

CURRICULUM VITAE FOR ACADEMIC PROMOTION
The Johns Hopkins University School of Medicine

Luis Andres Garza

Version Date: 8/04/2016

DEMOGRAPHIC INFORMATION

Current appointments

2009-present Assistant Professor, Department of Dermatology, Johns Hopkins

Personal data

Research Division
Department of Dermatology
Room 204 Koch CRB II
1550 Orleans Street
Phone: 410-955-8662 or 410-614-6700 (Direct line)
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Email: LAG @jhmi.edu

Education and Training

Undergraduate

1994 B.A., Neurobiology; Cum Laude and With Distinction in All Subjects, Cornell University, Ithaca, NY

Doctoral/Graduate

2001 M.D. Ph.D., Medical Scientist Training Program, University of Pennsylvania School of Medicine, Philadelphia, PA

Postdoctoral

2001-2002 Intern, Transitional year, University of Pennsylvania Presbyterian Hospital, Philadelphia, PA

2002-2005 Resident, Dermatology, University of Michigan Hospital, Ann Arbor, MI

2005-2009 Post-doctoral Fellow, Dermatology, University of Pennsylvania, Philadelphia PA

Professional Experience

2009- present Assistant Professor, Department of Dermatology, Johns Hopkins

RESEARCH ACTIVITIES

Peer Reviewed Original Science Publications

1. Muschel RJ, Bernhard EJ, Garza L, McKenna WG, Koch CJ: Induction of apoptosis at different oxygen tensions: evidence that oxygen radicals do not mediate apoptotic signaling. *Cancer Research*. 55(5):995-8, 1995
2. Summers SA, Garza LA, Zhou H, Birnbaum MJ: Regulation of Insulin-Stimulated Glucose Transporter GLUT4 Translocation and AKT kinase activity by Ceramide. *Molecular and Cellular Biology*. 18(9):5457-5464, 1998
3. Zheng Z, Khoo A, Fambrough D Jr., Garza L, Booker R: Homeotic gene expression in the wild-type and a homeotic mutant of the moth *Manduca sexta*. *Development Genes & Evolution*. 209(8):460-72, 1999
4. Summers SA, Yin VP, Whitman EL, Garza LA, Cho H, Tuttle RL, Birnbaum MJ: Signaling Pathways Mediating Insulin-Stimulated Glucose Transport. *Annals of the New York Academy of Sciences*. 892:169-186, 1999
5. Hausdorff SF, Fingar DC, Morioka K, Whitman EL, Garza LA, Summers SA, Birnbaum MJ: Identification of Wortmannin-Sensitive Targets in 3T3-L1 Adipocytes: Dissociation of Insulin-Stimulated Glucose Uptake and GLUT4 Translocation. *Journal of Biological Chemistry*. 274(35):24677-24684, 1999
6. Garza LA and Birnbaum MJ: Trafficking of the Insulin-Responsive Aminopeptidase (IRAP) in 3T3-L1 Adipocytes. *Journal of Biological Chemistry*. 275(4):2560-7, 2000
7. Hanakawa Y, Lin C, Garza L, Sugai M, Schechter N, Amagai M, Stanley J: Molecular Mechanisms for Specific Cleavage of Desmoglein 1 by Exfoliative Toxins. *Journal of Clinical Investigation*. 110(1):53-60, 2002
8. Wang F*, Garza LA*, Kang S, Varani J, Orringer JS, Fisher GJ, Voorhees JJ. In Vivo Stimulation of De Novo Collagen Production Caused by Cross-linked Hyaluronic Acid Dermal Filler Injections in Photodamaged Human Skin. *143(2):155-163, 2007; Archives of Dermatology*. *Authors Contributed Equally

9. Wang F*, Garza LA*, Cho S, Kafi R, Hammberg C, Quan T, Hamilton T, Mayes M, Ratanatharathorn V, Voorhees JJ, Fisher GJ, Kang S. Effect of Increased Pigmentation on the Antifibrotic Response of Human Skin to UV-A1 Phototherapy.. 144(7):851-858, 2008. Archives of Dermatology. *Authors Contributed Equally
10. Cunninham, D, Spychala K, McLarren KW, Garza LA, Boerkoel CF, Herman GE. Developmental Expression Pattern of the Cholesterologenic Enzyme NSDHL and Negative Selection of NSDHL-deficient Cells in the Heterozygous *Bpa^{H/+}* Mouse. Molecular Genetics and Metabolism 2009 98(4):356-66
11. Garza LA, Yang CC, Zhao T, Blatt HB, Lee M, He H, Stanton DC, Carrasco L, Spiegel JH, Tobias JW, Cotsarelis G. Bald scalp in Men with Androgenetic Alopecia retains hair follicle stem cells but lacks CD200-rich and CD-34 positive hair follicle progenitor cells. **Journal of Clinical Investigation**. 121(2):613-622 2011.
12. Christman AL, Selvin E, Margolis D, Lazarus GS, Garza LA Hemoglobin A1c Predicts Healing Rate in Diabetic Wounds. Journal of Investigative Dermatology. 2011 131(10):2121-7
13. Garza LA, Liu Y, Yang Z, Alagesan B, Lawson JA, Norberg SM, et al. Prostaglandin D2 Inhibits Hair Growth and Is Elevated in Bald Scalp of Men with Androgenetic Alopecia. **Sci Transl Med**. 2012;4(126):126ra34.
14. Yang NB, Garza LA, Foote CE, Kang S, Meyerle JH. High prevalence of stump dermatoses 38 years or more after amputation. Arch Dermatol. 2012;148(11):1283
15. Nelson AM, Loy DE, Lawson JA, Katseff AS, Fitzgerald GA, Garza LA. Prostaglandin D2 Inhibits Wound-Induced Hair Follicle Neogenesis through the Receptor, Gpr44. J Invest Dermatol. 2013;133(4):881-9. PMID: PMC3593761.
16. Nieves A, Garza, LA. Does Prostaglandin D2 hold the cure to male pattern baldness? Exp Dermatol. 2014; Feb 13 Epub ahead of print. PMID: 24521203
17. Okoye GA, Rainer BM, Leung SG, Suh HS, Kim JH, Nelson AM, Garza, LA Chien, AL, Kang, S. Improving acne keloidalis nuchae with targeted ultraviolet B treatment: a prospective, randomized, split-scalp comparison study. Br J Dermatol. 2014. doi: 10.1111/bjd.13119. PubMed PMID: 24863570
18. Vandiver AR, Irizarry RA, Hansen KD, Garza LA, Runarsson A, Li X, et al. Age and sun exposure-related widespread genomic blocks of hypomethylation in nonmalignant skin. Genome Biol. 2015;16(1):80. doi: 10.1186/s13059-015-0644-y. PubMed PMID: 25886480.
19. Nelson AM, Reddy SK, Ratliff TS, Hossain MZ, Katseff AS, Zhu AS, Chang E, Resnik SR, Page C, Kim D, Whittam AJ, Miller LS, Garza LA. dsRNA Released by Tissue Damage Activates TLR3 to Drive Skin Regeneration. **Cell Stem Cell**. 2015;17(2):139-51. Epub 2015/08/09. doi: 10.1016/j.stem.2015.07.008. PubMed PMID: 26253200; PubMed Central PMCID: PMC4529957.
20. Nelson AM, Katseff AS, Ratliff TS, Garza LA. Interleukin 6 and STAT3 regulate p63 isoform expression in keratinocytes during regeneration. Exp Dermatol. 2015. Epub 2015/11/15. doi: 10.1111/exd.12896. PubMed PMID: 26566817.
21. Nelson AM, Katseff AS, Resnik SR, Ratliff TS, Zhu AS, Garza LA. Interleukin 6 null mice paradoxically display increased Stat3 activity and wound-induced hair neogenesis. J Invest Dermatol. 2016. Epub 2016/02/02. doi: 10.1016/j.jid.2015.12.043. PubMed PMID: 26829029.
22. Kim D, Hossain MZ, Nieves A, Gu L, Ratliff TS, Mi Oh S, Park A, Han S, Yang NB, Qi J, Taube JM, Kang S, Garza LA. To Control Site-Specific Skin Gene Expression, Autocrine Mimics Paracrine Canonical Wnt Signaling and Is Activated Ectopically in Skin Disease. Am J Pathol. 2016;186(5):1140-50. Epub 2016/04/24. doi: 10.1016/j.ajpath.2015.12.030. PubMed PMID: 27105735.

Invited reviews

1. Garza LA. Atopic Dermatitis: A Review. Postgraduate Dermatology. 1(2):1-3, 2003
2. Garza LA. Seborrheic Dermatitis: A Review. Postgraduate Dermatology. 2 (1):1-2, 2004
3. Saurabh Vyas, Hien Van Nguyen, Philippe Burlina, Amit Banerjee, Luis Garza, Rama Chellappa. Computational modeling of skin reflectance spectra for biological parameter estimation through machine learning. Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XVIII. Conference Paper.
4. Nieves A, Garza LA. Does prostaglandin D2 hold the cure to male pattern baldness? Exp Dermatol. 2014;23(4):224-7. Epub 2014/02/14. doi: 10.1111/exd.12348. PubMed PMID: 24521203; PubMed Central PMCID: PMC3982925.
5. Reddy SK, Garza LA. The thinning top: why old people have less hair. J Invest Dermatol. 2014;134(8):2068-9. doi: 10.1038/jid.2014.172. PubMed PMID: 25029319; PubMed Central PMCID: PMC4101907.
6. Saurabh Vyas, Amit Banerjee, Luis Garza, Sewon Kang, Philippe Burlina. Hyperspectral signature analysis of skin parameters. Medical Imaging 2013: Computer-Aided Diagnosis. Conference Paper.
7. Kim D, Garza LA. A new target for squamous cell skin cancer? Exp Dermatol. 2014. doi: 10.1111/exd.12576. PubMed PMID: 25356957.

8. Hossain MZ, Garza LA. Hairy math: addition of Wnt-3a to multiply bulge cells. J Invest Dermatol. 2015;135(6):1481-3. Epub 2015/05/13. doi: 10.1038/jid.2014.545. PubMed PMID: 25964269; PubMed Central PMCID: PMC4430324.
9. Nelson AM, Garza LA. Bad Hair Day: Testosterone and Wnts. J Invest Dermatol. 2015;135(11):2567-9. Epub 2015/11/10. doi: 10.1038/jid.2015.304. PubMed PMID: 26548488.

Inventions, Patents, Copyrights:

- 2007 Garza LA, and Cotsarelis G; World Patent: Methods and Compositions for Inhibiting or Reducing Hair Loss, Acne, Rosacea, Prostate Cancer and BPH.. WIPO Patent #WO/2007/149312
- 2007 Garza LA, and Cotsarelis G; Methods and Compositions for Inhibiting or Reducing Hair Loss, Acne, Rosacea, Prostate Cancer and BPH. Garza LA and Cotsarelis G Co-inventors. Licensed to Kythera and subsidiaries in a milestone driven deal for total of \$27 Million dollars. United States Patent Application #US 2011/0021599
- 2012 Kang S, Dorfman DN, Ding Y, Shah C, Harwell AS, Kelly M, Chien A, Garza LA, Taube J; A Minimally Invasive Skin Biopsy Device for Removal (cosmetic and diagnostic purposes) of Skin Conditions in the Epidermis. WO2012154773 A3
- 2013 Burlina PM, Banerjee A, Vyas S, Garza LA United States Patent Application: U.S. Patent Number 8,761,476 . Hyperspectral Imaging for Detection of Skin Related Conditions. US8761476 B2
- 2013 Sample JL, Patrone JB, Benkoski JJ, Breidenich JL, Kelly LA, Huong L, Crookston JC, Patchan MW, Garza LA, Calderon-Colon X, Wolfe JT, Theodore ML, Nelson A, Kang S Topical Compositions and Methods of Detection and Treatment. United States Patent Application: # US20130022685 A1.
- 2013 Garza LA, Kang S, Meyerle JH. Methods for using autologous fibroblasts to alter skin identity. WIPO WO2013166045 A1
- 2014 Garza LA, Kang S., Meyerle JH Cryosyringe designed for sterile liquid nitrogen freezing, quick thawing and injection of cellular slurries. Disclosure sent to JH tech transfer
- 2015 Garza LA. Topical timolol for the treatment of Rosacea. Preliminary provisional filed; verified to work in self-trial.

Extramural Sponsorship

Current Grants:

- | | |
|-----------|---|
| 2017-2021 | “Mild wounding to enhance skin identity conversion”
CDMRMP/DMRDP
Department of Defense
350k yearly direct costs
Principal Investigator: Luis Garza 10% |
| 2017-2019 | “Defining the epigenetics of rosacea”
LEO foundation
50k total direct costs
Principal Investigator: Luis Garza 1% |
| 2013-2018 | “The use of autologous volar fibroblasts to induce ectopic volar skin”
AFIRM2
Department of Defense
190k yearly direct costs;
Principal Investigator: Luis Garza; 9% |
| 2013-2018 | “Mechanism and clinical pilot test of volar fibroblasts to create ectopic volar skin”
1R01AR064297-01A1
NIH NIAMS
250k yearly direct costs,
Principal Investigator: Luis Garza; 28% |
| 2015-2018 | “Epigenetic Detection and Treatment of Skin Cancer” |

Translational Grant
V Foundation
200k yearly direct costs,
Principal Investigator: Andrew P. Feinberg
Role: Co-PI, 2%

2015-2018 “Clinical trial of human fibroblast stem cells to convert skin identity and enhance prosthetic use”
MD-15-1
Maryland Stem Cell Research Fund
200k yearly direct costs
Principal Investigator: Luis Garza, 30%

2016-2017 “Epigenetics of Rosacea”
Trial Award
Rosacea Society
15k
Principal Investigator: Luis Garza 1%

Pending Grants: None

Previous Grants:

2005-2007.1 “Bulge cells in tumorigenesis and alopecia”
Minority Postdoctoral Fellow Stipend, R01 Supplement.
NIAMS/NIH
70k direct costs, Principal Investigator—George Cotsarelis
35% percent effort

2006-2007 “Isolation and Characterization of Human Skin Stem Cells”
Dermatologist Investigator Research Fellowship Award.
Dermatology Foundation.
30k direct costs,
Principal Investigator—Luis Garza; 35% percent effort

2007-2008 “Heterogeneous cell populations within the human hair follicle stem cell compartment”
Research Scholar Award.
American Skin Association
50k direct costs,
Principal Investigator—Luis Garza, 10% percent effort

2007-2008 “Heterogeneous cell populations within the human hair follicle stem cell compartment and their role in alopecias”
Physician Scientist Career Development Award.
Dermatology Foundation
55k direct costs,
Principal Investigator—Luis Garza, 65% percent effort

2007-2008 “Heterogeneous cell populations within the human hair follicle stem cell compartment and their role in alopecias”
Research Grant.
Dermatology Foundation
20k direct costs.
Principal Investigator—Luis Garza, 10% percent effort

2008-2013.1 “Role of Prostaglandin D2 in Hair Follicle Biology”

K08 Mentored Research Award 1K08AR055666-01A1
NIAMS/NIH
586k direct costs,
Principal Investigator—Luis Garza, 75% percent effort

- 2009-2010.1 “Prostaglandins in normal hair growth and alopecia”
Research Grant.
Dermatology Foundation
20k direct costs,
Principal Investigator—Luis Garza, 10% percent effort
- 2010-2011 “Use of solid lipid nanoparticles (SLN) for drug delivery: pilot studies for both diagnostic and therapeutic applications in dermatology”
Intramural grant
Institute for NanoBioTechnology (INBT)
20K direct costs.
Principal Investigator: Luis Garza, 1% effort
- 2010-2011 “Use of solid lipid nanoparticles for topical compound delivery”
Applied Physics Laboratory Subcontract
Department of Defense
118k direct costs
Principal Investigator—Luis Garza, 10% effort
- 2010-2011 “Conversion of Stump Skin to Acral Skin to enhance Prosthetic Use”
DARPA award, A66001-10-1-4081
Department of Defense
350k direct costs,
Principal Investigators: Luis Garza, 30% effort
- 2011-2012 “Effects of Antibiotics and Acne on the Skin Microbiome”
American Acne & Rosacea Society Clinical Research Grant
10k direct costs;
Principal Investigator: Luis Garza; 1% effort
- 2012-2013 “Pilot clinical trial to convert stump skin to palmo-plantar skin to enhance prosthetic use”
TATRC subcontract award,
Department of Defense
120k direct costs,
Principal Investigator: Luis Garza, 10% effort
- 2013-2015 “Expansion and pre-clinical testing of autologous volar fibroblasts”
PACT award,
NIH NHBLI
Labor grant for services, estimated value 50k yearly costs,
Principal Investigator: Luis Garza, no effort

Research Programming Building/Leadership:

- 2009-present Initiation of independent basic science research laboratory for Dr. Garza,
2009-present I wrote and am the PI on 4 shared IRB protocols to allow for all research faculty in my department (as co-PIs) to research banked paraffin skin biopsies, discarded human skin tissue, perform gene array studies on skin, and conduct chart reviews for the study of wounds.
Title: “Retrospective pilot analysis of the histology of completed dermatologic biopsies and excisions”
Number: NA_00072381
Title: "Use of Discarded Human Skin Surgery Tissue for Dermatology Research"
Number: NA_00031269

Title: "Skin biopsy-only study to determine gene expression signature of skin"

Number: NA_00033375

Title: "Retrospective analysis of patient characteristics and outcomes in Bayview wound center through analysis of the Wound Matrix Database."

Number: NA_00035916

EDUCATIONAL ACTIVITIES

Educational Publications:

Case Reports

1. Garza LA, Yoo EK, Junkins-Hopkins J, VanVoorhees. Photo Recall-Like Effect with Cefazolin: A Case Report. *Cutis*. 73(1):79-80,85, 2004

Book Chapters, Monographs

1. Qi, J and Garza LA. "Alopecias" chapter in book "The Skin and it's Diseases" Cold Spring Harbor Perspectives series. Cold Spring Harbor Laboratory Press. 2013
2. Garza LA. "Development and Structures of Skin" Fitzpatrick Dermatology. McGraw Hill. In preparation.

Teaching:

Classroom instruction

- 2009-2014 Organizer and Teacher for monthly Basic Science Journal Club for residents medical students and faculty. I identify high impact recent articles from prominent basic science journals, develop a lesson plan, meet with resident presenting the article, and then supervise the discussion with talking points based on critical concepts for the residents in particular to learn.
- 2009-present Monthly supervision of Resident taught lectures for accuracy and clinical relevance
- 2009-present MSII Dermatology lecture during Dermatology introductory course
- 2009-present MSII Dermatology small group session during Dermatology introductory course
- 2009-present PhD Graduate student Cell and Molecular Medicine graduate group introductory lecture on skin and small group session.
- 9/9/09 Dermatology Grand Rounds Lecture: "Stem cells and Prostaglandins in Androgenetic Alopecia"
- 10/9/09 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.
- 10/20/10 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.
- 12/8/10 Radiation Oncology Department Molecular Radiation Sciences Progress Report Seminars. "Status of Hair Follicle Stem Cell Compartment in Alopecia."
- 4/7/11 Good Samaritan Hospital Medical Residency Teaching Rounds "Common Dermatologic Conditions"
- 9/13/11 Johns Hopkins Health Care: "Skin Problems and Skin Care in the Diabetic Patient"
- 1/25/12 Dermatology Grand Rounds Lecture: "Control of palmo-plantar skin identity"
- 8/15/12 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.
- 2/19/13 Annual Joint Meeting of the Johns Hopkins Alliance for Science and Technology Development and the University of Maryland Baltimore Commercial Advisory Board. "Stump skin in Amputees: Changeover to Palmo/plantar Skin"
- 3/6/13 Oncology Translational Research Conference: "Maintenance and alteration of adult skin identity"
- 3/8/13 Rheumatology Grand Rounds: "Maintenance and alteration of adult skin identity"
- 6/5/13 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.
- 8/7/13 Resident teaching lecture-- Introduction to hair follicle in disease and health
- 9/4/13 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.
- 10/1/14 Resident teaching lecture-- Vitiligo and related pigmentary diseases
- 10/7/14 Institute for Cellular Engineering; Regenerative Medicine symposium "dsRNA stimulates organogenesis"

10/29/14 Resident teaching lecture—Alopecia
1/21/14 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.
6/2/15 Pathobiology PhD Graduate Group: Psoriasis
11/18/2015 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching
4/8/2016 Resident teaching lecture—dsRNA stimulates Hair Follicle Neogenesis
4/8/2016 Resident teaching lecture—Fibroblasts to alter skin identity
5/4/2016 Herlong MD-PhD Rounds—“Hidradenitis Suppurativa: biology and medicine”
6/2/2016 Hopkins Cell Biology Department lecture—“Skin as a model system for limb regeneration” (also lunch meeting with graduate students)
8/24/2016 Graduate student CMM Introductory course—“Skin” lecture
09/07/2016 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.

Clinical instruction

2009-present Inpatient consultation service. Attending physician 4 weeks per year, Johns Hopkins
2009-present Outpatient dermatology clinic. Attending physician 1-2 clinics per week, Johns Hopkins

CME instruction None

Workshops/seminars

2009 SID Montreal, Canada. Resident Retreat. Garza LA. How to Pursue a Career as a Dermatology Physician Scientist.
2010 SID Atlanta, Georgia. Resident Retreat. Garza LA. How to Pursue a Career as a Dermatology Physician Scientist.
2011 SID Phoenix, Arizona. Resident Retreat. Garza LA. How to Pursue a Career as a Dermatology Physician Scientist.
2012 SID Raleigh, North Carolina. Resident Retreat. Garza LA. How to Pursue a Career as a Dermatology Physician Scientist.
2014 SID Albuquerque, New Mexico. Resident Retreat. Garza LA. “How to write a good K award”
2016 Hopkins MD-PhD annual retreat. “How to grow a new limb”

Mentoring

Advisees

2014-2015 Zufiquer Hossain, PhD, current *Associate Professor at BRAC University*, a top school in Balgladesh.
2010-2013 Amanda Nelson, PhD, current *Assistant Professor at Pennsylvania State University*, completed F32 in my laboratory as a post-doctoral fellow
2010-2015 Sydney Resnick, MS, current Medical student at Florida International University, BS and then Masters student in my laboratory.
2010-2011 Nicole Yang, MD, current resident in internal medicine in Singapore, completed a year-off of research in my laboratory under North American Hair Research Society grant
2011-2012 Andrea Christman, MD, current Neurology resident at Hopkins, did research in my laboratory and successfully awarded Kligman Foundation Grant.
2013-2014 Ashley Nieves, BS, current Hopkins medical student did research for year-off in my laboratory under Howard Hughes Medical Institute grant
2013-2014 Sashank Reddy, MD-PhD, current plastic surgery resident did research for a year-off in my laboratory funded through R01.
2015-present Nasif Islam, graduate student BCMB graduate group.
2015-2017 Visiting Chinese PhD Thesis student: Rongying Zhou
2015-2017 Visiting Chinese PhD Thesis student: Ruosi Chen
2016 Alexa Raymundo, Centro Sol CARES Summer program for disadvantaged local high school students

Thesis committees

2012-2014 Annemarie McCartney MD-PhD candidate, Cell and Molecular Medicine, dissertation committee member
2011-2015 Amy Vandiver Utterman, MD-PhD candidate Cell and Molecular Medicine, dissertation committee member
2014-present Zixuan Pang, PhD candidate Biological Chemistry program, dissertation committee member
2014-present Xin Sun, PhD candidate Biological Chemistry program, dissertation committee member
2016-present Barry Poll, PhD candidate Biological Chemistry program, dissertation committee member
2016-present James Beckett, MD-PhD candidate, Cell and Molecular Medicine, dissertation committee member

Masters Student

2016 Secondary Reader for Danyelle Fraser

Training grant participation

T32 Dermatology NIAMS application, helped write collaboration section and active member.

Educational Program Building/Leadership None

Educational Extramural Funding None

CLINICAL ACTIVITIES

Certification:

Medical, other state/government licensure

2002-05 MI MD license #4301080066
2005-10 PA MD license #426253
2009-present MD MD license# D0069136

Boards, other specialty certification

2005 American Board of Dermatology

Clinical (Service) Responsibilities:

2005-08 1 month per year inpatient consult attending, HUP (Hospital of the University of Pennsylvania)
2005-08 ½ day general dermatology clinic, University of Pennsylvania Department of Dermatology Outpatient Service
2009-present ½ or 1 day general dermatology clinic, Johns Hopkins Department of Dermatology Outpatient Service
2009-present 1 month per year inpatient consult attending, Johns Hopkins Hospital
12/11-13/12 Johns Hopkins International trips—Riyadh Saudi Arabia

Clinical Program Building/Leadership

2011-2012 Assistant director of the Johns Hopkins Wound Center

Clinical Extramural Funding None

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES None

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2008-2009 Dermatology Epic Governance Chair-- University of Pennsylvania Electronic Charts Committee
2012-2014 Hopkins MSTP MD-PhD mentoring committee
2014-present Johns Hopkins Medicine Research Council

Editorial Activities

Editorial Board appointments:

2012-present Journal of Investigative Dermatology—Associate Editor

Journal Reviewer

2008-present Journal of Investigative Dermatology

2011-present American Journal of Pathology

Advisory Committees, Review Groups/Study sections

2014-2015 NIH NIAMS AMS Review Committee (K career development awards, T32 and R13 conference grants)
ad hoc reviewer

2014 New York State Stem Cell Commission (NYSTEM)- Consortia grant review

2015-present NIH NIAMS AMS Review Committee (K career development awards, T32 and R13 conference grants)
Standing member—three times per year meeting

2016 New York State Stem Cell Commission (NYSTEM)- Consortia grant review

Professional Societies

2002 American Academy of Dermatology

2002 Society for Investigative Dermatology

2005 North American Clinical Dermatology Society

Conference Organizer, Session Chair

2004-2006 Resident-fellow representative to the board of the Society for Investigative Dermatology (SID)

2010- North American Hair Research Society Annual Meeting Program Committee

2011 SID Co-Chair of Hair & Cutaneous Development Mini-Symposium

2012 SID Co-Chair of Hair & Cutaneous Development Mini-Symposium

2012 NIH Pediatric Dermatology Roundtable Conference 12-5-2011

2013- North American Hair Research Society Board member (organizing meetings in Vancouver 2015, Miami 2016, and yearly conference concurrent with SID)

2015 Gordon Research Conferences (GRC), Epithelial Differentiation & Keratinization; Therapeutics Session
Co-chair. Sunday River, Maine

2016 Atlantic Dermatology Conference: Fundraising Co-chair; raised ~\$500,000

2016 Atlantic Dermatology Conference: Chair for 1st Scientific Session

2016 SID Co-Chair of Clinical Scholars Symposium

Consultantships

2013 Johnson and Johnson, consultant on alopecia products

2014 Unilever, consultant on skin aging products

RECOGNITION

Awards, Honors

2004 Albert Kligman SID Travel Award

2005 National Young Investigator Award, Clinical Research AAD

2005 North American Clinical Dermatologic Society Resident Clinical Research Award

2005 Michigan Dermatological Society Ralph Coskey Resident Research Award

2002-05 Multiple University of Michigan “You’re Super” Awards for Excellence in Patient care.

2005 University of Michigan Department of Dermatology Upjohn Resident Research Award

2005 TAMS University of Michigan Medical Student Appreciation Award for Mentoring.

2007 Johnson-Berman Basic Science Research Award, College of Physicians of Philadelphia

2011 Winter Eicosanoid conference NIEHS/NIH Travel Award for Young Investigators

Invited Talks, Panels

- 1/11/07 Department of Dermatology Grand Rounds, University of Utah, Salt Lake City, Utah. "UVA1 as therapy for Scleroderma"
- 1/12/07 Department of Dermatology Research Seminar University of Utah, Salt Lake City, Utah. "Learning about Stem Cells through the study of Alopecia"
- 10/17/07 Department of Dermatology Grand rounds; Oregon Health Sciences University; Portland Oregon. "Learning about Prostaglandins through the study of Alopecia"
- 10/18/07 Department of Dermatology Research Seminar; Oregon Health Sciences University, Portland Oregon. "Learning about Stem Cells through the study of Alopecia"
- 2/7/08 Aderans Corporation; Philadelphia, Pennsylvania. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 3/14/08 Division of Dermatology Research Seminar; University of Massachusetts, Worcester, Massachusetts. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 4/11/08 Department of Dermatology Research Seminar; New York University; New York, New York. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 4/16/08 Department of Dermatology Research Seminar; Case Western Reserve University; Cleveland, Ohio. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 5/2/08 Stem Cell Institute Research Seminar; University of Colorado; Denver, Colorado. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 5/21/08 Epigenetic Program; Fox Chase Cancer Center; Philadelphia, Pennsylvania. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 5/29/08 Department of Dermatology Research Seminar; University of Minnesota, Minneapolis, Minnesota. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 6/27/08 Department of Dermatology Research Seminar; Southwestern University. Dallas, Texas "Learning about Stem Cells through the study of Alopecia"
- 7/31/08 Stem Cell Institute Research Seminar; University of Minnesota, Minneapolis, Minnesota. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 8/21/08 Division of Dermatology Research Seminar; Washington University, St. Louis, Missouri. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 9/18/08 Division of Dermatology SDRC Seminar, Vanderbilt University, Nashville, Tennessee. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"
- 8/12/10 DARPA: Accelerating the physics of wound healing conference, Fort Lauderdale, FL. "Wound healing clinical care and research at Johns Hopkins University School of Medicine"
- 9/16/10 Division of Dermatology, Harbor-UCLA, Los Angeles, CA. "CD200+ human hair follicle stem cells."
- 2/10/11 AmorePacific Company, R&D Center, Seoul **Korea**; "Human bald scalp in androgenetic alopecia retains hair follicle stem cells but lacks CD200-rich and CD34-positive hair follicle progenitor cells".
- 2/10/11 Department of Dermatology, Seoul National University Hospital, **Korea** "PGD2 contributes to androgenetic alopecia"
- 2/11/11 Institute of Dermatologic Sciences Symposium, Clinical Research Institute, Seoul National University Hospital, **Korea**. "Human bald scalp in androgenetic alopecia retains hair follicle stem cells but lacks CD200-rich and CD34-positive hair follicle progenitor cells"
- 6/9/11 University of Pennsylvania Department of Dermatology Kligman Symposium "Stem cells in androgenetic alopecia".
- 6/29/11 University of Pennsylvania PennFlow Conference. "Hair Follicle Stem Cells in Androgenetic Alopecia"
- 11/5/11 Maine Dermatology Society, Portland Maine. "Wound care for the dermatologist"
- 12/5/11 Pediatric Dermatology Roundtable Conference NIH. Prostaglandin D2 inhibits wound-induced hair follicle neogenesis.
- 10/18/12 International Society of Hair Restoration Conference, Nassau **Bahamas** "PGD2 as a Target for Androgenetic Alopecia"
- 1/16/13 University of Alabama at Birmingham Dermatology Grand Rounds. "Control of adult hair follicle de novo organogenesis"
- 11/19-21/13 12th International GCC Dermatology Conference. **Kuwait** City. "Organogenesis in adults", "Mechanisms of Androgenetic Alopecia" and "Modification of skin identity".
- 11/23/12 Japan Society of Clinical Hair Restoration, **Tokyo Japan**. "PGD2 as a Target for Androgenetic Alopecia"
- 4/6/13 American Society of Podiatric Dermatology (ASPD) Cherry Blossom Meeting, Baltimore, MD. "Organogenesis in adults"

- 4/4/14 American Society of Podiatric Dermatology (ASPD) Cherry Blossom Meeting, Baltimore, MD. “Dermatologic manifestations of internal disease”
- 4/10/14 Werthan Endowed Lectureship, Department of Medicine Vanderbilt University. “Mechanisms of Skin regeneration”
- 4/25/14 Symposium on Advanced Wound Care. Orlando, FL. “Skin diversity”
- 4/26/14 Unilever Dove Advisory Council Meeting, **Puerto Rico** “Stratum Corneum biomarkers of skin aging”
- 9/5/14 NIH/NINDS Grand Rounds. “When Embryogenesis is Reactivated in Adult Mammalian Skin”.
- 12/5/14 NIH/NIAMS Roundtable. “How to promote success for K08 awards”
- 12/10/14 University of Miami Grand Rounds. “PGD2 in Hair and Wound Regeneration”
- 12/11/14 Innovations in Wound Care, Florida “dsRNA as a signal for regeneration”
- 1/12/15 AFIRM2 Armed Forces Institute of Regenerative Medicine Conference. “Making new volar skin”.
- 7/16/2015 Gordon Conference: Epithelial Differentiation and Keratinization, Spring River Maine . Co-Discussion leader: “Novel Concepts in Epithelial Function and Therapeutics”
- 10/16/2015 Nature meeting Epigenetics of Cancer and Aging, **Beijing, China**. “Epigenetics of Skin in Photoaging”
- 5/6/2016 Atlantic Dermatology Conference, Baltimore MD: “Why Does Damage From Lasers or Peels or Dermabrasion Induce Rejuvenation?”
- 5/12/2016 Society for Investigative Dermatology; Scottsdale, Arizona: Plenary talk for Clinical Scholars Program “Skin as a model system for limb regeneration”.
- 7/10/2016 North Carolina Dermatology Association, Williamsburg VA: “Can Skin Research Teach Us How to Grow a New Limb?”
- 10/21/2016 University of Florida Dermatology Grand Rounds “Can Skin Research Teach Us How to Grow a New Limb?”
- 12/6/2016 New York University School of Medicine, Stem Cell Seminar Series “dsRNA as a signal for regeneration”
- 12/14/2016 University of Pennsylvania, Institute of Regenerative Medicine Philadelphia PA. Stem Cell Seminar series “dsRNA stimulates Regeneration”

OTHER PROFESSIONAL ACCOMPLISHMENTS

- 2011 #11 publication above was covered in segments by Time, Wall Street Journal, USA Today, Good Morning America among many other local papers. Internet coverage included Esquire and the New Yorker. It was also elected into the Faculty 1000 top 2% articles. The web site for this article has had more than 1 million views and 25,000 downloads in first 6 months of publication. It was selected by BBC to be the 2nd most noteworthy article in 2011.
- 2011 #12 publication was highlighted in the JID issue by being selected for “journal club” with accompanying commentary and questions. It was also selected for highlight by several other medical web sites.
- 2012 #13 publication was highlighted by ABC, CBS, FOX, CNN, BBC, Nature, LA times and NY times with significant international and web site coverage. It was the top viewed article in the London Telegraph on 9-2-2012.
- 2013 Interviewed by NPR reporter Michaelen Doucleff regarding PNAS article by Higgins et al on induction of de novo human hair follicle growth.
- 2014 Interviewed by NY Times reporter Pam Belluck, Health and Science Writer regarding Nature Medicine article Xing et al 2014 on alopecia areata and JAK inhibition.
- 2015 2007 Patent #US 2011/0021599 to Garza&Cotsarelis was licensed in a milestone driven deal for \$27 million dollars.
- 2015 #20 publication was covered by Fox Television News, BBC, and other media outlets.
- 2015 Interviewed for US News & World Report journalist Randy Dontinga for story on 10/23/2015 about JAK inhibitors for alopecia. Interviewed by NPR reporter Rob Stein about Common Rule for subjects research for story on 11/18/2015; aired on Morning Edition 11/25/2015.

2016

Interviewed by Washington Post Reporter Laurie McGinley for article on stem cell trials.