

CURRICULUM VITAE

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Education:

1998 – BS, Biological Sciences with Honors, Stanford University, Stanford, CA
2004 – PhD, Cell Biology and Genetics, Rockefeller University, New York, NY
2006 – MD, Weill Medical College of Cornell University, New York, NY
Cornell/Rockefeller/Sloan-Kettering MSTP Student

Employment and Training:

2000-2005	Graduate research with Dr. T. de Lange, The Rockefeller University, New York, NY.
2006-2007	Intern, Internal Medicine, Parkland Hospital, UT Southwestern, Dallas, TX
2007-2010	Resident, Dermatology, UT Southwestern, Dallas, TX
2009-2012	Postdoctoral research fellowship with Dr. B. Levine, UT Southwestern
2010-2011	Assistant Instructor, Dermatology, UT Southwestern, Dallas, TX
2011-2012	Instructor, Dermatology, UT Southwestern, Dallas, TX
2012-2019	Assistant Professor, Dermatology, UT Southwestern, Dallas, TX
2019-2024	Associate Professor, Dermatology, UT Southwestern, Dallas, TX
2024-2025	Professor, Dermatology, UT Southwestern, Dallas, TX
2025-present	Professor and Vice Chair of Research, Dermatology

Licensures and Board Certification:

Colorado, DR.0075471
Texas, M9728, 4/11/2008 to 2/28/2026
Dermatology, 12/31/2030 (continuously renewed through CertLink)

Honors and Awards (selected):

1994	Stanford University President's Scholar
1997	Howard Hughes Summer Research Fellowship
1998	Howard Hughes and NSF Pre-Doctoral Research Fellowships
2003	Irving Weinstein Symposium on Cancer, 1 st prize
2004	EMBO Workshop Travel Award
2005	Sume Koide Fellowship - Keystone Symposium on Melanoma
2008	Society for Investigative Dermatology - Leadership Retreat Participant
2009	UT Southwestern Physician Scientist Training Program Fellow
2009	Texas Dermatological Society, Oral presentation, 1 st prize
2010	Vitals Compassionate Doctor Recognition
2011	Montagna Symposium - Eugene M. Farber Travel Award

2011	Dermatology Foundation Physician Scientist Career Development Award
2012	Burroughs Wellcome Fund - Career Award for Medical Scientists Awardee
2012	Gordon Conference on Intermediate Filaments – Best Oral Presentation
2012	UT Southwestern DOCS Award
2013	AAD Young Investigators Award
2010-11	Vitals Patients' Choice Award
2014	Vitals Patients' Choice Award
2015	American Society for Clinical Investigation Young Physician Scientist Award
2015	Hartwell Foundation Individual Biomedical Research Award Finalist
2018	American Cancer Society Research Scholar
2019	Dr. J.B. Shelmire Professorship in Dermatology
2019	Election to American Society for Clinical Investigation
2021-26	Standing member of Genetics of Health and Disease (GHD) study section
2024	NIAMS Forum for Mentored K Awardees, Faculty Mentor

Publications and Scholarly Works:

A. Peer Review Original Investigations

1. Eleanor Dowell E, Mahapatra R, Bishop J, Matsumoto A, Callan A, Vandergriff TW, Alame A, Hosler G, Gagan J, Nijhawan RI, **Wang RC**. Characterization of Malignant Adnexal Tumors of the Head and Neck by Targeted Analysis of Cancer Genes and HPV 42. *JID Innov*. 2025 Jul 7.
2. Abbas LF, Barber G, Lu G, Chamseddin B, Vu H, Cai L, Srivastava D, Nijhawan RL, **Wang RC**, Chong BF. Metabolic profiles of cutaneous lupus have abnormalities in the nicotinamide adenine dinucleotide pathway. *Lupus Sci Med*. 2025 Jan 25. PMID: 39863305.
3. Klein JC, Mahapatra R, Hon GC, **Wang RC**. Identification of Associations with Dermatologic Diseases through a Focused GWAS of the UK Biobank. *JID Innov*. 2024 Oct 26. PMID: 39624183; PMCID: PMC11609433
4. Childs BA, Kim J, Patel RR, Vandergriff TW, Goff HW, **Wang RC**. Whole-Exome Sequencing Identifies Novel and Previously Reported Mutations in a Case of Intravascular B-Cell Lymphoma. *Am J Dermatopathol*. 2024 Sep 17. PMID: 39288753.
5. Lee EE, Mejia M, Matthews LA, Lee F, Shah KM, Schoggins JW, Vandergriff TW, Yancey KB, Thomas C, **Wang RC**. West Nile virus encephalitis presenting with a vesicular dermatitis. *JAAD Case Rep*. 2024 Jan 7;45:117-122. PMID: 38464779; PMCID: PMC10920127.
6. Bishop JA, Nakaguro M, Urano M, Yamamoto Y, Utsumi Y, Li R, Weinreb I, Nagashima Y, Gangahar C, Yamashiro K, Hashimoto K, Rooper LM, Carlile B, **Wang RC**, Gagan J, Nagao T. Keratocystoma: A Distinctive Salivary Gland Neoplasm Characterized by RUNX2 Rearrangements. *Am J Surg Pathol*. 2024 Mar 1;48(3):317-328. PMID: 38084005.
7. Cheng Q, Farbiak L, Vaidya A, Guerrero E, Lee EE, Rose EK, Wang X, Robinson J, Lee SM, Wei T, Miller WE, Benedicto EA, Lian X, **Wang RC**, Siegwart DJ. In situ production and secretion of proteins endow therapeutic benefit against psoriasiform dermatitis and melanoma. *Proc Natl Acad Sci U S A*. 2023 Dec 26. PMID: 38109533.
8. Yu DM, Zhao J, Lee EE, Kim D, Mahapatra R, Rose EK, Zhou Z, Hosler CR, El-Kurdi A, Choe JY, Abel ED, Hoxhaj G, Westover KD, Cho RJ, Cheng JB, **Wang RC**. GLUT3

promotes macrophage signaling and function via Ras-mediated endocytosis in atopic dermatitis and wound healing. *J Clin Invest*. 2023 Sep 14. PMID: 37721853. Featured in *J Clin Invest* commentary and editorial highlight (37909335).

9. Momin ZK, Lee A, Vandergriff TW, Bowling JE, Chamseddin B, Dominguez A, Hosler GA, **Wang RC***, Kitchell E*. A Plaque Passing Over: Clinical Features of the 2022 Mpox Outbreak in Patients of Color Living with HIV. *HIV Medicine*. 2023 Jun 19.
*cocorresponding.
10. Qian J, Li JN, Rose EK, Vandergriff T, Khosama L, Beg MS, Mauskar MM, **Wang RC**. Fibroblast growth factor receptor inhibitor therapy induced calcinosis cutis treated with sodium thiosulfate. *JAAD Case Rep*. 2022 Nov 24; PMID: 36583143; PMCID: PMC9792732.
11. **Wang RC***, Lee EE, De Simone N, Kathote G, Primeaux S, Avila A, Yu DM, Johnson M, Good LB, Jakkamsetti V, Sarode R, Holland AA, Pascual JM*. Red Blood Cell Treatment of Glucose Transporter Type I Deficiency (G1D). *J Cereb Blood Flow Metab*. 2022 Dec 15 PMID: 36523131. * co-corresponding.
12. Lee EE, Sinkre R, Vandergriff TW, Hosler GA, **Wang RC**. Absence of Human Polyomaviruses in Angiolymphoid Hyperplasia with Eosinophilia (ALHE) in the United States. *J Cutan Pathol*. 2022 Sep 26. PMID: 36164281.
13. **Wang RC***, Lee EE, Zhao J, and Kim J. Assessment of the Abundance and Potential Function of Human Papillomavirus Type 16 Circular E7 RNA. *mBio*. 2022 May 17. PMID: 35579354.
14. Kolitz E, Lucas E, Hosler GA, Kim K, Hammer S, Lewis C, Xu L, Day AT, Mauskar M, Lea J, **Wang RC**. HPV-Positive and HPV-Negative Vulvar Squamous Cell Carcinoma Are Biologically, but Not Clinically, Distinct. *J Invest Dermatol*. 2021 Oct. PMID: 34756880.
15. Xing C, Kanchwala M, Rios JJ, Hyatt T, **Wang RC**, Tran A, Dougherty I, Tovar-Garza A, Purnadi C, Kumar MG, Berk D, Shinawi M, Irvine AD, Toledo-Bahena M, Agim NG, Glass DA 2nd. Biallelic variants in RNU12 cause CDAGS syndrome. *Hum Mutat*. 2021 Aug. PMID: 34085356.
16. Yang R, Lee EE, Kim J, Choi JH, Kolitz E, Chen Y, Crewe C, Salisbury NJH, Scherer PE, Cockerell C, Smith TR, Rosen L, Verlinden L, Galloway DA, Buck CB, Feltkamp MC, Sullivan CS, **Wang RC**. Characterization of ALTO-encoding circular RNAs expressed by Merkel cell polyomavirus and trichodysplasia spinulosa polyomavirus. *PLoS Pathog*. 2021 May 17. PMID: 33999949.
17. Ko CJ, Wang A, Panse G, Lee EE, **Wang RC**, Whang PG, Bosenberg M, Damsky W. HPyV6- and HPyV7-negative parakeratosis and dyskeratosis in squamous cell carcinoma in situ. *J Cutan Pathol*. 2021 Apr 4. doi: 10.1111/cup.14022. Epub ahead of print. PMID: 33813761.
18. Balachandra S, Kusin SB, Lee R, Blackwell JM, Tiro JA, Cowell LG, Chiang CM, Wu SY, Varma S, Rivera EL, Mayo HG, Ding L, Sumer BD, Lea JS, Bagrodia A, Farkas LM, **Wang R**, Fakhry C, Dahlstrom KR, Sturgis EM, Day AT. Blood-based biomarkers of human papillomavirus-associated cancers: A systematic review and meta-analysis. *Cancer*. 2021 Mar 15; PMID: 33270909.
19. Enos T, Vasquez R, Vandergriff T, **Wang R**, Rainwater Y. Treatment of extensive elastosis perforans serpiginosa with acitretin in a man with Down syndrome. *Int J Dermatol*. 2020 Nov 23. PMID: 33226122.
20. Kolitz E, Chamseddin B, Son R, Vandergriff T, Hsu AP, Holland S*, and **Wang RC***. A novel NEMO/IKBKG mutation identified in a primary immunodeficiency with recurrent

atypical mycobacterial infections. *JAAD Case Rep.* 2020 Oct 23. PMID 33318999.

*cocorresponding.

21. Zhao J, Jia Y, Shen S, Kim J, Wang X, Lee E, Brownell I, Cho-Vega JH, Lewis C, Homs J, Sharma RR, **Wang RC**. Merkel Cell Polyomavirus Small T Antigen Activates NonCanonical NF- κ B Signaling to Promote Tumorigenesis. *Mol Cancer Res.* 2020 Aug 4. PMID: 32753470.
22. Nanes BA, Laknezhad S, Chamseddin B, Doorbar J, Mir A, Hosler GA, **Wang RC**. Verrucous pilar cysts infected with beta human papillomavirus. *J Cutan Pathol.* 2020 Apr. PMID: 31626329.
23. Chamseddin BH, Lee EE, Kim J, Zhan X, Yang R, Murphy KM, Lewis CK, Hosler GA, Hammer ST, and **Wang RC**. Assessment of circularized E7 RNA, GLUT1, and PD-L1 in anal squamous cell carcinoma. *Oncotarget.* 2019 Sep 23. PMID: 31666927.
24. Zhao J, Lee EE, Kim J, Yang R, Chamseddin B, Ni C, Gusho E, Xie Y, Chiang CM, Buszczak M, Zhan X, Laimins L, **Wang RC**. Transforming activity of an oncoproteinencoding circular RNA from human papillomavirus. *Nat Comm.* 2019 May 24. PMID: 31127091. Featured in *Nat Comm* cervical cancer collection. **Cited >250 times.**
25. Chamseddin BH, Tran BA, Lee EE, Pastrana DV, Buck CB, **Wang RC**, Kikorian AY. Trichodysplasia spinulosa in a child: Identification of trichodysplasia spinulosa-associated polyomavirus in skin, serum, and urine. *Pediatr Dermatol.* 2019 June 12. PMID: 31190328.
26. Zhang Z, Zi Z, Lee EE, Zhao J, Contreras D, South AP, Abel ED, Chong BF, Vandergriff T, Hosler G, Mettlen M, Scherer PE, Rathmell J, DeBerardinis RJ, **Wang RC**. Differential Glucose Requirement in Skin Homeostasis and Injury Identifies a Therapeutic Target for Psoriasis. *Nat Med.* 2018 May;24(5):617-627. PMID: 29662201. Featured in *Nat Med* commentary (29736020). **Cited >150 times.**
27. Maddy AJ, Lee EE, Maderal AD, **Wang RC**, Tosti A, Cho-Vega JH. A case of disseminated follicular spicules in human immunodeficiency virus-associated follicular syndrome in the absence of the seven known human polyomaviruses, suggesting that this disorder is distinct from trichodysplasia spinulosa. *Br J Dermatol.* 2018 Mar 24. PMID: 29573272.
28. Matsumoto A, **Wang R**, Carlson JA. Columnar dyskeratosis-A clue to Wong-type dermatomyositis? *J Cutan Pathol.* 2017 Jul 14. PMID: 28707759.
29. Siska PJ, Beckermann KE, Mason FM, Andrejeva G, Greenplate AR, Sendor AB, Chiang YJ, Corona AL, Gemta LF, Vincent BG, **Wang RC**, Kim B, Hong J, Chen CL, Bullock TN, Irish JM, Rathmell WK, Rathmell JC. Mitochondrial dysregulation and glycolytic insufficiency functionally impair CD8 T cells infiltrating human renal cell carcinoma. *JCI Insight.* 2017 Jun 15;2(12). PMID: 28614802
30. Zhang ZZ, Lee EE, Sudderth J, Yue Y, Zia A, Glass D, DeBerardinis RJ, **Wang RC**. Glutathione Depletion, Pentose Phosphate Pathway Activation, and Hemolysis in Erythrocytes Protecting Cancer Cells from Vitamin C Induced Oxidative Stress. *J Biol Chem.* 2016 Sep 22. PMID: 27660392.
31. Maryoung L, Yue Y, Young A, Newton CA, Barba C, van Oers N, **Wang RC***, and Garcia CK*. Somatic mutations in telomerase promoter counterbalance germline loss-of-function mutations. *J Clin Invest.* 2017 Mar 1. PubMed PMID: 28192371. *cocorresponding.
32. Nguyen KD, Lee EE, Yue Y, Stork J, Pock L, North JP, Vandergriff T, Cockerell C, Hosler GA, Pastrana DV, Buck CB, **Wang RC**. Human polyomavirus 6 and 7 are associated

with pruritic and dyskeratotic dermatoses. *J Am Acad Dermatol*. 2017 May. PMID: 28040372.

33. Barton M, Lockhart S, Sidbury R, **Wang RC**, Brandling-Bennett H. Trichodysplasia Spinulosa in a 7-Year-Old Boy Managed by Physical Extraction of Keratin Spicules. *Pediatr Dermatol*. 2017 March. PMID: 27990673.
34. Starokadomskyy P, Gemelli T, Rios JJ, Xing C, **Wang RC**, Li H, Pokatayev V, Dozmorov I, Khan S, Miyata N, Fraile G, Raj P, Xu Z, Xu Z, Ma L, Lin Z, Wang H, Yang Y, Amitai DB, Orenstein N, Mussaffi H, Baselga E, Tadini G, Grunebaum E, Sarajlija, Krzweski K, Wakeland EK, Yan N, de la Morena MT, Zinn AR, and Burstein E. DNA polymerase- α regulates type I interferon activation through cytosolic RNA:DNA synthesis. *Nat Immunol*. 2016 Mar 28. PMID: 27019227.
35. Leitenberger JJ, Abdelmalek M, **Wang RC**, Strasfeld L, and Hopkins RS. Two cases of trichodysplasia spinulosa responsive to compounded topical cidofovir 3% cream. *JAAD Case Reports*. 2015 Nov. 1:S33-5. PMID: 27051806; PMCID: PMC4809585.
36. Kazem S, Lauber C, van der Meijden E, Kooijman S, Kravchenko AA; **TrichSpin Network**, Feltkamp MC, Gorbalenya AE. Limited variation during circulation of a polyomavirus in the human population involves the COCO-VA toggling site of Middle and Alternative T-antigen(s). *Virology*. 2015 Oct 28;487:129-140. PMID: 26519899.
37. Lee EE, Ma J, Sacharidou A, Mi W, Nguyen N, Jiang Y, Pascual JM, Shaul PW, and **Wang RC**. A Protein Kinase C phosphorylation site in GLUT1 affects glucose transport and is mutated in GLUT1 deficiency syndrome. *Mol Cell*. 2015 May 13. PMID: 25982116. Featured in *Mol Cell* commentary (26046643). **Cited >150 times**.
35. Hosler GA, Weibel L, and **Wang RC**. The Cause of Follicular Spicules in Multiple Myeloma. *JAMA Dermatol*. 2014 Dec 3. PMID: 25471315.
36. Hosler GA, Davoli T, Mender I, Litzner B, Choi J, Kapur P, Shay JW, and **Wang RC**. A Primary Melanoma and its Asynchronous Metastasis Highlight the Role of *BRAF*, *CDKN2A*, and *TERT*. *J Cutan Pathol*. 2014 Nov 19. PMID: 25407517.
37. Kazem S, van der Meijden E, **Wang RC**, Rosenberg AS, Pope E, Benoit T, Fleckman P, Feltkamp MC. Polyomavirus-Associated Trichodysplasia Spinulosa Involves Hyperproliferation, pRB Phosphorylation and Upregulation of p16 and p21. *PLoS One*. 2014 Oct 7;9(10):e108947. PMID: 25291363.
38. **Wang RC**, Wei Y, An Z, Zou Z, Xiao G, Bhagat G, White M, Reichelt J, and Levine B. Akt-Mediated Regulation of Autophagy and Tumorigenesis through Beclin 1 Phosphorylation. *Science*. 2012 Nov 16;338(6109):956-9. PMID: 23112296. Featured in *Science* commentary (23161981). **Cited >800 times**.
39. **Wang RC**, Levine B. Calcipotriol Induces Autophagy in HeLa Cells and Keratinocytes. *J Invest Dermatol*. 2011 Jan 13. PMID: 21228817.
40. Matthews MR*, **Wang RC***, Reddick RL, Saldivar VA, Browning JC*. Viral-associated trichodysplasia spinulosa: a case with electron microscopic and molecular detection of the trichodysplasia spinulosa-associated human polyomavirus. *J Cutan Pathol*. 2011 May. PMID: 21251037. *equal contribution.
41. Diaz de Leon A, Cronkhite JT, Yilmaz C, Brewington C, **Wang R**, Xing C, Hsia CC, Garcia CK. Subclinical Lung Disease, Macrocytosis and Premature Graying in Kindreds with Telomerase (*TERT*) Mutations. *Chest*. 2011 Feb 24. PMID: 21349926.
42. Hockemeyer D, Palm W, **Wang RC**, Couto SS, de Lange T. Engineered telomere degradation models dyskeratosis congenita. *Genes Dev*. 2008 Jul 1;22(13):1773-85. PMID: 18550783

43. Takai H, **Wang RC**, Takai KK, Yang H, de Lange T. Tel2 regulates the stability of PI3K-related protein kinases. *Cell*. 2007 Dec 28;131(7):1248-59. PMID: 18160036. **Cited >200 times.**
44. **Wang RC**, Smogorzewska A, de Lange T. Homologous recombination generates T-loop-sized deletions at human telomeres. *Cell*. 2004 Oct 29;119(3):355-68. PMID: 15507207. Cover article. Featured in *Cell* commentary (15546610). **Cited >650 times.**
45. Abola AP, Willits MG, **Wang RC**, Long SR. Reduction of adenosine-5'-phosphosulfate instead of 3'-phosphoadenosine-5'-phosphosulfate in cysteine biosynthesis by *R. meliloti* and other members of the family Rhizobiaceae. *J Bacteriol*. 1999 Sep;181(17):5280-7. PMID: 10464198.
46. Ma X, Sun Q, **Wang R**, Singh G, Jonietz EL, Margolin W. Interactions between heterologous FtsA and FtsZ proteins at the FtsZ ring. *J Bacteriol*. 1997 Nov;179(21):6788-97. PMID: 9352931.
47. Margolin W, **Wang R**, Kumar M. Isolation of an ftsZ homolog from the archaeobacterium *Halobacterium salinarum*: implications for the evolution of FtsZ and tubulin. *J Bacteriol*. 1996 Mar;178(5):1320-7. PMID: 8631708.

B. Reviews:

1. Chai AC, Siegwart DJ, **Wang RC**. Nucleic Acid Therapy for the Skin. *J Invest Dermatol*. 2025 Apr;145(4):780-789. PMID: 39269387; PMCID: PMC11903366.
2. An Z, Chiang WC, Fernández ÁF, Franco LH, He C, Huang SY, Lee E, Liu Y, Sebt S, Shoji-Kawata S, Sirasanagandla S, **Wang RC**, Wei Y, Zhao Y, Vega-Rubin-de-Celis S. Beth Levine's Legacy: From the Discovery of BECN1 to Therapies. A Mentees' Perspective. *Front Cell Dev Biol*. 2022 Jun 27;10:891332. PMID: 35832792.
3. Farooq Baba PU, Rasool Z, Younas Khan I, Cockerell CJ, **Wang R**, Kassir M, Stege H, Grabbe S, Goldust M. Merkel Cell Carcinoma: From Pathobiology to Clinical Management. *Biology* (Basel). 2021 Dec. PMID: 34943208.
4. Yang R, **Wang RC**. Research Techniques Made Simple: Studying Circular RNA in Skin Diseases. *J Invest Dermatol*. 2021 Oct. PMID: 34560913.
5. Nguyen KD, Chamseddin BH, Cockerell CJ, **Wang RC**. The Biology and Clinical Features of Cutaneous Polyomaviruses. *J Invest Dermatol*. 2019 Feb;139(2):285-292. Epub 2018 Nov 22. Review. PMID: 30470393.
6. Klionsky DJ et al. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*. 2016 Jan 2;12(1):1-222. PMID: 26799652.
7. Klionsky DJ et al. Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*. 2012 Apr;8(4):445-544. PMID: 22966490
8. **Wang RC**, Levine B. Autophagy in cellular growth control. *FEBS Lett*. 2010 Apr 2;584(7):1417-26. PMID: 20096689

C. Book Chapter:

1. Lee EE and **Wang RC**. Glucose Uptake in Heterologous Expression Systems. Glucose Transport-Methods and Protocols. *Methods Mol Biol*. 2017 Nov. PMID: 29218517.

Research Support:

A. Active Research Support

R01 CA275071 - Wang (PI) 7/01/23 - 6/30/28
National Cancer Institute (NCI) \$3,975,177 (total)
Regulation and Function of Viral and Endogenous Circular RNA in Cancer
The regulation and function of HPV derived and endogenous circular RNA in head and neck cancers will be assessed through sequencing and functional assays.

R21 AI168698 - Wang (PI) 11/8/22 – 10/31/24
National Institute of Allergy and Infectious Disease \$383,566 (total)
Regulation and Function of Human Polyomavirus circular RNAs
The function of polyomavirus circular ALTO RNAs on transcription and replication will be studied.

T32 AR065969 - Wang (PI) 6/01/20 – 5/31/25
National Institute of Arthritis and Musculoskeletal and Skin Diseases \$1,232,801 (total)
Dermatology Research Training Program
This grant funds the training of postdoctoral fellows (MD, PhD, and MD/PhDs) who are interested in pursuing academic research careers in skin biology and skin disease.

1RM1 NS133593 (co-I) 9/01/23 – 7/01/28
National Institute of Neurological Disorders and Stroke (PI: Pascual) \$7,658,307 (total)
Brain glucose deficiency: mechanisms and modulation
RBC exchange transfusion will be tested as a novel therapy for GLUT1 I deficiency (G1D).

B. Pending Research Support

MRP Team Science – Wang (PI) 3/1/24 - 2/28/27
Department of Defense CDMRP \$1,500,000 (direct)
Metabolic and Signaling Functions of the GLUT3-NRAS Complex in Melanoma Prognosis
Determine how GLUT1 and GLUT3 coordinate NRAS signaling and tumor in vitro, in cell culture, in mouse models, and in patient samples.

C. Completed Research Support

R01 AR072655 Wang (PI) 4/01/18 – 3/31/23 (NCE)
National Institute of Arthritis and Musculoskeletal and Skin Diseases \$1,754,720 (total)
Mechanisms of Glucose Dependence in Proliferating Cells
Determine how glucose transport and metabolism impact inflammatory and neoplastic skin diseases using both genetic and chemical inhibition of glucose transport.

TMKF10-20 Wang (PI) 7/01/20 – 6/30/22 (NCE)
The Mary Kay Foundation - Cancer Research Grant \$100,000
Development of a novel marker for cervical cancer using HPV circular RNA
We will test whether an HPV-derived circular RNA, circE7, can be detected in archived patient tumors and blood samples from both mouse models and patients with cervical cancer.

Research Scholar Grant 131383 – Wang (PI) 7/1/18 – 6/31/22
American Cancer Society \$660,000 (direct)

Glucose Transport as a Targetable Vulnerability in Squamous Cell Carcinoma

BWF1010978 – Wang (PI)	9/1/12 – 8/31/20
Burroughs Wellcome Fund	\$700,000 (direct)
Akt-mediated Regulation of Autophagy & Tumorigenesis through Formation of a Beclin 1/Keratin Intermediate Filament Complex	
ACS Pilot Research Grant 02-196 – Wang (sub-I)	1/1/12 – 12/31/14
American Cancer Society Principal Investigator (PI: James Willson)	\$74,800 Targeting
Post-Translation Modifications of GLUT1 in Cancer	
K08CA164047 – Wang (PI)	9/10/12 – 8/31/17
National Cancer Institute	\$716,560 (direct)
Elucidating the Role of Akt and Keratins in Autophagy and Tumorigenesis	
Career Development Award – Wang (PI)	7/01/10 – 9/01/12
Dermatology Foundation	\$110,000
The Inhibition of Autophagy by Akt and Keratins Promotes Cell Proliferation	

Institutional Review Board Approved Protocols:

- 2012-present Prevalence and impact of novel polyomaviruses on folliculotropic mycosis fungoides (PI, STU 092012-034)
- 2014-present Phosphorylated GLUT1 Expression in Cutaneous Neoplasms (PI, STU 042015046)
- 2014-present Red blood cell exchange transfusion as a novel treatment for GLUT1 deficiency syndrome (co-I, STU 122014-010)
- 2018-present Metabolic and Viral Tumor Marker Expression in Neoplastic and Inflammatory Disorders (PI, STU 072018-067)
- 2019-present Finding the Causes of Rare Skin Diseases (co-I, STU 092013-032)
- 2021-present Tissue Procurement and Outcome Collection for Patients with Head and Neck Tumors (co-I, STU 092013-032)
- 2022-present Monkeypox Images Data Repository (PI, STU-2023-0569)
- 2022-present Retrospective Chart Review of the Clinical, Histopathologic, and Molecular Features of Emerging Infectious Diseases (PI, STU-2022-0888)

Patents:

- 2017 Beclin 1 Phosphorylation, US Patent 9,671,412
- 2020 Autophagy activating complex, compositions and methods, US Patent 10,543,158

Invited Presentations (selected):

- 2003 Cold Spring Harbor Meeting: Telomeres and Telomerase, poster presentation
- 2003 Rockefeller Cancer Biology Symposium, poster presentation
- 2003 Irving Weinstein Symposium on Cancer Prevention, poster presentation
- 2004 EMBO / 58th Harden meeting: Telomeres and Genome Stability, oral presentation
- 2004 New York Academy of Sciences: Meeting on Genome Integrity, oral presentation
- 2009 Texas Dermatological Society: Spring 2009, Oral presentation, 1st prize
- 2010 Society for Investigative Dermatology (Selected oral presentation)

- 2011 AAD Annual Meeting, Merkel Cell Carcinoma Interest Group (Oral presentation)
- 2011 UT Health Science Center San Antonio, Lecturer
- 2011 Montagna Symposium on the Biology of the Skin (Invited oral presentation)
- 2012 Merkel cell carcinoma: Virology & Immunology toward rational therapy, organizer 2012 Gordon Research Seminar on Intermediate Filaments (Invited speaker)
- 2012 Gordon Research Conference on Intermediate Filaments (Oral presentation)
- 2012 Baylor University Medical Center Invited Speaker
- 2012 UT Southwestern Austin Lecturer
- 2013 Dialogues in Dermatology Invited Guest
- 2013 AAD Annual Meeting Invited Speaker: C022 Infectious Diseases
- 2015 FASEB Glucose Transporter Meeting (Selected Speaker)
- 2017 Texas Dermatology Society Annual Meeting
- 2017 Northwestern University Research Talk (Invited Speaker)
- 2017 FASEB Glucose Transporter Meeting (Selected Speaker)
- 2018 Society of Investigative Dermatology: Skin Development Sessions Short Talk
- 2019 Northwestern University Dermatology Grand Rounds
- 2019 UT San Antonio Health Science Center: Dermatology Talk (Invited Speaker)
- 2019 University of Miami Medical School: Dermatology Grand Rounds
- 2019 University of Miami Medical School: Pathology Grand Rounds
- 2019 Society of Investigative Dermatology: Clinical Scholar Plenary Talk
- 2019 Society of Investigative Dermatology: Carcinogenesis Sessions Short Talk
- 2019 ICGEB DNA Tumor Virus Meeting: Selected Presentation
- 2020 Dartmouth-Hitchcock Medical Center, Dermatology Grand Rounds
- 2020 American Society for Dermatopathology, Herman Pinkus Memorial Course Lecture 2022 Simmons Comprehensive Cancer Center Cellular Networks in Cancer Program: Metabolism Retreat
- 2022 UC Irvine Skin Symposium: Glucose Transporters in Skin Disease
- 2022 Lookingbill Grand Rounds, Pennsylvania State Hershey Medical Center Lecture
- 2022 UT Southwestern Dermatology Training Program 50th Anniversary
- 2023 Harbor-UCLA Gurevitch Grand Rounds; DNA tumor viruses in skin disease
- 2023 Simmons Comprehensive Cancer Center Cellular Networks in Cancer Program: Cancer Convergence - Insights from Signaling Mechanisms Retreat
- 2024 International Immunosuppression & Transplant Skin Cancer Collaborative: 2024 Annual Meeting - The Biology of HPV Infection Informs Current Treatments and Identifies Therapeutic Opportunities

Professional Societies and Extramural Organizations Leadership:

- 2023 SID Future Leaders Retreat, Co-Chair
- 2012 Co-chair, Society for Investigative Dermatology
Merkel cell carcinoma: From virology and immunology toward rational therapy

Grant and Award Review Activity:

- 2021-present Dermatology Foundation Review Committee (standing member)
- 2021-present Genetics of Health and Disease NIH Study section (standing member)
- 2020-present AAD Young Investigator Award (standing member)
- 2019 ACTS NIH (ad hoc)

Committee:

2019-2023 SID Education Committee

Membership:

The American Society for Clinical Investigation
Leaders Society – Dermatology Foundation
American Association for Cancer Research
The Society for Investigative Dermatology
American Academy of Dermatology
Texas Dermatological Society
Dallas Dermatological Society

Community Service:

2007-2025 Volunteer, Agape Free Clinic
2008-2019 Skin Cancer Screening Volunteer, AAD
2008-2010 Volunteer, Camp Braveskin for Children with skin disease
2000-2002 Cornell Science Challenge for NYC public schools, Cornell Medical College

Institutional Service Leadership:

2023-2025 UTSW, Dermatology T32 Training Program, PI
1999 MD-PhD Student Retreat, Coordinator, Tri-Institutional MD-PhD program

Committees:

2024 Emily Paterson (Qualifying)
2023-present UTSW MSTP T32 Training Program, Member
2019-present UTSW MSTP (M.D., Ph.D.) Admissions Committee
2017-present UTSW, Microbiology T32 Training Program, Member
2016-present UTSW, Dermatology T32 Training Program, Member
2016-present UTSW Graduate School Qualifying Committees
2016 Tabitha Ting
2017 Tracy Rosales (Qualifying Chair)
2018 Yuemeng Jia
2018 Hande Piristine (Qualifying Chair)
2022 Christina Hofman (Qualifying Chair)
2023 Stefanie Moye (Qualifying)
2013-present UTSW Graduate School Thesis Committee
2013 Xiaolei Shi (Thesis)
2002-2003 The Rockefeller University, Friday lecture series,
2000-2004 The Rockefeller University, Student & Postdoc Seminar Series Committee

Teaching:

2019-present UTSW Graduate School Lecturer
Cancer Biology I: Tumor Viruses
2014-present UTSW Graduate School rotation lab mentor
2015 Zachary Gallegos, Ford Foundation grant nominator
2014 Qian Yang
2014 Esther Kim

2012-present UTSW Dermatology Residency
 Didactic lectures and Kodachrome Lectures
 Resident Clinic Supervision (UTSW, Parkland Hospital)

2012-present UTSW Graduate School
 Journal Club Leader
 Ethics in Science Group Discussion Leader

2011-present UTSW Medical School Lecturer
 MS1 – Multisystem Disorders (Papulosquamous & Eczematous Disorders)

2010-present UTSW Medical School Small Group Leader Patient
 teaching session to MS1

2001-2003 Journal club leader, Weill Medical College of Cornell University.
 Host Defenses; Molecules to Cells; and Gene Expression Courses.

1998 Teaching Assistant, Stanford University.
 Biology 129 - Cellular Dynamics (T. Stearns and J. Nelson)

Mentorship:

2013-2014 Brandon Litzner, M.D., Residency Mentor
 (Dermatologist/Dermatopathologist at Heartland Dermatology)

2013-2016 Jing Ma, Ph.D., Postdoctoral Fellowship Mentor
 (Research Scientist, Harbin Institute of Technology)

2014-2016 Khang Nguyen, M.D., M.S., Residency Mentor
 (Assistant Professor, Dell Medical School, UT Austin)

2015-2017 Yangbo Yue, Ph.D., Postdoctoral Fellowship Mentor
 (Associate Director, Translational Science, BeiGene)

2015-2019 Jiawei Zhao, Ph.D., Graduate Thesis Advisor
 (Principal Investigator, Shenzhen Institute of Advanced Technology)

2016-2018 Zhuzhen Zhang, Ph.D., Postdoctoral Fellowship Mentor
 (Principal Investigator, College of Life Sciences, Wuhan University)

2018-2019 Bahir Chamseddin, M.D., Deans Research Scholar mentor
 (Dermatologist, Epiphany)

2018-2020 Rong Yang, Ph.D., Postdoctoral Fellowship Mentor
 (Principal Investigator, College of Life Sciences, Hunan Normal University)

2021-2022 Elly Kolitz Rose, M.D., Deans Research Scholar mentor
 (Dermatology Resident, UTSW)