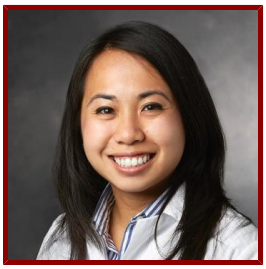
Stanford



Pamela A. Basto

Instructor, Medicine - Oncology

CLINICAL OFFICE (PRIMARY)

- **Stanford Cancer Center**

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  Palo Alto, CA 94304

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ACADEMIC CONTACT INFORMATION

- **Stanford Cancer Center**

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Bio

BIO

Dr. Basto is a physician scientist and medical oncologist specializing in the diagnosis and treatment of gastrointestinal malignancies.

She attended The University of Texas graduating magna cum laude in biomedical engineering, subsequently gaining her Ph.D. in Medical Engineering and Medical Physics at the Harvard-MIT Health Science and Technology program the under the tutelage of Professors Robert Langer and Ulrich von Andrian at the Koch Institute for Integrative Cancer Research. Her thesis focused on developing next generation polymeric nanoparticle vaccines towards improved antigen specific cellular and humoral responses, work that has been translated into clinical trials. She completed medical school at Stanford University, followed by residency in internal medicine at The Mount Sinai Hospital in the ABIM research pathway, where she served on the ICU frontlines during the COVID-alpha wave at Elmhurst Hospital. She subsequently completed her hematology/oncology fellowship at Stanford University training in Professor Edgar Engleman's lab in tumor immunology. Her translational research studies how cancers metastasize leveraging the immune system and designing therapeutics to interrupt this cascade. She was clinically trained by Professor Lipika Goyal in clinical and trial management of patients with hepatopancreatobiliary cancers.

As a clinician, she aims to create a welcoming partnership with patients during a difficult diagnosis based in trust and science, supported by an excellent clinical team. She welcomes patients from all backgrounds and aims to honor their values in culture, religion, and gender preferences. Her approach is to offer evidence based knowledge and the latest available treatments, including clinical trials, personalized to each individual's tumor biology and their values.

CLINICAL FOCUS

- Gastrointestinal Neoplasms
- Oncology

ACADEMIC APPOINTMENTS

- Instructor, Medicine - Oncology

HONORS AND AWARDS

- NIH Extramural L30 Renewal, NCI (2025-2026)
- ASCO Dr. Linda Bosserman & Dr. Debra Patt Women Who Conquer Cancer Young Investigator Award, Conquer Cancer Foundation (2024)
- Caroline Boitano Postdoctoral Fellowship & Leadership Award, A.P. Giannini Foundation (2024-2027)
- SCI Fellowship, Stanford Cancer Institute (2024-2025)
- SITC-Astrazeneca Immunotherapy in Lung Cancer Clinical Fellowship, SITC (2023-2024)
- FDA-AACR Oncology Education Fellowship, AACR & FDA (2022-2023)
- NIH Extramural Loan Repayment Program, NCI (2023-2025)
- Herbert Brendler Fellow, AUA (2015)
- Translational Research in Applied Medicine Scholar, Stanford University (2014)
- Stanford Society of Physician Scholars, Stanford School of Medicine (2014)
- Martha Gray Prize for Excellence in Research, Harvard Medical School (2013)
- Graduate Women of Excellence, Massachusetts Institute of Technology (2013)
- Center for Cancer Nanotechology Excellence Fellow, NIH (2012-2013)
- National Science Foundation Graduate Fellow, NSF (2006-2011)
- Tau Beta Pi Record Scholar, Tau Beta Pi (2005)

PROFESSIONAL EDUCATION

- Board Certification, ABIM , Internal Medicine
- Fellowship, Stanford , Hematology/Oncology
- Residency, The Mount Sinai Hospital- Manhattan , Internal Medicine- Research
- M.D., Stanford , Medicine
- Ph.D., Harvard-MIT , Medical Engineering Medical Physics
- B.S., The University of Texas at Austin , Biomedical Engineering

PATENTS

- "United States Patent 9526702 Vaccine Nanotechnology", Massachusetts Institute of Technology, The Brigham and Women's Hospital, Inc., President and Fellows of Harvard College, The Children's Medical Center Corporation, Dec 27, 2016
- "United States Patent 9381477 Microfluidic synthesis of organic nanoparticles", Massachusetts Institute of Technology, The Brigham and Women's Hospital, Inc., Jul 5, 2016
- "United States Patent 8,637,028 Adjuvant Incorporation in Immunotherapeutics", President and Fellows of Harvard College, MIT, The Brigham & Women's Hospital, Jan 28, 2014
- "United States Patent 8,591,905 Nicotine Immunotherapeutics", President and Fellows of Harvard College, MIT, The Brigham & Women's Hospital, Nov 26, 2013
- "United States Patent 8,343,497 Targeting of antigen presenting cells with immunonanotherapeutics", President and Fellows of Harvard College, MIT, The Brigham & Women's Hospital, Jan 1, 2013
- "United States Patent 8,277,812 Immunonanotherapeutics that provide IgG humoral response without T-cell antigen", President and Fellows of Harvard College, MIT, The Brigham & Women's Hospital, Oct 2, 2012

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Hematology (Fellowship Program)
- Oncology (Fellowship Program)

Publications

PUBLICATIONS

- **Interrogating the roles of lymph node metastasis in systemic immune surveillance.** *Clinical & experimental metastasis*
  Basto, P. A., Reticker-Flynn, N. E.
  2024

- **Lymph node colonization induces tumor-immune tolerance to promote distant metastasis.** *Cell*
  Reticker-Flynn, N. E., Zhang, W., Belk, J. A., Basto, P. A., Escalante, N. K., Pilarowski, G. O., Bejnood, A., Martins, M. M., Kenkel, J. A., Linde, I. L., Bagchi, S., Yuan, R., Chang, et al
  2022

- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression**
  Reticker-Flynn, N. E., Basto, P. A., Zhang, W., Martins, M. M., Chang, S., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
  AMER ASSOC CANCER RESEARCH.2020

- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression.**
  Reticker-Flynn, N. E., Basto, P. A., Zhang, W., Bejnood, A., Kenkel, J. A., Martins, M. M., Chang, S., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
  AMER ASSOC CANCER RESEARCH.2020: 25–26

- **Lymph node colonization promotes distant tumor metastasis through the induction of systemic immune tolerance**
  Reticker-Flynn, N. E., Martins, M. M., Basto, P. A., Zhang, W., Bejnood, A., Gentles, A. J., Sunwoo, J. B., Plevritis, S. K., Engleman, E. G.
  AMER ASSOC CANCER RESEARCH.2019

- **Akt and SHP-1 are DC-intrinsic checkpoints for tumor immunity.** *JCI insight*
  Carmi, Y., Prestwood, T. R., Spitzer, M. H., Linde, I. L., Chabon, J., Reticker-Flynn, N. E., Bhattacharya, N., Zhang, H., Zhang, X., Basto, P. A., Burt, B. M., Alonso, M. N., Engleman, et al
  2016; 1 (18)

- **Distribution of alkaline phosphatase, osteopontin, RANK ligand and osteoprotegerin in calcified human carotid atheroma.** *The protein journal*
  Higgins, C. L., Isbilir, S., Basto, P., Chen, I. Y., Vaduganathan, M., Vaduganathan, P., Reardon, M. J., Lawrie, G., Peterson, L., Morrisett, J. D.
  2015; 34 (5): 315-28

- **VACCINES. A mucosal vaccine against Chlamydia trachomatis generates two waves of protective memory T cells.** *Science (New York, N.Y.)*
  Stary, G., Olive, A., Radovic-Moreno, A. F., Gondek, D., Alvarez, D., Basto, P. A., Perro, M., Vrbanac, V. D., Tager, A. M., Shi, J., Yethon, J. A., Farokhzad, O. C., Langer, et al
  2015; 348 (6241): aaa8205

- **Engineered nanomedicine for myeloma and bone microenvironment targeting.** *Proceedings of the National Academy of Sciences of the United States of America*
  Swami, A., Reagan, M. R., Basto, P., Mishima, Y., Kamaly, N., Glavey, S., Zhang, S., Moschetta, M., Seevaratnam, D., Zhang, Y., Liu, J., Memarzadeh, M., Wu, et al
  2014; 111 (28): 10287-92

- **Adjuvant-carrying synthetic vaccine particles augment the immune response to encapsulated antigen and exhibit strong local immune activation without inducing systemic cytokine release.** *Vaccine*
  Ilyinskii, P. O., Roy, C. J., O'Neil, C. P., Browning, E. A., Pittet, L. A., Altreuter, D. H., Alexis, F., Tonti, E., Shi, J., Basto, P. A., Iannacone, M., Radovic-Moreno, A. F., Langer, et al
  2014; 32 (24): 2882-95

- **A vector-free microfluidic platform for intracellular delivery** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Sharei, A., Zoldan, J., Adamo, A., Sim, W. Y., Cho, N., Jackson, E., Mao, S., Schneider, S., Han, M., Lytton-Jean, A., Basto, P. A., Jhunjhunwala, S., Lee, et al
  2013; 110 (6): 2082-2087

- **Non-invasive assessment of failure torque in rat bones with simulated lytic lesions using computed tomography based structural rigidity analysis** *JOURNAL OF BIOMECHANICS*

Entezari, V., Basto, P. A., Vartanians, V., Zurakowski, D., Snyder, B. D., Nazarian, A.
2011; 44 (3): 552-556

- **Single-Step Assembly of Homogenous Lipid - Polymeric and Lipid - Quantum Dot Nanoparticles Enabled by Microfluidic Rapid Mixing** *ACS NANO*
  Valencia, P. M., Basto, P. A., Zhang, L., Rhee, M., Langer, R., Farokhzad, O. C., Karnik, R.
  2010; 4 (3): 1671-1679

- **Quantitative Segmentation of Principal Carotid Atherosclerotic Lesion Components by Feature Space Analysis Based on Multicontrast MRI at 1.5 T** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
  Karmonik, C., Basto, P., Vickers, K., Martin, K., Reardon, M. J., Lawrie, G. M., Morrisett, J. D.
  2009; 56 (2): 352-360

- **HER-2-Targeted Nanoparticle-Affibody Bioconjugates for Cancer Therapy** *CHEMMEDCHEM*
  Alexis, F., Basto, P., Levy-Nissenbaum, E., Radovic-Moreno, A. F., Zhang, L., Pridgen, E., Wang, A. Z., Marein, S. L., Westerhof, K., Molnar, L. K., Farokhzad, O. C.
  2008; 3 (12): 1839-1843

- **Microfluidic platform for controlled synthesis of polymeric nanoparticles** *NANO LETTERS*
  Karnik, R., Gu, F., Basto, P., Cannizzaro, C., Dean, L., Kyei-Manu, W., Langer, R., Farokhzad, O. C.
  2008; 8 (9): 2906-2912

- **MICROFLUIDIC SYNTHESIS OF POLYMERIC NANOPARTICLES**
  Karnik, R., Gu, F. X., Bose, S., Basto, P., Cannizzaro, C., Langer, R., Farokhzad, O. C., ASME
  AMER SOC MECHANICAL ENGINEERS.2008: 1921-1922

- **Co-delivery of hydrophobic and hydrophilic drugs from nanoparticle-aptamer bioconjugates** *CHEMMEDCHEM*
  Zhang, L., Radovic-Moreno, A. F., Alexis, F., Gu, F. X., Basto, P. A., Bagalkot, V., Jon, S., Langer, R. S., Farokhzad, O. C.
  2007; 2 (9): 1268-1271

- **Quantification of carotid atherosclerotic plaque components using feature space analysis and magnetic resonance imaging.** *Conference proceedings : ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Conference*
  Karmonik, C., Basto, P., Morrisett, J. D.
  2006; 1: 3102-3105