

## CV

Luis Andres Garza  
Version Date: 10/15/2009

### DEMOGRAPHIC INFORMATION

Assistant Professor  
Department of Dermatology  
Johns Hopkins University Hospital  
Bayview Hospital

Room 204 Koch CRB II  
1550 Orleans Street  
Phone: 410-955-3865 (Admin Assistant Brenda Davis)  
Fax: 410-955-8645  
Email: LAG @jhmi.edu

### Education/Training

Cornell University, College of Arts and Sciences  
Cum Laude and With Distinction in All Subjects  
B.A., May 1994 Neurobiology Major

University of Pennsylvania School of Medicine  
Medical Scientist Training Program  
(Full scholarship with stipend)  
M.D. Ph.D., May 2001

University of Michigan Department of Dermatology  
Residency in Dermatology  
Graduation July 2005

University of Pennsylvania Department of Dermatology  
Instructor/Laboratory Fellowship  
August 2005- June 2009

### Professional Experience

Johns Hopkins University Department of Dermatology  
Assistant Professor  
June 2009-

## RESEARCH ACTIVITIES

### 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 Aminopetidase (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. Garza LA. Atopic Dermatitis: A Review. *Postgraduate Dermatology*. 1(2):1-3, 2003
9. Garza LA, Yoo EK, Junkins-Hopkins J, VanVoorhees. Photo Recall-Like Effect with Cefazolin: A Case Report. *Cutis*. 73(1):79-80,85, 2004
10. Garza LA. Seborrheic Dermatitis: A Review. *Postgraduate Dermatology*. 2 (1):1-2, 2004
11. 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
12. 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
13. Cunninham, D, Spychala K, McLarren KW, Garza LA, Boerkoel CF, Herman GE. Developmental Expression Pattern of the Cholesterogenic Enzyme NSDHL and Negative Selection of NSDHL-deficient Cells in the Heterozygous *Bpa<sup>fl</sup>/+* Mouse. *Molecular Genetics and Metabolism* 2009 \* In Press

14. Garza LA, Lee M, Lu Y, Stanton DC, Carrasco L, Tobias JW, Cotsarelis G. Adult stem cells are Preserved in Male Pattern Hair Loss. Manuscript resubmitted to JCI.
15. Garza LA , Liu Y, Tobias JW, Stanton DC, Yang, Z, Cotsarelis, G. Prostaglandin D2 contributes to Androgenetic Alopecia. Manuscript in preparation for Science Translational Medicine.

### **Inventions, Patents, Copyrights:**

2007 Patent: Methods and Compositions for Inhibiting or Reducing Hair Loss, Acne, Rosacea, Prostate Cancer and BPH. Garza LA and Cotsarelis G Co-inventors. WIPO Patent #WO/2007/149312

### **Extramural Funding**

#### **Grants (Garza as PI)**

2005-7	Minority Postdoctoral Fellow Stipend, R01 Supplement. NIAMS/NIH “Bulge cells in tumorigenesis and alopecia” 70k direct costs, Principal Investigator—George Cotsarelis 35% percent effort
2006-7	Dermatologist Investigator Research Fellowship Award. Dermatology Foundation. “Isolation and Characterization of Human Skin Stem Cells” 30k direct costs, Principal Investigator—Luis Garza 35% percent effort
2007-8	Research Scholar Award. American Skin Association “Heterogeneous cell populations within the human hair follicle stem cell compartment” 50k direct costs, Principal Investigator—Luis Garza 10% percent effort
2007-8	Physician Scientist Career Development Award. Dermatology Foundation “Heterogeneous cell populations within the human hair follicle stem cell compartment and their role in alopecias” 55k direct costs, Principal Investigator—Luis Garza 65% percent effort
2007-8	Research Grant. Dermatology Foundation “Heterogeneous cell populations within the human hair follicle stem cell compartment and their role in alopecias” 20k direct costs. Principal Investigator—Luis Garza 10% percent effort
2008-2013	K08 Mentored Research Award, NIAMS/NIH Score 130 1K08AR055666-01A1 “Role of Prostaglandin D2 in Hair Follicle Biology” 586k direct costs, Principal Investigator—Luis Garza 75% percent effort
2009-2010	Research Grant. Dermatology Foundation “Prostaglandins in normal hair growth and alopecia” 20k direct costs 10% percent effort

- 2010-2011 Clinical Trial Grant. Unilever Corporation  
“Testing of a novel compound for anti-aging properties”  
250k direct costs, Principal Investigator—Luis Garza  
5% effort
- 2010-2011 DARPA, Department of Defense  
“Conversion of Stump Skin to Acral Skin to enhance Prosthetic Use”  
500k direct costs, Principal Investigators: Luis Garza,;  
Co-PI: Jon Meyerle, Sewon Kang

**Research Programming Building/Leadership:**

2009-present Initiation of independent basic science research laboratory for Dr. Garza.

2009- present Approved IRB protocols for the department

**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

---

**EDUCATIONAL ACTIVITIES**

**Teaching:**

***Resident Teaching Classroom instruction:***

2009-present 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.

September 9, 2009: Dermatology Grand Rounds Lecture: “Stem cells and Prostaglandins in Androgenetic Alopecia”.

October 7, 2009 Dermatology Grand Rounds Moderator: Coordinated grand rounds discussion regarding the exam, diagnosis, treatment and prognosis of difficult patients with an emphasis on resident teaching.

***Resident Teaching Clinical instruction:***

2009-present Supervision and teaching of a resident in my weekly wound clinic.

***Medical Teaching Classroom instruction:***

October 15, 2009 MSII course Dermatology: “Common Infections and Infestations of The Skin”  
Armstrong MSII Auditorium.

October 27, 2009 Medical Student Dermatology Interest Group Meeting. Albert H. Owens  
Auditorium: “Dermatology Research in the Garza Laboratory”

### **Presentations**

American Academy of Dermatology (AAD) Washington, DC 2004. Resident and Fellow Forum.  
Garza LA, Kang S. Use of antioxidants to prevent photoaging.

SID St. Louis, MO 2005. Concurrent Minisymposium  
Garza LA, Cho S, Daley T, Kafi R, Wang R, Voorhees JJ, Fisher GH, Kang S. Failure to induce  
matrix metalloproteinases in pigmented human skin in vivo by UVA1 is overcome by high dose  
UVB/A2.

SID. Philadelphia PA 2006. Concurrent Minisymposium  
Garza LA, Lee M, Lu Y, Stanton DC, Carrasco L, Tobias JW, Cotsarelis G. Adult stem cell  
compartment changes in androgenetic alopecia demonstrate maintenance of progenitor stem cells  
with loss of descendant CD200high A6 Integrin high expressing cells.

Montagna Symposium 2006: Signaling to Structures; Skin Appendages, Development and  
Disease  
Garza, LA, Lee M, Liu, Y, Stanton DC, Carrasco L, Tobias JW, Cotsarelis G. Balding scalp  
possesses a normal complement of follicle stem cells and increased expression of genes involved  
in inflammation.

SID Los Angeles 2007. Concurrent Minisymposium.  
Garza LA, M Lee, Y Liu, D Stanton, L Carrasco, J Tobias and G Cotsarelis.  
Adult hair follicle stem cell compartment changes in androgenetic alopecia demonstrate  
maintenance of progenitor stem cells with loss of descendant CD200high A6 integrinhigh  
expressing cells.

North American Hair Research Society Meeting Vancouver, Plenary Session, Canada 2007.  
Garza LA, M Lee, Y Liu, D Stanton, L Carrasco, J Tobias and G Cotsarelis.  
Adult hair follicle stem cell compartment changes in androgenetic alopecia demonstrate  
maintenance of progenitor stem cells with loss of descendant CD200high A6 integrinhigh  
expressing cells.

SID Montreal, Canada 2009. Concurrent Minisymposium  
Garza LA, Alagesan B, Lawson JA, Norberg SM, Zhao T, Blat HB, Stanton DC, Carrasco L,  
Fischer SM, FitzGerald GA, Cotsarelis G. Prostaglandin D2 contributes to Androgenetic  
Alopecia and Catagen.

SID Montreal, Canada 2009. Resident Retreat  
Garza LA. How to Pursue a Career as a Dermatology Physician Scientist.

### **Invited Outside Seminar Lectures**

1/11/2007 Department of Dermatology Grand Rounds, University of Utah, Salt Lake City, Utah. "UVA1 as therapy for Scleroderma"

1/12/2007 Department of Dermatology Research Seminar University of Utah, Salt Lake City, Utah. "Learning about Stem Cells through the study of Alopecia"

10/17/2007. Department of Dermatology Grand rounds; Oregon Health Sciences University; Portland Oregon. "Learning about Prostaglandins through the study of Alopecia"

10/18/2007. Department of Dermatology Research Seminar; Oregon Health Sciences University, Portland Oregon. "Learning about Stem Cells through the study of Alopecia"

02/07/2008 Aderans Corporation; Philadelphia, Pennsylvania. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

03/14/2008 Division of Dermatology Research Seminar; University of Massachusetts, Worcester, Massachusetts. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

04/11/2008 Department of Dermatology Research Seminar; New York University; New York, New York. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

04/16/2008 Department of Dermatology Research Seminar; Case Western Reserve University; Cleveland, Ohio. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

03/14/2008 Division of Dermatology Research Seminar; University of Massachusetts, Worcester, Massachusetts. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

05/02/2008 Stem Cell Institute Research Seminar; University of Colorado; Denver, Colorado. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

05/21/2008. Epigenetic Program; Fox Chase Cancer Center; Philadelphia, Pennsylvania. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

05/29/2008. Department of Dermatology Research Seminar; University of Minnesota, Minneapolis, Minnesota. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

06/27/2008. Department of Dermatology Research Seminar; Southwestern University. Dallas, Texas "Learning about Stem Cells through the study of Alopecia"

07/31/2008 Stem Cell Institute Research Seminar; University of Minnesota, Minneapolis, Minnesota. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

08/21/2008 Division of Dermatology Research Seminar; Washington University, St. Louis, Missouri. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

09/18/2008 Division of Dermatology SDRC Seminar, Vanderbilt University, Nashville, Tennessee. "Learning about Stem cells and Prostaglandins through the Study of Alopecia"

**Mentoring:**

2007-2009 Algerson, Brinda; Undergraduate BA; Independent Study "Measuring Prostaglandins in the Hair Cycle through Mass Spectrometry"

---

## **CLINICAL ACTIVITIES**

### **Certification:**

**Medical: Physician License in Maryland.**

### **Boards:**

2005 Diplomate of the 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 day general dermatology clinic, Johns Hopkins Department of Dermatology Outpatient Service

2009-present: 1 month per year inpatient consult attending, Johns Hopkins Hospital

---

## **ORGANIZATIONAL ACTIVITIES**

### **Institutional Administrative Appointments:**

#### **Committees**

2004-2006 Resident-fellow representative to the board of the SID

2008-2009 Epic Governance Chair-- University of Pennsylvania Electronic Charts Committee

#### **Professional Societies**

2002-present American Academy of Dermatology, Member

2002-present Society for Investigative Dermatology, Member

2005-present North American Clinical Dermatology Society

#### **Consultantships** (date, organization/agency, role)

None

---

## **Recognition**

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-Beerman Basic Science Research Award, College of Physicians of Philadelphia