

Adela Rambí G. Cardones, M.D., MHSc

- Current position/s Associate Professor, Department of Dermatology, Tenure Track
Clinician Investigator
Duke University Medical Center, Durham, NC
(*On faculty since March 2010*).
- Director, Inpatient Dermatology Consult Service, *March 2010 to present*
Member, Duke Scleroderma Center
Member, Duke Cancer Institute
Faculty, Duke Microbiome Center
Duke Dermatology Immunofluorescence Laboratory
- Staff Physician, Dermatology (AD-15)
Department of Medicine
Durham VA Medical Center, Durham, NC
June 2010 to present
- Sub-specialty Clinics Immunodermatology (Autoimmune and Connective Tissue Disease)
DermatoOncology
Multidisciplinary Graft vs Host Disease Clinic
- Other positions held Graduate Faculty (Term Membership) Duke Graduate School of Biomedical Engineering
October 2014
Served as Graduate Faculty Committee Member for Master's Degree
Dissertation of Seung Yun Lee.
- Sept 2009 – March 2010
Staff Clinician
Dermatology Branch, National Cancer Institute
National Institutes of Health, Bethesda, MD
- TRAINING**
- Master's Degree Duke-NIH Clinical Research Training Program, leading to a Master's Degree in Clinical
Research, May 2018
- Residency training July 2006 – June 2009
Dermatology Residency
Duke University Medical Center, Durham, NC
- Chief Resident, **2008-2009**
- Internship July 2005-June 2006, Internal Medicine, Preliminary Year
Good Samaritan Hospital-Johns Hopkins University, Baltimore, MD
- Postdoctoral
fellowship August 2001 – June 2005
Dermatology Branch, NCI/NIH, Bethesda, MD
(postdoctoral fellow in the laboratory of Dr. Sam T. Hwang)

Previous Residency Training January 1996 to December 1998
Dermatology Residency, Section of Dermatology, Department of Medicine
University of the Philippines College of Medicine and Philippine General Hospital (Manila, Philippines)

Chief Resident, **1998**

Previous Internship May 1994 – April 1995 (prerequisite for graduation)
Rotating Internship, University of the Philippines-Philippine General Hospital

Medical Degree University of the Philippines College of Medicine (Manila, Philippines)
June 1988- April 1995, as part of the 7 year Integrated Program*, with a degree of B.S. Medical Sciences and M.D.
* *The Integrated Arts and Medicine Program* of the University of the Philippines College of Medicine is a seven-year program inclusive of 2 years of intensive pre-medical courses, four years of medicine, and 1 year of a rotating internship. Annually, out of the 20,000 high school graduates who take the University of the Philippines College Admission Test, the top 60 are selected as candidates. After further screening, 40 are admitted into the program.

LICENSE AND CERTIFICATION

ECFMG Certification 9 December 2003 (Valid Indefinitely)

Subspecialty Board Certification American Board of Dermatology, August 2009, renewed 2019

Medical Licensure Maryland (current)
North Carolina (current)

MEMBERSHIP

American Academy of Dermatology
Rheumatologic-Dermatology Society
Member, Research Committee 2019- present
Society for Investigative Dermatology
European Society for Dermatologic Research
Society for Dermatology Hospitalists
Member, Scientific Task Force 2014-2019
Medical Dermatology Society
Member, Committee on Education and Programs, 2013-16
Chair, Membership Committee, 2016-present
Board of Directors, 2016- present
Dermatology Foundation
Grants/Study Section Member, 2017 to present
American Society for Clinical Oncology
American Association of Immunologists

Other Committee Membership Research Committee, Department of Dermatology Duke University
Physician Compensation Panel, Durham VA Medical Center, 2017 to present

Research Advisory Committee, Duke University Medical Center
Education Committee, Department of Dermatology, Duke University Medical
Center, 2011-2013

- Reviewer for Journals
1. JAMA Dermatology
 2. Journal of the American Academy of Dermatology
 3. British Journal of Dermatology
 4. Journal of Dermatologic Science
 5. International Journal of Hyperthermia
 6. JEADV
 7. Pediatric Dermatology
 8. Ultrasound in Medicine and Biology
- Grant Review Activities
1. Review Panel Member, Congressionally Directed Medical Research Programs – Peer Reviewed Medical Research Program, 2011
- Other Mentorship and Teaching Activities
1. American Academy of Dermatology Leadership Program Mentor: 2020-2021
 2. Fellows' Retreat in Hematology-Oncology. Faculty. Duck, NC, 2016, 2015, 2014, 2013.
 3. Mentor to Dermatology Research Fellows, Residents and Medical Students

PATENTS

- **Specific Antibodies to the Lymphatic Endothelial Cell Specific Hyaluronic Acid Receptor, LYVE-1**
DHHS Reference No. E-107-2004/0—Research Tool.

SELECTED AWARDS

1. J Llamar Callaway Teaching Award 2018, Department of Dermatology, Duke University
2. Duke Medicine Scholars, 2017
3. Duke Skin Disease Research Center, Translational Project Award, 2015
4. J Llamar Callaway Teaching Award 2013, Department of Dermatology, Duke University
5. Dermatology Foundation Medical Dermatology Career Development Award, 2012, 2013, 2014
6. JAAD Editorial Mentorship Program 2012-2013
7. American Academy of Dermatology Leadership Program 2011-2012
8. AAD-EADV Scholarship Grant 2008
9. 2007 Womens' Dermatological Society Mentorship Award
10. 2004 Fellow's Award for Research Excellence (FARE), National Institutes of Health, Bethesda, Maryland.
11. Travel Fellowship, International Investigative Dermatology, Miami Beach, Florida, 2003.
12. Recipient, American Academy of Dermatology World Congress Fund International Scholarship for the AAD Annual Convention, March 2000, San Francisco
13. Finalist, Most Outstanding Resident, Department of Medicine, Philippine General Hospital, 1998
14. First Place, University of the Philippines College of Medicine – Philippine General Hospital Department of Medicine Annual Research Forum, Prospective Study Category, 1998
15. Second Place, Philippine Dermatological Society Annual Research Forum, 1998

16. First Place, University of the Philippines College of Medicine – Philippine General Hospital Department of Medicine Annual Research Forum, Case Report Category
17. Second Place, University of the Philippines Committee for Research Investigation and Development Annual Research Forum, 1992.
18. College Scholar, University of the Philippines College of Medicine, 1989
19. University Scholar, University of the Philippines College of Medicine, 1988, 1989

PUBLICATIONS:

1. Cardones AR. DRESS Syndrome. *Clinics in Dermatology*. *In press*.
2. Cardones AR, Hall RP 3rd, Sullivan KM, Hooten J, Lee SY, Liu B, Green CL, Chao NJ, Nichols KR, Bañez LL, Shah A, Leung N, Palmeri ML. Quantifying skin stiffness in graft-versus-host disease, morphea and systemic sclerosis using acoustic radiation force impulse imaging and shear wave elastography. *J Invest Dermatol*. 2020 Sep 17;S0022-202X(20)32051-0. doi: 10.1016/j.jid.2020.07.031. Online ahead of print.
3. Atia A, Moris D, McRae M, Song M, Stempora L, Leopardi F, Williams K, Kwun J, Parker W, Cardones AR, Kirk AD, Cendales LC. Th17 cell inhibition in a costimulation blockade-based regimen for vascularized composite allotransplantation using a nonhuman primate model. *Transpl Int*. 2020 Apr 11. doi: 10.1111/tri.13612. [Epub ahead of print] PMID: 32277724
4. Coias JL, Abbas LF, Cardones AR. Management of Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis: A Review and Update. *Clinical and Experimental Dermatology*. *In press*.
5. Arthur M, Fett NM, Latour E, Jacobe H, Kunzler E, Florez-Pollack S, Houser J, Sharma S, Prasad S, Femia A, Stern MJ, Pappas-Taffer LK, Gaffney R, Fernandez AP, Knabel D, Cardones AR, Leung N, Laumann A, Yu JM, Zhao J, Vleugels RA, Tkachenko E, Lo K. Evaluation of the Effectiveness and Tolerability of Mycophenolate Mofetil and Mycophenolic Acid for the Treatment of Morphea. *JAMA Dermatol*. 2020 Apr 1. doi: 10.1001/jamadermatol.2020.0035. [Epub ahead of print] PMID: 32236497
6. Petty AJ, Cardones AR, Marano AL. Analysis of clinical characteristics of drug-induced cutaneous lupus erythematosus in men. *J Am Acad Dermatol*. 2020 Mar 7. pii: S0190-9622(20)30366-2. doi: 10.1016/j.jaad.2020.03.002. [Epub ahead of print] PMID: 32151631
7. Seminario-Vidal L, Kroshinsky D, Malachowski SJ, Sun J, Markova A, Beachkofsky TM, Kaffenberger BH, Ergen EN, Mauskar M, Bridges A, Calhoun C, Cardones AR, Chen ST, Chodosh J, Cotliar J, Davis MDP, DeNiro KL, Dominguez AR, Eljure-Téllez J, Femia A, Fox LP, Guda A, Mitchell C, Mostaghimi A, Ortega-Loayza AG, Owen C, Pasieka H, Rahnama-Moghadam S, Saeed HN, Saunderson RB, Shanbhag S, Sharon VR, Strowd L, Venkatesh S, Wanat KA, Wetter DA, Worswick S, Micheletti RG. Society of Dermatology Hospitalists supportive care guidelines for the management of Stevens-Johnson syndrome/toxic epidermal necrolysis in adults. *J Am Acad Dermatol*. 2020 Mar 7. pii: S0190-9622(20)30312-1. doi: 10.1016/j.jaad.2020.02.066. [Epub ahead of print] PMID: 32151629
8. Korman AM, Kroshinsky D, Raff AB, Mostaghimi A, Micheletti RG, Rosenbach M, Kaffenberger BH; Society of Dermatology Hospitalists Scientific Task Force on Cellulitis. A survey-based study of diagnostic and treatment concordance in standardized cases of cellulitis and pseudocellulitis via teledermatology. *J Am Acad Dermatol*. 2020 May;82(5):1221-1223. doi:

10.1016/j.jaad.2019.09.084. Epub 2019 Oct 15. No abstract available. PMID: 31626887

9. Concha JSS, Pena S, Gaffney RG, Patel B, Tarazi M, Kushner CJ, Merola JF, Fiorentino D, Dutz JP, Goodfield M, Nyberg F, Volc-Platzer B, Fujimoto M, Ang CC, Werth VP; Skin Myositis Delphi Group. Developing classification criteria for skin-predominant dermatomyositis: the Delphi process. *Br J Dermatol.* 2020 Feb;182(2):410-417. doi: 10.1111/bjd.18096. Epub 2019 Sep 29. PMID: 31049930
10. Emge D, Cardones AR. Updates on Merkel Cell Carcinoma. *Dermatologic Clinics.* Volume 37, Issue 4, October 2019, Pages 489-503.
11. Blanchard SK, Sullivan KM, Hooten JN, Holcomb ZE, Nichols KR, Selim MA, Rao CL, Hall RP 3rd, Chao NJ, Cardones AR. High dose intravenous immunoglobulin as adjuvant treatment for grade IV acute cutaneous graft versus host disease. *Br J Dermatol.* 2019 Apr 24. doi: 10.1111/bjd.18028. [Epub ahead of print] PMID: 31017659
12. Cardones AR, Sullivan KM, Breen C, Chao NJ, Nichols KR, Bañez LL, Burton CS, Horwitz ME, Long GD, Rao CL, Sarantopoulos S, Sidhu-Malik N, Sung A, Hall RP. Inter-rater reliability of clinical grading measures for chronic cutaneous graft versus host disease. *JAMA Dermatol.* 2019 Apr 17. doi: 10.1001/jamadermatol.2018.5459. [Epub ahead of print] PMID: 30994873
13. Noe MH, Rosenbach M, Hubbard RA, Mostaghimi A, Cardones AR, Chen JK, Cotliar J, Davis MDP, Dominguez A, Fox LP, Hughey LC, Kaffenberger BH, Kroshinsky D, Kwong BY, Miller DD, Musiek A, Ortega-Loayza AG, Sharon VR, Shinkai K, Summers EM, Wanat KA, Wetter DA, Worswick S, Margolis DJ, Gelfand JM, Micheletti RG. Development and Validation of a Risk Prediction Model for In-Hospital Mortality Among Patients With Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis-ABCD-10. *JAMA Dermatol.* 2019 Mar 6. doi: 10.1001/jamadermatol.
14. Sarantopoulos S, Cardones AR, Sullivan KM. How we treat refractory chronic graft-versus-host disease. *Blood.* 2019 Jan 23. pii: blood-2018-04-785899. doi: 10.1182/blood-2018-04-785899. [Epub ahead of print]2018.5605.
15. Isaacs M, Cardones AR, Rahnema-Moghadam S. DRESS syndrome: clinical myths and pearls. *Cutis.* 2018 Nov;102(5):322-326.
16. Marano AL, Selim MA, Cardones AR, Burton CS. Nodular amyloidosis in a patient with systemic scleroderma. *Dermatol Online J.* 2018 Sep 15;24(9). pii: 13030/qt85b030dk.
17. Agarwal A, Hall RP, Bañez LL, Cardones AR. Comparison of rituximab and conventional adjuvant therapy for pemphigus vulgaris: A retrospective analysis. *PlosOne,* 2018 Sep 25;13(9):e0198074. doi: 10.1371/journal.pone.0198074. eCollection 2018.
18. Marano AL, Clarke JM, Morse MA, Shah A, Barrow W, Selim MA, Hall RP, Cardones, AR. Subacute cutaneous lupus erythematosus and dermatomyositis associated with anti-programmed cell death (PD) 1 therapy. *British Journal of Dermatology, Br J Dermatol.* 2018 Sep 23. doi: 10.1111/bjd.17245. [Epub ahead of print].
19. Poe JC, Jia Q, Di Paolo JA, Reyes NJ, Kim JY, Su H, Sundy JS, Cardones AR, Perez VL, Chen BJ, Chao NJ, Cardona DM, Saban DR, Sarantopoulos S. SYK Inhibitor Entospletinib Prevents Eye and Skin GVHD in Mice. *JCI Insight.* 2018 Oct 4;3(19). pii: 122430. doi:

- 10.1172/jci.insight.122430. [Epub ahead of print].
20. Leung N, Cardones AR, Larrier N. Long-term Remission of Recalcitrant Darier's Disease with Photon and Electron Beam Radiation Therapy. *JAAD Case Reports*, 2018 Nov 14;4(10):1062-1064. doi: 10.1016/j.jdc.2018.08.017. eCollection 2018 Nov.
 21. Puza CJ, Mosca PJ, Cardones AR. Early Stage Melanoma and Hematopoietic Stem Cell Transplantation Outcomes. *J Am Acad Dermatol*. 2018 Jul 16. pii: S0190-9622(18)32280-1. doi: 10.1016/j.jaad.2018.07.010. [Epub ahead of print]
 22. Puza CJ, Myers SA, Cardones AR, Beasley GM, Mosca PJ. The impact of transplant rejection on cutaneous squamous cell carcinoma in renal transplant recipients. *Clin Exp Dermatol*. 2018 Jun 27. doi: 10.1111/ced.13699. [Epub ahead of print]
 23. Leung N, Cardones AR, Larrier N. Long-term improvement of recalcitrant Hailey-Hailey disease with electron beam radiation therapy: Case report and review. *Pract Radiat Oncol*. 2018 Mar 2. pii: S1879-8500(18)30071-7. doi: 10.1016/j.pro.2018.02.011. [Epub ahead of print]
 24. Puza CJ, Cardones AR, Mosca PJ. Timing and Number of Cutaneous Squamous Cell Carcinomas in Transplant Recipients. *JAMA Dermatol*. 2018 Jun 1;154(6):727-728. doi: 10.1001/jamadermatol.2018.0856. No abstract available.
 25. Micheletti RG, Chiesa-Fuxench Z, Noe MH, Stephen S, Aleshin M, Agarwal A, Boggs J, Cardones AR, Chen JK, Cotliar J, Davis MD, Dominguez A, Fox LP, Gordon S, Hamrick R, Ho B, Hughey LC, Jones LM, Kaffenberger BH, Kindley K, Kroshinsky D, Kwong BY, Miller DD, Mostaghimi A, Musiek A, Ortega-Loayza AG, Patel R, Posligua A, Rani M, Saluja S, Sharon VR, Shinkai K, John JS, Strickland N, Summers EM, Sun N, Wanat KA, Wetter DA, Worswick S, Yang C, Margolis DJ, Gelfand JM, Rosenbach M. Stevens-Johnson Syndrome / Toxic Epidermal Necrolysis: a multicenter retrospective study of 377 adult patients from the United States. *J Invest Dermatol*. 2018 May 11. pii: S0022-202X(18)31964-X. doi: 10.1016/j.jid.2018.04.027. [Epub ahead of print]
 26. Cendales LC, Ruch DS, Cardones AR, Potter G, Dooley J, Dore D, Orr J, Ruskin G, Song M, Chen DF, Selim MA, Kirk AD. De novo belatacept in clinical vascularized composite allotransplantation. *Am J Transplant*. 2018 May 3. doi: 10.1111/ajt.14910. [Epub ahead of print]
 27. Puza CJ, Cardones AR, Mosca PJ. Examining the Incidence and Presentation of Melanoma in the Cardiothoracic Transplant Population. *JAMA Dermatol*. 2018 May 1;154(5):589-591. doi: 10.1001/jamadermatol.2018.0130.
 28. Murrell DF, Peña S, Joly P, Marinovic B, Hashimoto T, Diaz LA, Sinha AA, Payne AS, Daneshpazhooh M, Eming R, Jonkman MF, Mimouni D, Borradori L, Kim SC, Yamagami J, Lehman JS, Saleh MA, Culton DA, Czernik A, Zone JJ, Fivenson D, Ujiie H, Wozniak K, Akman-Karakaş A, Bernard P, Korman NJ, Caux F, Drenovska K, Prost-Squarcioni C, Vassileva S, Feldman RJ, Cardones AR, Bauer J, Ioannides D, Jedlickova H, Palisson F, Patsatsi A, Uzun S, Yayli S, Zillikens D, Amagai M, Hertl M, Schmidt E, Aoki V, Grando SA, Shimizu H, Baum S, Cianchini G, Feliciani C, Iranzo P, Mascaró JM Jr, Kowalewski C, Hall R, Groves R, Harman KE, Marinkovich MP, Maverakis E, Werth VP. Diagnosis and Management of Pemphigus: recommendations by an International Panel of Experts. *J Am Acad Dermatol*.

2018 Feb 10. pii: S0190-9622(18)30207-X. doi: 10.1016/j.jaad.2018.02.021. [Epub ahead of print]

29. Cardones AR, Hall RP. Doxycycline and the treatment for bullous pemphigoid: what outcomes are most important to our patients? *Br J Dermatol*. 2017 Nov;177(5):1145-1147. doi: 10.1111/bjd.15890.
30. Puza C, Cardones AR. Concepts and controversies in the treatment of cutaneous lichen planus. *G Ital Dermatol Venereol*. 2017 Dec;152(6):607-614. doi: 10.23736/S0392-0488.17.05778-9. Epub 2017 Sep 12. PMID: 28895668
31. Weiner J, Marano A, Cardones A, Criscione-Schreiber L. Fever, Joint Pain, Seizures and Rash in a 53-Year-Old Woman. *Arthritis Care Res (Hoboken)*. 2017 Apr 4. doi: 10.1002/acr.23248. [Epub ahead of print] PMID: 28376294
32. Siegel JA, Chren MM, Weinstock MA; Department of Veterans Affairs Keratinocyte Carcinoma Chemoprevention Trial Group. Correlates of skin-related quality of life (QoL) in those with multiple keratinocyte carcinomas (KCs): A cross-sectional study. *J Am Acad Dermatol*. 2016 Sep;75(3):639-42.
33. Schneider M, Cardones AR, Selim MA. Amicrobial Pustulosis of the Folds and Autoimmunity. *J Low Genit Tract Dis*. 2016 Oct;20(4):e57-8.
34. Cardones AR, Hall RP 3rd. Cost of Inpatient Care of Patients With Pemphigus in the United States: Translating Dollars and Cents Into Improved Patient Care. *JAMA Dermatol*. 2016 Jun 1;152(6):629-30.
35. Schneider M, Cardones AR, Selim MA, Cendales LC. Vascularized composite allotransplantation: a closer look at the banff working classification. *Transpl Int*. 2016 Jun;29(6):663-71. Review.
36. Whitley MJ, Cardones AR, Craciunescu OI, Kirsch DG. Externally applied high-dose-rate brachytherapy for deeply invasive cutaneous squamous cell carcinoma in an older patient. *Pract Radiat Oncol*. 2016 Jul-Aug;6(4):e141-4.
37. Hooten JN, Hall RP 3rd, Cheng R, Selim MA, Cardones AR. Opportunistic cutaneous fungal infections in the inpatient setting. *Int J Dermatol*. 2016 Apr;55(4):e223-6.
38. Pichard DC, Cardones AR, Chu EY, Dahut WL, Kong HH. Sorafenib-Induced Eruption Mimicking Erythema Multiforme. *JAMA Dermatol*. 2016 Feb;152(2):227-8.
39. Kim JK, Ahmad A, Selim MA, Olsen EA, Cardones AR. Disseminated Cutaneous Cytomegalovirus Infection Following Total Body Electron Beam Irradiation for Mycosis Fungoides. *JAMA Dermatol*. 2015 Dec 1;151(12):1380-1381.
40. Lee SY, Cardones AR, Doherty J, Nightingale K, Palmeri M. Preliminary Results on the Feasibility of Using ARFI/SWEI to Assess Cutaneous Sclerotic Diseases. *Ultrasound Med Biol*. 2015 Nov;41(11):2806-19.
41. Pomerantz H, Hogan D, Eilers D, Swetter SM, Chen SC, Jacob SE, Warshaw EM, Stricklin G, Dellavalle RP, Sidhu-Malik N, Konnikov N, Werth VP, Keri J, Lew R, Weinstock MA; Veterans

- Affairs Keratinocyte Carcinoma Chemoprevention (VAKCC) Trial Group. Long-term Efficacy of Topical Fluorouracil Cream, 5%, for Treating Actinic Keratosis: A Randomized Clinical Trial. *JAMA Dermatol.* 2015 Sep;151(9):952-60.
42. Agarwal A, Chang D, Selim MA, Penrose CT, Chudgar SM, Cardones AR. Pinch Purpura: A Cutaneous Manifestation of Systemic Amyloidosis. *Am J Med.* 2015 Apr 21. *Am J Med.* 2015 Sep;128(9):e3-4.
 43. Cardones AR, Hall RP. Reshaping the treatment of autoimmune blistering diseases: from consensus guidelines to prospective data from 'the crowd'. *Br J Dermatol.* 2015 Apr;172(4):845-6.
 44. Hooten J, Hall RP, Cardones AR. Updates on the Management of Autoimmune Blistering Diseases. *Skin Therapy Letter, Sept-Oct 2014:* 19(5): 1-6.
 45. Korgavkar K, et al. Measuring the severity of topical 5-fluorouracil toxicity. *J Cutan Med Surg.* 2014 Jul-Aug;18(4):229-35.
 46. Aldabagh B, Angeles JG, Cardones AR, Arron ST. Cutaneous Squamous Cell Carcinoma and Human Papillomavirus: Is There an Association? *Dermatol Surg.* 2012 *Dermatol Surg.* 2013 Jan;39(1 Pt 1):1-23.
 47. Liu Q, Chen H, Ojode T, Gao X, Anaya-O'Brien S, Turner NA, Ulrick J, DeCastro R, Kelly C, Cardones AR, Gold SH, Hwang EI, Wechsler DS, Malech HL, Murphy PM, McDermott DH. WHIM syndrome caused by a single amino acid substitution in the carboxy-tail of chemokine receptor CXCR4. *Blood.* 2012 Jul 5;120(1):181-9.
 48. Cardones AR, Hall RP 3rd. Management of dermatitis herpetiformis. *Dermatol Clin.* 2011 Oct;29(4):631-5.
 49. Cardones AR, Hall RP 3rd. Pathophysiology of dermatitis herpetiformis: a model for cutaneous manifestations of gastrointestinal inflammation. *Dermatol Clin.* 2011 Jul;29(3):469-77.
 50. Cardones AR, Grichnik JM. Alpha-MSH induced neovogenesis. *Arch Dermatol.* 2009 Apr;145(4):441-4.
 51. Makoto Sugaya M, Fang L, Cardones AR, Kakinuma T, Jaber S, Blauvelt A, Hwang ST. Oncostatin M enhances CCL21 expression by microvascular endothelial cells and increases the efficiency of dendritic cell trafficking to lymph nodes. *J Immunol.* 2006 Dec 1;177(11):7665-72. *equal contribution as first author
 52. Cardones AR, Banez LL. Angiogenesis inhibitors in Cancer Therapy. *Curr Pharm Des.* 2006;12(3):387-94.
 53. Cardones AR, Leitner WW, Murakami T, Kapoor V, Udey MC, Hwang ST. Genetic immunization with LYVE-1 cDNA yields function-blocking antibodies against native protein. *Microvasc Res.* 2006 Jan;71(1):32-9.
 54. Klebanoff CA, Gattinoni L, Torabi-Parizi P, Kerstann K, Cardones AR, Finkelstein SE, Palmer DC, Antony PA, Hwang ST, Rosenberg SA, Waldmann TA, and Restifo NP. Central memory tumor-reactive CD8⁺ T cells confer superior anti-tumor immunity compared to effector memory T cells. *Proc Natl Acad*

Sci U S A. 2005 Jul 5;102(27):9571-6.

55. Murakami T, Cardones AR, Hwang S. Chemokines and Melanoma Metastasis. *Journal of Dermatological Science*. 2004 Nov;36(2):71-8.
56. Cardones AR, Murakami T, Hwang S. CXCR4 enhances adhesion of B16 tumor cells to endothelial cells in vitro and in vivo via beta-1 integrin. *Cancer Res*. 2003 Oct 15;63(20):6751-7.
57. Murakami T, Cardones AR, Overwijk WW, Theoret MR, Restifo NP, Klaunberg BA, Nestle FO, Castillo SS, Dennis PA, Hwang ST. Immune evasion by murine melanoma mediated through CC chemokine receptor (CCR)-10. *J Exp Med*. 2003 Nov 3;198(9):1337-47.
58. Yao L, Salvucci O, Cardones AR, Hwang ST, Aoki Y, Sierra MD, Sajewicz A, Pittaluga S, Yarchoan R, Tosato G. Selective expression of stromal-derived factor-1 in the capillary vascular endothelium plays a role in Kaposi's sarcoma pathogenesis. *Blood*. 2003 Dec 1;102(12):3900-5.
59. Murakami T, Maki W, Cardones AR, Fang H, Kyi AT, Nestle F and Hwang S. Expression of CXC Chemokine receptor (CXCR)-4 enhances the pulmonary metastatic potential of murine B16 melanoma cells. *Cancer Research*. 2002 Dec 15;62(24):7328-34.
60. Cardones AR, Frez ML. Febrile Ulceronecrotic Pityriasis Lichenoides et Varioliformis Acuta. *Journal of the Philippine Dermatological Society*, Vol 7, No. 2. November 1998.
61. Cardones AR. Actinomycetoma Secondary to Nocardia Brasiliensis in a Filipino: A Case Report. *Journal of the Philippine Dermatological Society*, Vol. 7 No 1, May 1998.

SELECTED ABSTRACTS

1. Jin FQ, Postiglione M, Knight AE, Cardones AR, Nightingale KR and M. L. Palmeri ML, "Comparison of Deep Learning and Classical Image Processing for Skin Segmentation," 2019 IEEE International Ultrasonics Symposium (IUS), Glasgow, United Kingdom, 2019, pp. 1152-1155, doi: 10.1109/ULTSYM.2019.8926233.
2. Knight AE, Pely AB, Jin FQ, Cardones AR, Palmeri ML and Nightingale KR, "Analysis of Factors Affecting Shear Wave Speed in in vivo Skin," 2019 IEEE International Ultrasonics Symposium (IUS), Glasgow, United Kingdom, 2019, pp. 970-973, doi: 10.1109/ULTSYM.2019.8925965.
3. Cardones AR, Hall RP, Hooten J, Lee SY, Liu B, Green CL, Chao NJ, Rowe Nichols K, Banez LL, Shah A, Leung N, Sullivan KM, Palmeri ML. Quantifying skin stiffness in graft-versus-host disease, morphea and systemic sclerosis using acoustic radiation force impulse imaging and shear wave elastography. Oral Presentation. Rheumatology-Dermatology Society Annual Meeting. Atlanta, GA. November 2019.
4. Cardones AR, Lee SY, Hooten J, Sullivan KS, Hall RP, Palmeri M. A Novel Method of Objectively Quantifying Cutaneous Sclerosis. Discussed Poster. International Investigative Dermatology, Orlando, FL. May 2018.
5. Poe J, Di Paolo J, Jia W, Kim JY, Su H, Reyes NJ, Marcondes M, Saban DR, Cardona D, Anand S, Cardones AR, Chao NJ, and Sarantopoulos S. Oral Syk inhibitor, Entospletinib (GS-9973), controls

disease and enhances survival in a mouse model of chronic graft-versus host disease (cGVHD). Oral Presentation. European Society for Bone Marrow Transplantation Annual Meeting. Marseille, France. March 2017.

6. Marano A, Clarke J, Selim MA, Hall RP, Cardones AR. Cutaneous Lupus from PD-1 Inhibitor Therapy. *Poster Presentation*. Medical Dermatology Society Annual Meeting. Orlando, FL. March 2017.
7. Leung N, Cardones AR, Larrier N. Electron beam treatment of Darier's disease and Hailey-Hailey Disease. *Poster Presentation*. Medical Dermatology Society Annual Meeting. Orlando, FL. March 2017.
8. Leung N, Her M, Peterson M, Banez LL, Cardones AR. Scleroderma among patients with solid organ malignancies. *Oral Presentation*. Rheumatology Dermatology Society Annual Meeting. Washington, DC. November 2016.
9. Foster Y, Shah A, Cardones AR, Nichols K, Chao NJ. Pulse cyclophosphamide for steroid-refractory chronic graft-versus-host disease. *Poster Presentation*. American Society for Blood and Marrow Transplantation Tandem Meetings. Honolulu, HI. February 2016.
10. Agarwal A, Hall RP, Cardones AR. Retrospective study comparing outcomes among patients receiving rituximab vs conventional adjuvant therapy for pemphigus vulgaris. *Poster Presentation*. Society for Investigative Dermatology Annual Meeting, Atlanta, GA. May 2015.
11. Pichard D, Cardones AR, Chu E and Kong HH. Patients with sorafenib induced drug eruptions can be successfully re-challenged. *Poster Presentation*. Society for Investigative Dermatology Annual Meeting, Atlanta, GA. May 2015.
12. Cardones AR, Lee SY, Hooten J, Banez LL, Agarwal A, Hall RP, Sullivan K and Palmeri M. Novel imaging techniques for quantifying cutaneous sclerosis. *Poster Presentation*. Society for Investigative Dermatology Annual Meeting, Atlanta GA. May 2015.
13. Lee S, Cardones AR, Knightingale K, Palmeri M. Assessment of Cutaneous Sclerotic Disorders Using ARFI/SWEI. Oral Presentation. World Federation of Ultrasound in Medicine and Biology (WFUMB), Orlando, FL. March 2015.
14. Jiang B, Myers E, Hall RP and Cardones AR. Cost analysis of rituximab as an alternative first line adjuvant therapy to mycophenolate mofetil for moderate-to-severe pemphigus vulgaris. *Poster presentation*. SID Annual Meeting, Albuquerque, NM. May 2014
15. Lee S, Cardones AR, Hooten J, Nightingale K, Palmeri M. Assessment of Cutaneous Sclerotic Disorders Using ARFI/SWEI. *Oral Presentation. Best Student Presentation Award*. International Tissue Elasticity Conference, Lingfield, UK. October 2013.
16. Hooten JN, Hall RP III, Cardones AR. Carbamazepine-induced bullous pemphigoid with elevated IgE and peripheral eosinophilia. *Poster Presentation*, International Investigative Dermatology, Edinburgh, Scotland, UK. May 2013.
17. Cardones AR, Grichnik JM. α -MSH induced neovogenesis. *Oral Presentation*, PASPCR Annual Meeting, Chicago, IL. Sep 2007.
18. Cardones AR, Sugaya M, Blauvelt A, Hwang ST. Oncostatin M increases CCL21 expression by

human primary endothelial cells in vitro and in murine skin in vivo. *Oral and poster presentation*, Society for Investigative Dermatology Annual Meeting, St. Louis, MO. May 2005.

19. Cardones AR, Leitner W, Hwang ST. Gene gun-mediated delivery of full-length cDNA encoding the human lymphatic endothelial marker, LYVE-1, to skin, yields function-blocking mouse antibodies that recognize native structure for flow cytometry and immunohistochemistry. *Oral and poster presentation*, Society for Investigative Dermatology Annual Meeting, Providence, RI, April 2004.
20. Cardones AR, Murakami T, Hwang S. CXCR4 enhances adhesion of B16 tumor cells to endothelial cells in vitro and in vivo via beta-1 integrin. *Poster Presentation*, International Investigative Dermatology, May 2003, Miami Beach, Florida.
21. Cardones AR, Fang H, Hwang ST. Ligation of CD86 on maturing bone marrow-derived dendritic cells (BMDC) regulates chemokine production and surface expression of CD40 and MHC class II molecules. *Poster presentation*, NIH Immunology Interest Group Annual Retreat, November 2002, Virginia, USA.
22. Cardones AR, Wu MT, Fang H, Hwang S. CCR4 binding of antigen primed T cells to Dendritic cells under dynamic flow conditions. *Poster presentation*, NIH Immunology Interest Group Annual Retreat, October 2001, Virginia USA ; *Oral presentation*, Society for Investigative Dermatology Annual Meeting, Los Angeles, CA May 2002.
23. Cardones AR, Frez L, Pastorfide G, de Leoz J. UVB as a Novel Treatment in Type 1 Lepra Reactions: Results of a Pilot Study. *First Place*, UP-PGH Department of Medicine Annual Research Forum, 1998. *Second Place*, Philippine Dermatological Society-Philippine Society for Cutaneous Medicine Joint Annual Residents' Research Forum, 1998. *Poster presentation*, American Academy of Dermatology 58th Annual Meeting, San Francisco, CA, USA March 2000
24. Cardones AR, Bañez L. Hypertrophic Discoid Lupus Erythematosus with Malignant Transformation in a Filipino. *Poster Presentation*: 5th Asian Dermatological Congress, Beijing, China, 1998.

BOOK CHAPTERS

1. Cardones AR. Pallisaded Granulomatous Neutrophilic Dermatitis. UpToDate. 2018.
2. Cardones AR, Hall RP. Chapter 63: Bullous Diseases of the Skin and Mucous Membranes. Clinical Immunology: Principles and Practice. Editors: Rich, Fleisher, Shearer, Schroeder, Frew & Weyand. 4th edition. *In press*.
3. George D, Cardones AR, Murrell D, Hall RP. Chapter 60: Treatment of Dermatitis Herpetiformis. Blistering Diseases: Clinical Features, Pathogenesis, Treatment. Editor: Murrell D. Springer-Verlag Berlin Heidelberg. 1st Edition. 2015.

SELECTED INVITED TALKS:

1. **Updates on Treatments for Autoimmune Diseases. Plenary Speaker.** Medical Dermatology Society Annual Meeting. March 2021.
2. **Skin changes among pediatric HSCT patients. Plenary Speaker.** Society for Pediatric Dermatology Annual Meeting. June 2020.
3. **Immunodermatology.** Memphis Dermatology Association. Memphis, TN. June 2019.

4. **DermatoOncology. (Visiting Professor)** University of Tennessee Dermatology Grand Rounds. Memphis, TN. June 2019.
5. **Cutaneous Reactions to Common and Emerging Chemotherapeutic Agents.** Duke Debates. Asheville, NC, April 2019
6. **Important and Emerging Chemotherapy Reactions.** North Carolina Dermatology Association Annual Meeting. January 2019.
7. **Novel Treatments for Autoimmune Connective Tissue Disorders.** North Carolina Dermatology Association Annual Meeting. January 2019.
8. **Quantifying Skin Sclerosis: Challenges and Novel Solutions.** Pinnell Center for Investigative Dermatology Annual Symposium, Durham, NC. October 2018.
9. **Lichen planus mimickers.** American Academy of Dermatology, Annual Meeting, Orlando, FL. March 2018.
10. **The Microbiome in Immune-Mediated Skin Disease.** 2017 Microbiome Forum/Probiotics Congress. San Diego, CA. November 2017.
11. **Novel Imaging Techniques for Quantifying Cutaneous Sclerosis.** Duke MedEx Colloquim. Durham, NC. October 2017.
12. **Cutaneous Manifestations of Rheumatologic Disease.** Duke Department of Rheumatology. October 2017.
13. **DRESS Syndrome.** UP-PGH Medical Center Dermatology Annual Meeting (Keynote speaker). Manila, Philippines. May 2017.
14. **Cutaneous Graft versus Host Disease.** UP-PGH Medical Center Dermatology Annual Meeting (Keynote speaker). Manila, Philippines. May 2017.
15. **Lichen planus mimickers.** American Academy of Dermatology, Annual Meeting, Orlando, FL. March 2017.
16. **Inpatient Dermatology.** American Academy of Dermatology, Annual Meeting, Orlando, FL. March 2017.
17. **Cutaneous Graft versus Host Disease.** Virginia Commonwealth University. September 2016.
18. **Inpatient Dermatology.** London Dermatopathology Society Annual Meeting. London, UK. May 2016.
19. **Lichen planus mimickers.** American Academy of Dermatology, Annual Meeting, Washington, DC. March 2016
20. **Inpatient Dermatology.** American Academy of Dermatology, Annual Meeting, San Francisco, CA. March 2015.

21. **Cutaneous Viral Infections in the Immunosuppressed.** Duke University Department of Dermatology Grand Rounds. January 2015.
22. **Cutaneous Manifestations of Lupus.** Lupus Foundation, NC Chapter, Annual Meeting, Raleigh, NC. October 2014.
23. **Inpatient Dermatology.** American Academy of Dermatology, Summer Meeting, Chicago, IL. August 2014.
24. **Graft-versus-host Disease.** University of the Philippines-Philippine General Hospital Grand Rounds. Manila, Philippines. June 2014.
25. **Sclerosing Skin Disorders.** Philippine Dermatological Society, Continuing Medical Education. Manila, Philippines. June 2014.
26. **Intravenous Immunoglobulin.** Duke University Department of Dermatology Grand Rounds. March 2014.
27. **Therapeutic dilemmas for the dermatologist in managing chronic GVHD.** AAD Annual Meeting (FRM F103 Graft-Versus-Host Disease). March 24, 2014.
28. **Inpatient Dermatology.** Johns Hopkins University Department of Dermatology Grand Rounds, Feb 28, 2014.
29. **Quantifying Cutaneous Sclerosis.** Research Symposium and Dedication of Sheldon Pinnell MD Center for Investigative Dermatology. October 15, 2013
30. **Cutaneous Graft vs Host Disease.** Virginia Commonwealth University Dermatology Grand Rounds. September 25, 2013.
31. **Morphea.** Rheumatology Grand Rounds. October 2012.
32. **Inpatient Dermatology.** Department of Medicine Grand Rounds, Duke University. September 9, 2011.
33. **Cutaneous reactions to TNF inhibitors.** Pediatric Rheumatology Grand Rounds, Duke University. June 2011.
34. **Mechanistic Logic Behind the Koebner Phenomenon.** 23rd World Congress of Dermatology, Seoul South Korea, May 28, 2011. *Co-chair*, Physical Trauma and the Skin.
35. **Graft vs. Host Disease.** Department of Dermatology, UTSW, Dallas, TX. April 13, 2011
36. **Dermatitis Herpetiformis.** Division of Gastrointestinal Disease, Duke University, Durham, NC.

CURRENT FUNDING

1. NIH R42 CA228159 Ultrasound-based Device to Guide Treatment of Graft-versus-Host Disease Using Skin Elasticity as a Biomarker; **Co-Principal Investigator** (\$1,491,733.00)
2. NIH R21 CA223419 Keratinocyte Targeted Strategies for Treatment of Cutaneous GVHD; **Co-Principal Investigator** (\$ 384,432.00)
3. ASPIRE Grant (Pfizer); Pilot Study on the Efficacy of Crisaborole Ointment in the Treatment of Morphea; **Principal Investigator** (\$ 150,000.00)

PAST FUNDING

1. Duke Medicine Scholars; Cutaneous Microbiome in the Pathogenesis of Cutaneous Graft-versus-host Disease; **Principal Investigator, 2017-2019**
2. Duke MedEx Grant; Photoacoustics in Diagnosing Vasculitis; **Principal Investigator, 2018**
3. Duke-Coulter Partnership Project; Ultrasonic Skin Elasticity Imaging. June 2016-May2018 **Principal Investigator.**
4. Dermatology Foundation Medical Dermatology Career Development Award. July 2012 – June 2015. Quantification of Disease Severity in Chronic Cutaneous GVHD. **Principal Investigator**
5. Duke Skin Disease Research Center, Translational Project Award. January 2015 – July 2015. Improving Clinical Scoring of Chronic Cutaneous Graft-versus-Host Disease using a Novel Imaging Technique. **Principal Investigator**
6. Duke ENABLE Grant; Cytokine profile in cutaneous graft versus host disease. **Principal Investigator.**