2021 - 2022)
- Reviewer, Neuro-Oncology, Clinical Cancer Research, Cancer Research, Fluids and Barriers of the CNS, Molecular Cancer Therapeutics, Cancers, International Journal of Molecular Sciences, Biomedicines, Neuro-Oncology Advances, Translational Oncology, American Journal of Neuroradiology, International Journal of Environmental Research and Public Health, Molecular Imaging and Biology, Biomedical Optics Express, Current Oncology Cancer Investigation, Neuropsychiatric Disease and Treatment, Journal of Visualized Experiments (2011 - present)
- Reviewer, European Molecular Imaging Meeting (EMIM) (2023 - 2024)
- Reviewer, World Molecular Imaging Congress (WMIC) (2022 - 2024)
- Reviewer, IEEE International Symposium on Biomedical Imaging (ISBI) (2023 - 2023)
- Reviewer, Biomedical Engineering Society (BMES) Annual Meeting (2022 - 2022)

- Organizer, Molecular Imaging Program at Stanford (MIPS) Journal Club (2018 - 2021)
- Secretary, Tau Beta Pi National Engineering Honor Society, MI-Gamma Chapter (2013 - 2014)
- Co-Founder, Treasurer & Safety Officer, University of Michigan Table Tennis Club (2014 - 2017)
- Treasurer, Graduate Society of Women Engineers, University of Michigan, Ann Arbor (2014 - 2015)
- International Student Ambassador, Rackham Graduate School, University of Michigan, Ann Arbor (2012 - 2015)
- Professional Development Chair, Graduate Society of Women Engineers, University of Michigan, Ann Arbor (2012 - 2014)
- Member, Society of Nuclear Medicine and Molecular Imaging (SNMMI) (2024 - present)
- Member, Stanford Cancer Institute (SCI) (2024 - present)
- Member, Society of Neuro-Oncology (SNO) (2020 - present)
- Member, World Molecular Imaging Society (WMIS) (2018 - present)
- Member, American Gastroenterological Association (2017 - present)
- Member, SPIE international society for optics and photonic (2017 - present)
- Member, Optical Society of America (OSA) (2016 - present)
- Member, Phi Kappa Phi (National All-Discipline Honor Society) (2014 - present)
- Member, Tau Beta Pi (National Engineering Society) (2012 - 2018)
- Member, DEI Workgroup, World Molecular Imaging Society (WMIS) (2023 - 2023)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Michigan, Ann Arbor , Biomedical Engineering (Biomedical Imaging track) (2017)
- Master of Science, University of Michigan, Ann Arbor , Biomedical Engineering (Biomaterials track) (2012)
- Bachelor of Science (Hons.), Hong Kong Baptist University , Applied Biology (Biotechnology) and Chemistry (minor) (2010)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Current Research Focus: molecular targeted theranostic imaging of brain tumor and enhanced drug delivery

Areas of Insterests: molecular imaging, theranostics, fluorescence-guided surgery, brain tumor, drug delivery

Dr. Zhou has made substantial contributions to the growing biomedical research field of Molecular Imaging. Molecular imaging emerged in the mid twentieth century as a highly specialized discipline at the intersection of molecular biology and in vivo imaging, focusing on imaging molecules of medical interest within intact living subjects. Dr. Zhou’s research addresses some of the nation’s most pressing issues related to the development of effective approaches for accurate detection of human diseases and improving their treatment outcome. Her innovations in molecular imaging technology enables the visualization, characterization, and quantification of biologic processes taking place at the cellular and subcellular levels. The multiple and numerous potentialities of Quan’s work are applicable to the diagnosis of diseases such as cancer, neurological and cardiovascular diseases. Her strong education background in biological sciences and biomedical engineering followed by postdoctoral training in translational and clinical research have helped her develop multiple disease-specific molecular probes and imaging strategies for early cancer diagnosis, image-guided surgery, therapeutic delivery prediction and at-risk cardiovascular plaque detection. Her research also contributes to improving the treatment of these disorders by testing and optimizing the execution of new interventions. Her work is expected to have a major economic impact due to earlier disease detection and personalized therapy.

Dr. Zhou's research has led to emergence of novel solutions and opportunities, in particular, for molecular imaging of cancer and other diseases, for discovering, leveraging and integration of cancer biomarker and tumor microenvironment information, and for novel approaches to acquire real-time high-resolution contrast enhanced visualization of tumor margin and optimization based on imaging depth, quality and speed. Dr. Zhou has been able to formulate the involved clinical and biological problems into biomedical engineering frameworks and find ways to exploit a variety of modern techniques and approaches from photoacoustic imaging, fluorescence-guided surgery, micro-electromechanical systems and therapeutic delivery strategies in developing elegant and effective solutions. Her work in the Neurosurgery Department and Molecular Imaging Program at Stanford involves research related to developing tumor-specific molecular probes, advanced imaging methods and therapeutic delivery systems for adult and pediatric patients with malignant brain cancers to improve margin detection, enhance resection accuracy, and improve treatment outcome.

CLINICAL TRIALS

- Panitumumab-IRDye800 in Diagnosing Participants With Malignant Glioma Undergoing Surgery, Recruiting
- Panitumumab-IRDye800 to Detect Pediatric Neoplasms During Neurosurgical Procedures, Not Recruiting

Publications

PUBLICATIONS

- **Factors for differential outcome across cancers in clinical molecular-targeted fluorescence imaging.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*
  Zhou, Q., van den Berg, N. S., Kang, W., Pei, J., Nishio, N., van Keulen, S., Engelen, M. A., Lee, Y. J., Hom, M., Vega Leonel, J. C., Hart, Z., Vogel, H., Cayrol, et al
  2022
- **Fluorescence-guided craniotomy of glioblastoma using panitumumab-IRDye800.** *Neurosurgical focus: Video*
  Zhou, Q., Li, G.
  2022; 6 (1): V9
- **EGFR-targeted intraoperative fluorescence imaging detects high-grade glioma with panitumumab-IRDye800 in a phase 1 clinical trial.** *Theranostics*
  Zhou, Q., van den Berg, N. S., Rosenthal, E. L., Iv, M., Zhang, M., Vega Leonel, J. C., Walters, S., Nishio, N., Granucci, M., Raymundo, R., Yi, G., Vogel, H., Cayrol, et al
  2021; 11 (15): 7130-7143
- **Molecular imaging of a fluorescent antibody against epidermal growth factor receptor detects high-grade glioma.** *Scientific reports*
  Zhou, Q., Vega Leonel, J. C., Santoso, M. R., Wilson, C., van den Berg, N. S., Chan, C. T., Aryal, M., Vogel, H., Cayrol, R., Mandella, M. J., Schonig, F., Lu, G., Gambhir, et al
  2021; 11 (1): 5710
- **In vivo photoacoustic tomography of EGFR overexpressed in hepatocellular carcinoma mouse xenograft.** *Photoacoustics*
  Zhou, Q., Li, Z., Zhou, J., Joshi, B. P., Li, G., Duan, X., Kuick, R., Owens, S. R., Wang, T. D.
  2016; 4 (2): 43-54
- **Advancing presurgical non-invasive molecular subgroup prediction in medulloblastoma using artificial intelligence and MRI signatures.** *Cancer cell*
  Wang, Y. J., Wang, P., Yan, Z., Zhou, Q., Gunturkun, F., Li, P., Hu, Y., Wu, W. E., Zhao, K., Zhang, M., Lv, H., Fu, L., Jin, et al
  2024
- **Flavinated SDHA underlies the change in intrinsic optical properties of oral cancers.** *Communications biology*
  Marumo, T., Maduka, C. V., Ural, E., Apu, E. H., Chung, S., Tanabe, K., van den Berg, N. S., Zhou, Q., Martin, B. A., Miura, T., Rosenthal, E. L., Shibahara, T., Contag, et al
  2023; 6 (1): 1134
- **Flavinated SDHA Underlies the Change in Intrinsic Optical Properties of Oral Cancers.** *bioRxiv : the preprint server for biology*
  Marumo, T., Maduka, C. V., Ural, E., Apu, E. H., Chung, S., van den Berg, N. S., Zhou, Q., Martin, B. A., Rosenthal, E. L., Shibahara, T., Contag, C. H.
  2023
- **Low-count whole-body PET/MRI restoration: an evaluation of dose reduction spectrum and five state-of-the-art artificial intelligence models.** *European journal of nuclear medicine and molecular imaging*

Wang, Y. J., Wang, P., Adams, L. C., Sheybani, N. D., Qu, L., Sarrami, A. H., Theruvath, A. J., Gatidis, S., Ho, T., Zhou, Q., Pribnow, A., Thakor, A. S., Rubin, et al

2023

- **MRGFUS-DELIVERED FLUORESCENT EGFR/EGFRVIII ANTIBODY ENABLES THERANOSTIC IMAGING OF PEDIATRIC HIGH-GRADE GLIOMA AND PREDICTS RESPONSE TO TARGETED THERAPY**

  Zhou, Q., Aryal, M., Leonel, J., Santoso, M., Zlitni, A., Vogel, H., Cayrol, R., Li, G., Moseley, M.

  OXFORD UNIV PRESS INC.2022: 217

- **89Zr-panitumumab combined with 18F-FDG-PET improves detection and staging of head and neck squamous cell carcinoma.** *Clinical cancer research : an official journal of the American Association for Cancer Research*

  Lee, Y., van den Berg, N. S., Duan, H., Azevedo, E. C., Ferri, V., Hom, M., Raymundo, R. C., Valencia, A., Castillo, J., Shen, B., Zhou, Q., Freeman, L., Koran, et al

  2022

- **The Use of Panitumumab-IRDye800CW in a Novel Murine Model for Conjunctival Squamous Cell Carcinoma.** *Translational vision science & technology*

  Youn, G. M., Case, A. G., Jarin, T., Li, B., Swarup, A., Naranjo, A., Bou-Khalil, C., Yao, J., Zhou, Q., Hom, M. E., Rosenthal, E. L., Wu, A. Y.

  2022; 11 (7): 23

- **Noninvasive ultrasonic induction of cerebrospinal fluid flow enhances intrathecal drug delivery.** *Journal of controlled release : official journal of the Controlled Release Society*

  Aryal, M., Azadian, M. M., Hart, A. R., Macedo, N., Zhou, Q., Rosenthal, E. L., Airan, R. D.

  2022

- **MRI Radiogenomics of Pediatric Medulloblastoma: A Multicenter Study.** *Radiology*

  Zhang, M., Wong, S. W., Wright, J. N., Wagner, M. W., Toescu, S., Han, M., Tam, L. T., Zhou, Q., Ahmadian, S. S., Shpanskaya, K., Lummus, S., Lai, H., Eghbal, et al

  2022: 212137

- **Fluorescent molecular imaging can improve intraoperative sentinel margin detection in oral squamous cell carcinoma.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*

  Krishnan, G., van den Berg, N. S., Nishio, N., Kapoor, S., Pei, J., Freeman, L., Lee, Y., van Keulen, S., Fakurnejad, S., Condon, J., Back, F., Martin, B., Rosenthal, et al

  1800

- **EGFR-targeted fluorescence-guided surgery: differential imaging performance and clinical predictors in solid tumors** *World Molecular Imaging Congress (WMIC)*

  Zhou, Q., Iv, M., Moseley, M.

  2022

- **Metastatic and sentinel lymph node mapping using intravenously delivered Panitumumab-IRDye800CW.** *Theranostics*

  Krishnan, G., van den Berg, N. S., Nishio, N., Juniper, G., Pei, J., Zhou, Q., Lu, G., Lee, Y. J., Ramos, K., Iagaru, A. H., Baik, F. M., Colevas, A. D., Martin, et al

  2021; 11 (15): 7188-7198

- **In Vivo Evaluation of Near-Infrared Fluorescent Probe for TIM3 Targeting in Mouse Glioma.** *Molecular imaging and biology*

  Zhang, M., Zhou, Q., Huang, C., Chan, C. T., Wu, W., Li, G., Lim, M., Gambhir, S. S., Daldrup-Link, H. E.

  2021

- **Focused ultrasound: growth potential and future directions in neurosurgery.** *Journal of neuro-oncology*

  Zhang, M., Rodrigues, A., Zhou, Q., Li, G.

  2021

- **FIRST-IN-HUMAN FLUORESCENCE GUIDED SURGERY OF HIGH-GRADE GLIOMAS USING PANITUMUMAB-IRDYE800**

  Zhou, Q., van den Berg, N., Nishio, N., Lu, G., Chirita, S., Raymundo, R., Yi, G., Vogel, H., Cayrol, R., Rosenthal, E., Li, G.

  OXFORD UNIV PRESS INC.2020: 52

- **Effect of Formalin Fixation for Near-Infrared Fluorescence Imaging with an Antibody-Dye Conjugate in Head and Neck Cancer Patients.** *Molecular imaging and biology*

  Kapoor, S., Lu, G., van den Berg, N. S., Krishnan, G., Pei, J., Zhou, Q., Martin, B. A., Baik, F. M., Rosenthal, E. L., Nishio, N.

  2020

- **Tumour-specific fluorescence-guided surgery for pancreatic cancer using panitumumab-IRDye800CW: a phase 1 single-centre, open-label, single-arm, dose-escalation study.** *The lancet. Gastroenterology & hepatology*

  Lu, G., van den Berg, N. S., Martin, B. A., Nishio, N., Hart, Z. P., van Keulen, S., Fakurnejad, S., Chirita, S. U., Raymundo, R. C., Yi, G., Zhou, Q., Fisher, G. A., Rosenthal, et al

  2020

- **Optimal Dosing Strategy for Fluorescence-Guided Surgery with Panitumumab-IRDye800CW in Head and Neck Cancer** *MOLECULAR IMAGING AND BIOLOGY*

  Nishio, N., van den Berg, N. S., van Keulen, S., Martin, B. A., Fakurnejad, S., Zhou, Q., Lu, G., Chirita, S. U., Kaplan, M. J., Divi, V., Colevas, A. D., Rosenthal, E. L.

  2020; 22 (1): 156–64

- **Predicting Therapeutic Antibody Delivery into Human Head and Neck Cancers.** *Clinical cancer research : an official journal of the American Association for Cancer Research*

  Lu, G., Fakurnejad, S., Martin, B. A., van den Berg, N. S., van Keulen, S., Nishio, N., Zhu, A. J., Chirita, S. U., Zhou, Q., Gao, R. W., Kong, C. S., Fischbein, N., Penta, et al

  2020

- **Safety and Stability of Antibody-Dye Conjugate in Optical Molecular Imaging.** *Molecular imaging and biology*

  Pei, J. n., Juniper, G. n., van den Berg, N. S., Nisho, N. n., Broadt, T. n., Welch, A. R., Yi, G. S., Raymundo, R. C., Chirita, S. U., Lu, G. n., Krishnan, G. n., Lee, Y. J., Kapoor, et al

  2020

- **Endoscopic Fluorescence-Guided Surgery for Sinonasal Cancer Using an Antibody-Dye Conjugate.** *The Laryngoscope*

  Hart, Z. P., Nishio, N., Krishnan, G., Lu, G., Zhou, Q., Fakurnejad, S., Wormald, P. J., van den Berg, N. S., Rosenthal, E. L., Baik, F. M.

  2019

- **Probe-based fluorescence dosimetry of an antibody-dye conjugate to identify head and neck cancer as a first step to fluorescence-guided tissue preselection for pathological assessment.** *Head & neck*

  Nishio, N., van Keulen, S., van den Berg, N. S., Lu, G., LaRochelle, E. P., Davis, S. C., Martin, B. A., Fakurnejad, S., Zhou, Q., Birkeland, A. C., Kaplan, M. J., Divi, V., Colevas, et al

  2019

- **The Clinical Application of Fluorescence-Guided Surgery in Head and Neck Cancer** *JOURNAL OF NUCLEAR MEDICINE*

  van Keulen, S., Nishio, N., Fakurnejad, S., Birkeland, A., Martin, B. A., Lu, G., Zhou, Q., Chirita, S. U., Forouzanfar, T., Colevas, A., van den Berg, N. S., Rosenthal, E. L.

  2019; 60 (6): 758–63

- **Optimal Dosing Strategy for Fluorescence-Guided Surgery with Panitumumab-IRDye800CW in Head and Neck Cancer.** *Molecular imaging and biology : MIB : the official publication of the Academy of Molecular Imaging*

  Nishio, N., van den Berg, N. S., van Keulen, S., Martin, B. A., Fakurnejad, S., Zhou, Q., Lu, G., Chirita, S. U., Kaplan, M. J., Divi, V., Colevas, A. D., Rosenthal, E. L.

  2019

- **The Clinical Application of Fluorescence-Guided Surgery in Head and Neck Cancer.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*

  van Keulen, S., Nishio, N., Fakurnejad, S., Birkeland, A., Martin, B. A., Lu, G., Zhou, Q., Chirita, S. U., Forouzanfar, T., Colevas, D., van den Berg, N. S., Rosenthal, E. L.

  2019

- **Rapid, non-invasive fluorescence margin assessment: Optical specimen mapping in oral squamous cell carcinoma.** *Oral oncology*

  van Keulen, S., van den Berg, N. S., Nishio, N., Birkeland, A., Zhou, Q., Lu, G., Wang, H., Middendorf, L., Forouzanfar, T., Martin, B. A., Colevas, A. D., Rosenthal, E. L.

  2019; 88: 58–65

- **Predicting antibody penetration in a first-in-human clinical trial of head and neck cancers** *Society of Photographic Instrumentation Engineers (SPIE) Photonics West*

  Lu, G., Fakurnejad, S., Martin, B. A., Zhu, A., van den Berg, N., van Keulen, S., Zhou, Q., Teraphongphom , N., Gao, R., Oberhelman, N., Chirita, S. U., Erstey, R., Kong , et al

  2019: 1085905

- **Fluorescence-guided surgery with panitumumab-IRDye800 and cetuximab-IRDye800 in glioblastoma patients** *Society of Photographic Instrumentation Engineers (SPIE) Photonics West*
  Zhou, Q., Miller, S. E., van den Berg, N., Lu, G., Vogel, H., Cayrol, R., Oberhelman , N. J., Chirita , S. U., van Keulen, S., Grant, G. A., Li, G., Rosenthal, E.
  2019: 108620Y
- **Reversible blood-brain barrier modulation enhances in vivo delivery of panitumumab-IRDye800 to high-grade glioma in cranial window model** *Society of Photographic Instrumentation Engineers (SPIE) Photonics West*
  Zhou, Q., Wilson, C. M., Vogel, H., Teraphongphom , N., Ertsey, R. D., Chu, P. M., Lu, G., van den Berg, N., van Keulen, S., Nishio, N., Grant, G. A.
  2019 : 1086402
- **Clinical Application of Fluorescence Guided Surgery in Head and Neck Cancer: Successes and Limitations** *Triological Society 122nd Annual Meeting at Combined Otolaryngology Spring Meetings (COSM)*
  van Keulen, S., van den Berg, N., Nishio, N., Lu, G., Zhou, Q., Rosenthal, E.
  2019: 25
- **Rapid, non-invasive fluorescence margin assessment: Optical specimen mapping in oral squamous cell carcinoma** *ORAL ONCOLOGY*
  van Keulen, S., van den Berg, N. S., Nishio, N., Birkeland, A., Zhou, Q., Lu, G., Wang, H., Middendorf, L., Forouzanfar, T., Martin, B. A., Colevas, A., Rosenthal, E. L.
  2019; 88: 58–65
- **In Vivo Optical Imaging of High-grade Glioma with Fluorescent EGFR Antibody** *World Molecular Imaging Congress (WMIC)*
  Zhou, Q., Wilson, C., Vogel, H., Teraphongphom, N., Ertsey , R., Chu, P., Lu, G., van den Berg, N., van Keulen, S., Nishio , N., Grant, G. A., Rosenthal, E.
  2018
- **Ultrasmall Paramagnetic Iron Oxide Nanoprobe Targeting Epidermal Growth Factor Receptor for In Vivo Magnetic Resonance Imaging of Hepatocellular Carcinoma.** *Bioconjugate chemistry*
  Chen, Y., Zhou, Q., Li, X., Wang, F., Heist, K., Kuick, R., Owens, S. R., Wang, T. D.
  2017; 28 (11): 2794-2803
- **In vivo near-infrared imaging of ErbB2 expressing breast tumors with dual-axes confocal endomicroscopy using a targeted peptide.** *Scientific reports*
  Gao, Z., Li, G., Li, X., Zhou, J., Duan, X., Chen, J., Joshi, B. P., Kuick, R., Khoury, B., Thomas, D. G., Fields, T., Sabel, M. S., Appelman, et al
  2017; 7 (1): 14404
- **Visualizing epithelial expression in vertical and horizontal planes with dual axes confocal endomicroscope using compact distal scanner.** *IEEE transactions on medical imaging*
  Li, G., Li, H., Duan, X., Zhou, Q., Zhou, J., Wang, T.
  2017
- **Multimodal laser-based angioscopy for structural, chemical and biological imaging of atherosclerosis.** *Nature biomedical engineering*
  Savastano, L. E., Zhou, Q., Smith, A., Vega, K., Murga-Zamalloa, C., Gordon, D., McHugh, J., Zhao, L., Wang, M., Pandey, A., Thompson, B. G., Xu, J., Zhang, et al
  2017; 1
- **Targeted sections in either XY or XZ plane with dual-axes confocal endomicroscope** *Society of Photographic Instrumentation Engineers (SPIE) Photonics West*
  Li, G., Li, H., Duan, X., Zhou, Q., Zhou, J., Oldham, K. R., Wang, T.,
  2017
- **Photoacoustic imaging of hepatocellular carcinoma targeting gold nanoshells** *Quan Zhou*
  Zhou, Q., Chen, Y., Li, Z., Zhou, J., Duan, X., Wang, T., ,
  2017: 1007907
- **Novel Peptide Probe Targets GPC3 Overexpression in Vivo in Hepatocellular Carcinoma** *Quan Zhou*
  Zhou, Q., Li, Z., Zhou, J., Duan, X., Kuick, R., Wang, T.
  2017
- **Visualizing epithelial expression of EGFR in vivo with distal scanning side-viewing confocal endomicroscope** *SCIENTIFIC REPORTS*
  Duan, X., Li, H., Zhou, J., Zhou, Q., Oldham, K. R., Wang, T. D.
  2016; 6

- **In vivo fluorescence imaging of hepatocellular carcinoma xenograft using near-infrared labeled epidermal growth factor receptor (EGFR) peptide** *BIOMEDICAL OPTICS EXPRESS*
  Li, Z., Zhou, Q., Zhou, J., Duan, X., Zhu, J., Wang, T. D.
  2016; 7 (9): 3163-3169
- **Integrated monolithic 3D MEMS scanner for switchable real time vertical/horizontal cross-sectional imaging** *OPTICS EXPRESS*
  Li, H., Duan, X., Qiu, Z., Zhou, Q., Kurabayashi, K., Oldham, K. R., Wang, T. D.
  2016; 24 (3): 2145-2155
- **Design and Synthesis of Near-Infrared Peptide for in Vivo Molecular Imaging of HER2** *BIOCONJUGATE CHEMISTRY*
  Joshi, B. P., Zhou, J., Pant, A., Duan, X., Zhou, Q., Kuick, R., Owens, S. R., Appelman, H., Wang, T. D.
  2016; 27 (2): 481-494
- **. EGFR Targeting Photoacoustic Probe for Hepatocellular Carcinoma Imaging in Vivo** *Quan Zhou*
  Zhou, Q., Li, Z., Zhou, J., Joshi, B., Li, G., Duan, X., Kuick, R., Owens, S., Wang, T.,
  2016: CTh2A-6
- **Vertical cross-sectional imaging of colonic dysplasia in vivo with multi-spectral dual axes confocal endomicroscopy.** *Gastroenterology*
  Qiu, Z., Khondee, S., Duan, X., Li, H., Mandella, M. J., Joshi, B. P., Zhou, Q., Owens, S. R., Kurabayashi, K., Oldham, K. R., Wang, T. D.
  2014; 146 (3): 615-617
- **Preparation and Characterization of a novel sludge conditioner by microbial flocculant (MBF) extracted from waste yeast with nano SiO2 particles** *Quan Zhou*
  Zhou, Q., Zhou, C.
  2011: 557-560

PRESENTATIONS

- Novel Peptide Probe Targets GPC3 Overexpression in Vivo in Hepatocellular Carcinoma - 2017 Digestive Disease Week® (DDW) (May 6, 2017 - May 9, 2017)
- Photoacoustic Imaging of Hepatocellular Carcinoma Targeting Gold Nanoshell - 2017 Society of Photographic Instrumentation Engineers (SPIE) Photonics West (January 28, 2017 - February 2, 2017)
- EGFR Targeting Photoacoustic Probe for Hepatocellular Carcinoma Imaging in Vivo - 2016 Biomedical Optics Congress (April 25, 2016 - April 28, 2016)
- Preparation and Characterization of a novel sludge conditioner by microbial flocculant (MBF) extracted from waste yeast with nano SiO2 particles - 2011 International Conference on Remote Sensing, Environment and Transportation Engineering (June 24, 2011 - June 26, 2011)
- In vivo optical imaging of high-grade glioma with fluorescent EGFR antibody following reversible blood-brain barrier modulation - World Molecular Imaging Congress (WMIC) (9/12/2018 - 9/15/2018)
- Fluorescence-guided surgery with panitumumab-IRDye800 and cetuximab-IRDye800 in glioblastoma patients - Society of Photographic Instrumentation Engineers (SPIE) Photonics West (2/2/2019 - 2/7/2019)
- Reversible blood-brain barrier modulation enhances in vivo delivery of panitumumab-IRDye800 to high-grade glioma in cranial window model - Society of Photographic Instrumentation Engineers (SPIE) Photonics West (2/2/2019 - 2/7/2019)
- First-in-human fluorescence guided surgery of high-grade gliomas using panitumumab-IRDye800 - Society for Neuro-Oncology Annual Meeting (11/19/2020 - 11/22/2020)
- EGFR-targeted fluorescence-guided surgery: differential imaging performance and clinical predictors in solid tumors - World Molecular Imaging Congress (WMIC) (9/27/2022 - 10/1/2022)