



## Pamela A. Basto

- Affiliate, Dean's Office Operations - Dean Other
- Fellow in Medicine

### Bio

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#### PROFESSIONAL EDUCATION

- Residency, The Mount Sinai Hospital- Manhattan , Internal Medicine- Research (2020)
- M.D., Stanford , Medicine (2018)
- Ph.D., Harvard-MIT , Medical Engineering Medical Physics (2013)
- 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

### Publications

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- **Lymph node colonization promotes distant tumor metastasis through the induction of tumor-specific immunosuppression.**  
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- **Akt and SHP-1 are DC-intrinsic checkpoints for tumor immunity.** *JCI insight*  
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- **VACCINES. A mucosal vaccine against Chlamydia trachomatis generates two waves of protective memory T cells.** *Science (New York, N.Y.)*  
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- **Distribution of alkaline phosphatase, osteopontin, RANK ligand and osteoprotegerin in calcified human carotid atheroma.** *The protein journal*

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- **Adjuvant-carrying synthetic vaccine particles augment the immune response to encapsulated antigen and exhibit strong local immune activation without inducing systemic cytokine release.** *Vaccine*  
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2014; 32 (24): 2882–95
- **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  
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- **A vector-free microfluidic platform for intracellular delivery** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
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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.  
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- **Single-Step Assembly of Homogenous Lipid - Polymeric and Lipid - Quantum Dot Nanoparticles Enabled by Microfluidic Rapid Mixing** *ACS NANO*  
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- **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*  
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- **HER-2-Targeted Nanoparticle-Affibody Bioconjugates for Cancer Therapy** *CHEMMEDCHEM*  
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- **Microfluidic platform for controlled synthesis of polymeric nanoparticles** *NANO LETTERS*  
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- **Co-delivery of hydrophobic and hydrophilic drugs from nanoparticle-aptamer bioconjugates** *CHEMMEDCHEM*  
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- **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*  
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