

# Stanford

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## Carmel Chan

Senior Scientific Manager, Rad/Molecular Imaging Program at Stanford

### Bio

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#### CURRENT ROLE AT STANFORD

Senior Scientific Manager

#### HONORS AND AWARDS

- 1st Place in Poster Presentation Competition, World Molecular Imaging Congress, Savannah, Georgia (2013)
- Travel Award, ARCMP Joint Symposium for Catholic Univ. of Korea - MIPS Stanford University, Seoul, South Korea (2010)
- Travel Award, 5th International Conference on 'The Hsp90 Chaperone Machine' in Les Diablerets, Switzerland (2010)
- Junior Scientist Travel Award, Institute of Molecular Imaging Sciences/Academy of Molecular Imaging (2009)
- Student Travel Award, World Molecular Imaging Congress. (2008)
- Postdoctoral Fellowship Award, Susan G. Komen Breast Cancer Foundation (2006-2008)
- Travel Award, American Association of Cancer Research Edward A. Smuckler Memorial Pathobiology of Cancer Workshop (2005)
- Young Investigator Travel Award, Academy of Molecular Imaging (2005)
- Young Investigator Travel Award, Academy of Molecular Imaging (2005)
- Predoctoral Fellowship Award, Department of Defense Breast Cancer Research Program (2001-2004)
- Trainee Award, Department of Defense Breast Cancer Research Training Program (2000-2004)
- Young Investigator Award, American Association of Cancer Research Conference on 'Signal transduction in Cancer'. (2000)
- Dean's Honors List, University of California, Davis (1994-1995)

#### EDUCATION AND CERTIFICATIONS

- Ph.D., City of Hope Graduate School of Biological Sciences , Biological Sciences (2004)
- B.Sc. (Hons), University of British Columbia, Vancouver, Canada , Cell & Developmental Biology (1998)

### Publications

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#### PUBLICATIONS

- **Engineering of a novel subnanomolar affinity fibronectin III domain binder targeting human programmed death-ligand 1.** *Protein engineering, design & selection : PEDS*  
Ramakrishnan, S., Natarajan, A., Chan, C. T., Panesar, P. S., Gambhir, S. S.  
2019
- **Microglia are effector cells of CD47-SIRPalpha antiphagocytic axis disruption against glioblastoma.** *Proceedings of the National Academy of Sciences of the United States of America*

- Hutter, G., Theruvath, J., Graef, C. M., Zhang, M., Schoen, M. K., Manz, E. M., Bennett, M. L., Olson, A., Azad, T. D., Sinha, R., Chan, C., Assad Kahn, S., Gholamin, et al  
2019
- **Ferumoxetyl-based Dual-modality Imaging Probe for Detection of Stem Cell Transplant Rejection.** *Nanotheranostics*  
Li, K., Chan, C. T., Nejadnik, H., Lenkov, O. D., Wolterman, C., Paulmurugan, R., Yang, H., Gambhir, S. S., Daldrup-Link, H. E.  
2018; 2 (4): 306–19
  - **Multimodal assessment of SERS nanoparticle biodistribution post ingestion reveals new potential for clinical translation of Raman imaging** *BIOMATERIALS*  
Campbell, J. L., SoRelle, E. D., Ilovich, O., Liba, O., James, M. L., Qiu, Z., Perez, V., Chan, C. T., de la Zerda, A., Zavaleta, C.  
2017; 135: 42-52
  - **A PET Imaging Strategy to Visualize Activated T Cells in Acute Graft-versus-Host Disease Elicited by Allogenic Hematopoietic Cell Transplant.** *Cancer research*  
Ronald, J. A., Kim, B., Gowrishankar, G., Namavari, M., Alam, I. S., D'Souza, A., Nishikii, H., Chuang, H., Ilovich, O., Lin, C., Reeves, R., Shuhendler, A., Hoehne, et al  
2017; 77 (11): 2893-2902
  - **Detection of Stem Cell Transplant Rejection with Ferumoxetyl MR Imaging: Correlation of MR Imaging Findings with Those at Intravital Microscopy.** *Radiology*  
Daldrup-Link, H. E., Chan, C., Lenkov, O., Taghavigarmestani, S., Nazekati, T., Nejadnik, H., Chapelin, F., Khurana, A., Tong, X., Yang, F., Pisani, L., Longaker, M., Gambhir, et al  
2017: 161139-?
  - **Longitudinal Monitoring of Antibody Responses against Tumor Cells Using Magneto-nanosensors with a Nanoliter of Blood.** *Nano letters*  
Lee, J. R., Chan, C. T., Ruderman, D., Chuang, H. Y., Gaster, R. S., Atallah, M., Mallick, P., Lowe, S. W., Gambhir, S. S., Wang, S. X.  
2017; 17 (11): 6644–52
  - **Syntheses and Discovery of a Novel Class of Cinnamic Hydroxamates as Histone Deacetylase Inhibitors by Multimodality Molecular Imaging in Living Subjects** *CANCER RESEARCH*  
CHAN, C. T., Qi, J., Smith, W., Paranol, R., Mazitschek, R., West, N., Reeves, R., Chiosis, G., Schreiber, S. L., Bradner, J. E., Paulmurugan, R., Gambhir, S. S.  
2014; 74 (24): 7475-7486
  - **Molecular Photoacoustic Imaging of Follicular Thyroid Carcinoma** *CLINICAL CANCER RESEARCH*  
Levi, J., Kothapalli, S., Bohndiek, S., Yoon, J., Dragulescu-Andrasi, A., Nielsen, C., Tisma, A., Bodapati, S., Gowrishankar, G., Yan, X., Chan, C., Starcevic, D., Gambhir, et al  
2013; 19 (6): 1494-1502
  - **New Positron Emission Tomography (PET) Radioligand for Imaging sigma-1 Receptors in Living Subjects** *JOURNAL OF MEDICINAL CHEMISTRY*  
James, M. L., Shen, B., Zavaleta, C. L., Nielsen, C. H., Mesangeau, C., Vuppala, P. K., Chan, C., Avery, B. A., Fishback, J. A., Matsumoto, R. R., Gambhir, S. S., McCurdy, C. R., Chin, et al  
2012; 55 (19): 8272-8282
  - **Discovery and validation of small-molecule heat-shock protein 90 inhibitors through multimodality molecular imaging in living subjects** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Chan, C. T., Reeves, R. E., Geller, R., Yaghoubi, S. S., Hoehne, A., Solow-Cordero, D. E., Chiosis, G., Massoud, T. F., Paulmurugan, R., Gambhir, S. S.  
2012; 109 (37): E2476-E2485
  - **Overcoming Trastuzumab resistance with the novel pan-erbB inhibitor AZD8931**  
Balachandran, B., Chabot, C., Hamel, S., Chan, C. T., Kane, S., Buchanan, M., Aguilar-Mahecha, A., Basik, M.  
AMER ASSOC CANCER RESEARCH.2012
  - **Optical Imaging with Her2-Targeted Affibody Molecules Can Monitor Hsp90 Treatment Response in a Breast Cancer Xenograft Mouse Model** *CLINICAL CANCER RESEARCH*  
van de Ven, S. M., Elias, S. G., Chan, C. T., Miao, Z., Cheng, Z., De, A., Gambhir, S. S.  
2012; 18 (4): 1073-1081
  - **Non-invasive Bioluminescence Imaging of Myoblast-Mediated Hypoxia-Inducible Factor-1 Alpha Gene Transfer** *MOLECULAR IMAGING AND BIOLOGY*  
Gheysens, O., Chen, I. Y., Rodriguez-Porcel, M., Chan, C., Rasooly, J., Vaerenberg, C., Paulmurugan, R., Willmann, J. K., Deroose, C., Wu, J., Gambhir, S. S.  
2011; 13 (6): 1124-1132

- **Bioluminescence resonance energy transfer (BRET) imaging of protein-protein interactions within deep tissues of living subjects** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Dragulescu-Andrasi, A., Chan, C. T., De, A., Massoud, T. F., Gambhir, S. S.  
2011; 108 (29): 12060-12065
- **Noninvasive molecular imaging of c-Myc activation in living mice** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Fan-Minogue, H., Cao, Z., Paulmurugan, R., Chan, C. T., Massoud, T. F., Felsher, D. W., Gambhir, S. S.  
2010; 107 (36): 15892-15897
- **Molecular Imaging of Phosphorylation Events for Drug Development** *MOLECULAR IMAGING AND BIOLOGY*  
CHAN, C. T., Paulmurugan, R., Reeves, R. E., Solow-Cordero, D., Gambhir, S. S.  
2009; 11 (3): 144-158
- **Molecular imaging of the efficacy of heat shock protein 90 inhibitors in living subjects** *CANCER RESEARCH*  
Chan, C. T., Paulmurugan, R., Gheysens, O. S., Kim, J., Chiosis, G., Gambhir, S. S.  
2008; 68 (1): 216-226
- **Fluorescent fructose derivatives for imaging breast cancer cells** *BIOCONJUGATE CHEMISTRY*  
Levi, J., Cheng, Z., Gheysens, O., Patel, M., Chan, C. T., Wang, Y., Namavari, M., Gambhir, S. S.  
2007; 18 (3): 628-634
- **Split luciferase complementation assay for studying interaction of proteins x and y in living mice.** *CSH protocols*  
Paulmurugan, R., Ray, P., De, A., Chan, C. T., Gambhir, S. S.  
2006; 2006 (6)
- **Differential sensitivities of trastuzumab (Herceptin (R))-resistant human breast cancer cells to phosphoinositide-3 kinase (PI-3K) and epidermal growth factor receptor (EGFR) kinase inhibitors** *BREAST CANCER RESEARCH AND TREATMENT*  
Chan, C. T., Metz, M. Z., Kane, S. E.  
2005; 91 (2): 187-201
- **Imaging protein-protein interactions in living subjects** *TRAC-TRENDS IN ANALYTICAL CHEMISTRY*  
Paulmurugan, R., Ray, P., De, A., CHAN, C. T., Gambhir, S. S.  
2005; 24 (5): 446-458
- **Characterization of Three-Dimensional Tissue Cultures Using Electrical Impedance Spectroscopy** *Biophysical Journal*  
Kyle, A. H., Chan, C. T., Minchinton, A. I.  
1999; 76 (5): 2640-2648