

Paula D. Bos, PhD



Assistant Professor
Department of Pathology
Massey Cancer Center
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Education

Postgraduate Training

Memorial Sloan-Kettering Cancer Center

Graduate Education

PhD, Weill Cornell Graduate School of Medical Sciences - Cornell University M.Sc.
Weill Cornell Graduate School of Medical Sciences - Cornell University

Awards

- 2018 V Scholar – V Foundation
- 2018 Career Catalyst Award – Susan G. Komen Foundation
- 2010 American Cancer Society Post-doctoral award
- 2010 National Institutes of Health, Immunology Training Grant, Memorial Sloan Kettering Cancer Center
- 2000 Gold medal to the best GPA of the 2000 class at the National University of Misiones, Argentina
- 1999 National Senate of Argentina Research Award
- 1999 Rotary Club Special Mention - Woman of the year for the work in cervical cancer, Misiones, Argentina
- 1998 XIV Latin American Congress of Microbiology Prize, Asunción, Paraguay

VCU Service

Flow Cytometry Core Facility Advisor – Massey Cancer Center.

Lecturer – Immunobiology – MICR-505 -Virginia Commonwealth School of Medicine.

Lecturer – Microbiology Research Seminar – MICR-690-002 - Virginia Commonwealth School of Medicine.

Lecturer – Immunity and Infection – MEDI-114 Medical Course – Virginia Commonwealth School of Medicine.

Guest Lecturer – Biology of Cancer Graduate Course - Virginia Commonwealth School of Medicine.

Lecturer - Advanced Immunology Graduate Course. Virginia Commonwealth School of Medicine.

Professional Organizations

American Association for Cancer Research
Metastasis Research Society

Recent Invited Presentations

- 2020 Metastasis Research Society Biennial Meeting, Buenos Aires, Argentina
- 2020 ASCO The biology and microenvironment of brain metastases, Chicago
- 2019 Keystone Symposium "Cancer Metastasis: The role of the metabolism, Immunity and the Tumor Microenvironment", Florence, Italy
- 2019 University of Virginia – Carter Immunology Center Seminar Series – Charlottesville, VA.
- 2018 Temple University – Temple Seminar Series, Philadelphia, PA.
- 2017 Moffit Cancer Center – Basic Science Ground Rounds, Tampa, Florida
- 2017 Cold Spring Harbor Laboratories – Biology of Cancer: Microenvironment and Metastasis, Long Island, NY.

2017 National Cancer Institute Cancer and Inflammation Program Retreat, Bethesda, MD.

2017 Keystone Symposium "Cell plasticity within the tumor microenvironment", Big Sky, Montana.

2014 Radiation Research Society Annual International Meeting, Las Vegas, NV.

Recent Publications

<https://www.ncbi.nlm.nih.gov/myncbi/collections/mybibliography/>

Selected Peer Reviewed Publications

Martinez MM, Robila V, Clark NM, Du W, Idowu M, Rutkowski MR, and **Bos PD**. (2019) "Regulatory T cells control the switch from in situ to invasive breast cancer" – Front. Immunol. | doi: 10.3389/fimmu.2019.01942

Buchta-Rosean C, Bostic RR, Ferey JCM, Feng TY, Azar FN, **Bos PD** and Rutkowski MR. (2019) "Pre-existing commensal dysbiosis is a host-intrinsic regulator of tissue inflammation and tumor cell dissemination in hormone receptor-positive breast cancer" - Cancer Research Jul 15;79(14):3662-3675. doi: 10.1158/0008-5472.CAN-18-3464. Epub 2019 May 7.

Plitas G, Konopacki C, Wu K, **Bos PD**, Morrow M and Rudensky AY. (2016) "*Distinct features of regulatory T cells in human breast cancer*", Immunity, 45(5):1122-1134. PMID: 27851913

Bos PD. (2016) "*Treg cells in cancer: beyond classical immunological control*" Immunological Investigations. Invited review, 45(8):721-28. PMID:27759466

Bos PD*, Plitas G*, Rudra D, Lee SY, and Rudensky AY (*equal contribution) (2013) "*Transient regulatory T cell ablation deters oncogene-driven breast cancer and enhances radiotherapy*", Journal of Experimental Medicine 210(11):2435-66. PMID: 24127486

Gasteiger G, Hemmers S, **Bos PD**, Sun JC, Rudensky AY. IL-2-dependent adaptive control of NK cell homeostasis. J Exp Med. 2013 Jun 3;210(6):1179-87. doi: 10.1084/jem.20122571. Epub 2013 May 6. PubMed PMID: 23650439; PubMed Central PMCID: PMC3674698.

Bos PD* and Rudensky AY* (*co-corresponding authors) (2012) "*Treg cells in cancer: a case of multiple personality disorder*", Science Translational Medicine 4(164):164fs44 PMID:

23241741

Bos PD, Nguyen DX and Massagué J (2010) *"Modeling metastasis in the mouse"*, Current Opinion in Pharmacology 10:571-7. PMID: PMC2952835

Bos PD, Zhang HFX, Nadal C, Shu W, Gomis RR, Nguyen DX, Minn DX, van de Vijver MJ, Gerald WJ, Foekens JA, Massagué J (2009) *"Genes that mediate breast cancer metastasis to the brain"*, Nature 459:1005-9. PMID: PMC2698953.

Nguyen DX, **Bos PD**, Massagué J (2009) *"Metastasis: from dissemination to organ- specific colonization"*, Nature Reviews Cancer 9:274-84.

Gupta GP, Nguyen DX, Chiang AC, **Bos PD**, Kim JY, Nadal C, Gomis RR, Manova- Todorova K, Massagué J (2007) *"Mediators of vascular remodelling co-opted for sequential steps in lung metastasis"*, Nature 446:765-70

Minn AJ, Gupta GP, Siegel PM, **Bos PD**, Shu W, Giri DD, Viale A, Olshen AB, Gerald WL, Massagué J (2005) *" Genes that mediate breast cancer metastasis to lung"*, Nature 436:518-24

Book Chapters

Du W and **Bos PD**. (2019) *"Tracing bone marrow derived microglia in brain metastatic tumors"* - MIE (Galluzzi) Tumor Immunology and Immunotherapy – Integrated Methods Volume 635 – *in press*

Clark, NM and **Bos, PD**. (2018) *"Tumor-Associated Macrophage isolation and in vivo analysis of their tumor promoting activity"*, Invited Book Chapter, Cancer Immun-surveillance: Methods and Protocols, Springer, in press.