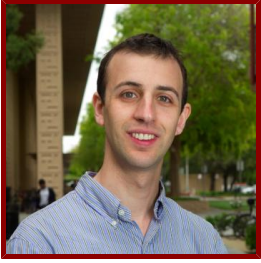


Stanford



Adam de la Zerda

Associate Professor of Structural Biology

Bio

ACADEMIC APPOINTMENTS

- Associate Professor, Structural Biology
- Member, Bio-X
- Member, Stanford Cancer Institute

LINKS

- de la Zerda Group Website: <http://delazerda.stanford.edu/>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Molecular imaging technologies for studying cancer biology in vivo

Teaching

COURSES

2019-20

- Biochips and Medical Imaging: EE 225, MATSCI 225 (Win)

2017-18

- Biochips and Medical Imaging: EE 225, MATSCI 382, SBIO 225 (Win)

2016-17

- Biochips and Medical Imaging: EE 225, MATSCI 382, SBIO 225 (Win)
- Biotechnology in the Natural World: BIOS 251 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Bryce Yao

Postdoctoral Faculty Sponsor

Jingjing Zhao

Doctoral Dissertation Advisor (AC)

Yonatan W, Edwin Yuan

Doctoral (Program)

Assaf Eisenman

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biophysics (Phd Program)
- Structural Biology (Phd Program)

Publications

PUBLICATIONS

- **Speckle-modulating optical coherence tomography in living mice and humans** *NATURE COMMUNICATIONS*
Liba, O., Lew, M. D., SoRelle, E. D., Dutta, R., Sen, D., Moshfeghi, D. M., Chu, S., de la Zerda, A.
2017; 8: 15845
- **Quantitative contrast-enhanced optical coherence tomography** *APPLIED PHYSICS LETTERS*
Winetraub, Y., SoRelle, E. D., Liba, O., de la Zerda, A.
2016; 108 (2)
- **Contrast-enhanced optical coherence tomography with picomolar sensitivity for functional in vivo imaging.** *Scientific reports*
Liba, O., SoRelle, E. D., Sen, D., de la Zerda, A.
2016; 6: 23337-?
- **Biofunctionalization of Large Gold Nanorods Realizes Ultrahigh-Sensitivity Optical Imaging Agents** *LANGMUIR*
SoRelle, E. D., Liba, O., Hussain, Z., Gambhir, M., de la Zerda, A.
2015; 31 (45): 12339-12347
- **Optical coherence contrast imaging using gold nanorods in living mice eyes** *CLINICAL AND EXPERIMENTAL OPHTHALMOLOGY*
de la Zerda, A., Prabhulkar, S., Perez, V. L., Ruggeri, M., Paranjape, A. S., Habte, F., Gambhir, S. S., Awdeh, R. M.
2015; 43 (4): 358-366
- **A correlative optical microscopy and scanning electron microscopy approach to locating nanoparticles in brain tumors.** *Micron*
Kempen, P. J., Kircher, M. F., de la Zerda, A., Zavaleta, C. L., Jokerst, J. V., Mellinghoff, I. K., Gambhir, S. S., Sinclair, R.
2015; 68: 70-76
- **Imaging the Glycosylation State of Cell Surface Glycoproteins by Two-Photon Fluorescence Lifetime Imaging Microscopy** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*
Belardi, B., de la Zerda, A., Spiciarich, D. R., Maund, S. L., Peehl, D. M., Bertozzi, C. R.
2013; 52 (52): 14045-14049
- **Single step nanoplasmonic immunoassay for the measurement of protein biomarkers.** *Biosensors*
Prabhulkar, S., de la Zerda, A., Paranjape, A., Awdeh, R. M.
2013; 3 (1): 77-88
- **Continuous sensing of tumor-targeted molecular probes with a vertical cavity surface emitting laser-based biosensor** *JOURNAL OF BIOMEDICAL OPTICS*
Parashurama, N., O'Sullivan, T. D., de la Zerda, A., El Kalassi, P., Cho, S., Liu, H., Teed, R., Levy, H., Rosenberg, J., Cheng, Z., Levi, O., Harris, J. S., Gambhir, et al
2012; 17 (11)
- **Family of Enhanced Photoacoustic Imaging Agents for High-Sensitivity and Multiplexing Studies in Living Mice** *ACS NANO*
de la Zerda, A., Bodapati, S., Teed, R., May, S. Y., Tabakman, S. M., Liu, Z., Khuri-Yakub, B. T., Chen, X., Dai, H., Gambhir, S. S.
2012; 6 (6): 4694-4701
- **A brain tumor molecular imaging strategy using a new triple-modality MRI-photoacoustic-Raman nanoparticle** *NATURE MEDICINE*
Kircher, M. F., de la Zerda, A., Jokerst, J. V., Zavaleta, C. L., Kempen, P. J., Mitra, E., Pitter, K., Huang, R., Campos, C., Habte, F., Sinclair, R., Brennan, C. W., Mellinghoff, et al

2012; 18 (5): 829-U235

- **Advanced contrast nanoagents for photoacoustic molecular imaging, cytometry, blood test and photothermal theranostics** *CONTRAST MEDIA & MOLECULAR IMAGING*
de la Zerda, A., Kim, J., Galanzha, E. I., Gambhir, S. S., Zharov, V. P.
2011; 6 (5): 346-369
- **A Comparison Between Time Domain and Spectral Imaging Systems for Imaging Quantum Dots in Small Living Animals** *MOLECULAR IMAGING AND BIOLOGY*
de la Zerda, A., Bodapati, S., Teed, R., Schipper, M. L., Keren, S., Smith, B. R., Ng, J. S., Gambhir, S. S.
2010; 12 (5): 500-508
- **Ultrahigh Sensitivity Carbon Nanotube Agents for Photoacoustic Molecular Imaging in Living Mice** *NANO LETTERS*
de la Zerda, A., Liu, Z., Bodapati, S., Teed, R., Vaithilingam, S., Khuri-Yakub, B. T., Chen, X., Dai, H., Gambhir, S. S.
2010; 10 (6): 2168-2172
- **Photoacoustic ocular imaging** *OPTICS LETTERS*
de la Zerda, A., Paulus, Y. M., Teed, R., Bodapati, S., Dollberg, Y., Khuri-Yakub, B. T., Blumenkranz, M. S., Moshfeghi, D. M., Gambhir, S. S.
2010; 35 (3): 270-272
- **Three-Dimensional Photoacoustic Imaging Using a Two-Dimensional CMUT Array** *IEEE TRANSACTIONS ON ULTRASONICS FERROELECTRICS AND FREQUENCY CONTROL*
Vaithilingam, S., Ma, T., Furukawa, Y., Wygant, I. O., Zhuang, X., de la Zerda, A., Oralkan, O., Kamaya, A., Gambhir, S. S., Jeffrey, R. B., Khuri-Yakub, B. T.
2009; 56 (11): 2411-2419
- **Implantable optical biosensor for in vivo molecular imaging** *Conference on Optical Fibers and Sensors for Medical Diagnostics and Treatment Applications IX*
O'Sullivan, T. D., Munro, E., de la Zerda, A., Parashurama, N., Teed, R., Walls, Z., Levi, O., Gambhir, S. S., Harris, J. S.
SPIE-INT SOC OPTICAL ENGINEERING.2009
- **Noninvasive Raman spectroscopy in living mice for evaluation of tumor targeting with carbon nanotubes** *NANO LETTERS*
Zavaleta, C., de la Zerda, A., Liu, Z., Keren, S., Cheng, Z., Schipper, M., Chen, X., Dai, H., Gambhir, S. S.
2008; 8 (9): 2800-2805
- **Carbon nanotubes as photoacoustic molecular imaging agents in living mice** *NATURE NANOTECHNOLOGY*
de la Zerda, A., Zavaleta, C., Keren, S., Vaithilingam, S., Bodapati, S., Liu, Z., Levi, J., Smith, B. R., Ma, T., Oralkan, O., Cheng, Z., Chen, X., Dai, et al
2008; 3 (9): 557-562
- **Noninvasive molecular imaging of small living subjects using Raman spectroscopy** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Keren, S., Zavaleta, C., Cheng, Z., de la Zerda, A., Gheysens, O., Gambhir, S. S.
2008; 105 (15): 5844-5849
- **Drug delivery - Keeping tabs on nanocarriers** *NATURE NANOTECHNOLOGY*
de la Zerda, A., Gambhir, S. S.
2007; 2 (12): 745-746
- **Formulating adaptive radiation therapy (ART) treatment planning into a closed-loop control framework** *48th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
de la Zerda, A., Armbruster, B., Xing, L.
IOP PUBLISHING LTD.2007: 4137-53