

CURRICULUM VITAE
CRISTINA DE GUZMAN STRONG, PHD

DATE: 8/27/2020

CITIZENSHIP: USA



ADDRESS AND TELEPHONE NUMBER:

Office: Division of Dermatology
Center for Pharmacogenomics
Center for the Study of Itch & Sensory Disorders
Department of Medicine
Washington University School of Medicine
Campus Box 8123
4523 Clayton Avenue
St. Louis, MO 63110
Location: McDonnell Basic Sciences Building RM770
Tel: (314) 362-7695

PRESENT POSITION: Assistant Professor of Medicine (Division of Dermatology), Washington University School of Medicine, St. Louis, MO

EDUCATION:

Undergraduate
1992-1995 B.S., Biology major, Emory University, Atlanta, GA, *magna cum laude*
Graduate
1997-2002 Ph.D., Human Genetics, University of Alabama at Birmingham, Birmingham, AL
Postgraduate
2003-2010 Post-doctoral Fellow, National Human Genome Research Institute, Bethesda, MD

ACADEMIC POSITIONS / EMPLOYMENT:

1994-1995 Research Assistant, Laboratory of Dr. John Nickerson, Department of Ophthalmology, Emory University, Atlanta, GA
1997-2002 Graduate Student, Laboratory of Dr. Christopher Klug, Department of Microbiology, University of Alabama at Birmingham, Birmingham, AL
2003-2010 Post-doctoral Fellow, Laboratory of Dr. Julie Segre, National Human Genome Research Institute, National Institute of Health, Bethesda, MD
2010-present Assistant Professor, Division of Dermatology, Center for Pharmacogenomics, Center for the Study of Itch, Department of Medicine, Washington University School of Medicine, St. Louis, MO

UNIVERSITY AND HOSPITAL APPOINTMENTS AND COMMITTEES:

2010 – present Member, Division of Biology and Biological Science Graduate Program (Human and Statistical Genetics, Molecular Genetics and Genomics, Computational and Systems Biology, Developmental, Regenerative, and Stem Cell Biology), Washington University in St. Louis, ***featured faculty on DBBS website video,**
<http://www.dbbs.wustl.edu/prospstudents/AboutDBBS/Pages/films.aspx>
2010 – present Member, Institute of Clinical and Translational Sciences, Washington University School of Medicine

2010 – present	Member, Center for Pediatric Pulmonary Disease, Children’s Discovery Institute
2013 – present	Member, Division of Biology and Biological Science Graduate Program PhD Admissions Committee B (Human and Statistical Genetics, Molecular Genetics and Genomics, Computational and Systems Biology, Developmental, Regenerative, and Stem Cell Biology), Washington University in St. Louis
2014 – present	Member, Molecular Genetics and Genomics Steering Committee, Division of Biology and Biological Science Graduate Program, Washington University in St. Louis
2015 – 2018	Member, Faculty Diversity Committee, subcommittee to Academic Affairs Committee of Washington University School of Medicine
2016 – present	Member, Department of Medicine Cultural Awareness and Inclusion (CAI) Faculty Task Force
2019 – present	Chair, Division of Biology and Biological Science Graduate Program PhD Admissions Committee B (Human and Statistical Genetics, Molecular Genetics and Genomics, Computational and Systems Biology, Developmental, Regenerative, and Stem Cell Biology), Washington University in St. Louis

HONORS AND AWARDS:

1994 – 1995	Emory College Honors Program
1995	<i>Magna Cum Laude</i> , Emory University, Atlanta, GA
1999	Honorable Mention, Ford Foundation Predoctoral Fellowship for Minorities
1999 – 2002	Predoctoral fellowship, NIH Training Grant in Molecular and Viral Oncology
2001	First place, Sigma Xi Graduate Student Research Day
2002	Pfizer Scholar-in-Training Award, American Association of Cancer Research Conference, San Francisco, CA
2005	NHGRI Retreat Blue Ribbon Poster Award
2008	Society of Investigative Dermatology Eugene Farber Award for Young Investigator Travel, Montagna Symposium, Gleneden Beach, OR
2010	Faculty Diversity Scholar (awarded by the Dean), Washington University School of Medicine in St. Louis
2011 – 2016	NIH Loan Repayment Program Award – Pediatric Research

EDITORIAL RESPONSIBILITIES:

Associate Editor, *JID Innovations*
 Editorial Board Member, *Frontiers in Cellular and Infection Microbiology*
 Editorial Consultant, *Journal of Investigative Dermatology*
 Guest Editor, *PLoS Genetics*
 Ad-hoc reviewer, *BMC Dermatology*
 Ad-hoc reviewer, *Frontiers in Genetics*
 Ad-hoc reviewer, *Genomics, Proteomics, & Bioinformatics*
 Ad-hoc reviewer, *Int. J. Mol. Sci.*
 Ad-hoc reviewer, *Journal of Allergy and Clinical Immunology*
 Ad-hoc reviewer, *Journal of Clinical Investigation Insight*
 Ad-hoc reviewer, *Journal of Clinical Medicine*
 Ad-hoc reviewer, *Journal of Investigative Dermatology*
 Ad-hoc reviewer, *Nature Communications*

Ad-hoc reviewer, *PLoS Genetics*
Ad-hoc reviewer, *PLoS One*
Ad-hoc reviewer, *PLoS Pathogens*
Ad-hoc reviewer, *Scientific Reports*
Ad-hoc reviewer, *Skin Pharmacology*

NATIONAL SCIENTIFIC PANELS:

2011 Ad Hoc Grant Reviewer, Foundation for Ichthyosis and Related Skin Types
2014 Ad Hoc Grant Reviewer, Medical Research Council (U.K.)
2015 Ad Hoc Reviewer, NIH P30 Special Emphasis Study Section Review Committee, National Institute of Arthritis and Musculoskeletal Skin Diseases
2016 Ad Hoc Mail Reviewer, NIH P50 Special Emphasis Study Section Review Committee, National Institute of Arthritis and Musculoskeletal Skin Diseases
2016 Ad Hoc Reviewer, NIAMS Roundtable on Ichthyosis: Gaps and Unmet Needs, National Institute of Arthritis and Musculoskeletal Skin Diseases (invited by NIAMS director)
2016 Ad Hoc Reviewer, Arthritis, Connective Tissue and Skin Study Section Review Committee, National Institute of Health
2017 Ad Hoc Reviewer, Arthritis, Connective Tissue and Skin Study Section Review Committee, National Institute of Health
2017 Ad Hoc Reviewer, NIH P50 Special Emphasis Study Section Review Committee, National Institute of Arthritis and Musculoskeletal Skin Diseases
2017 Ad Hoc Grant Reviewer, Medical Research Council (U.K.)
2018 Ad Hoc Reviewer, University of Strasbourg Institute for Advanced Study (USIAS)
2018 Ad Hoc Reviewer, NIH P30 Special Emphasis Study Section Review Committee, National Institute of Arthritis and Musculoskeletal Skin Diseases
2018 – 2022 Standing Study Section Member, Arthritis, Connective Tissue and Skin Study Section Review Committee, National Institute of Health
2018 – 2023 Member, Society of Investigative Dermatology Committee on Education
2020 Ad Hoc Reviewer, NIH Loan Repayment Program, National Institute of Arthritis and Musculoskeletal Skin Diseases

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

Member, American Society of Human Genetics

Member, American Association for Cancer Research

Member, Society of Investigative Dermatology Atopic Dermatitis Biomarkers Working Group

Accepted Attendee, Gordon Conference

- Invited Session Moderator, 2015 Barrier Function of Mammalian Skin Gordon Conference, Waterville Valley, NH
- Invited Session Moderator, 2017 Epithelial Differentiation and Keratinization Gordon Conference, Barga, Italy

Member, Society of Investigative Dermatology

- Invited Co-chair Genomics Workshop, 2012 SID Meeting, Phoenix, AZ
- Invited Poster Walk Chair, "Epidermal Structure and Function", 2013 IID Meeting, Edinburgh, Scotland
- Member, Post-doc PhD retreat committee, 2014 SID Meeting, Albuquerque, NM

- Invited Session Moderator/Abstract Reviewer, “Epidermal Structure and Function”, 2014 SID Meeting, Albuquerque, NM
- Member, Post-doc PhD retreat committee, 2015 SID Meeting, Atlanta, GA
- Invited Speaker Post-doc PhD retreat, 2015 SID Meeting, Atlanta, GA
- Invited Trainee Dinner Host, 2015 SID Meeting, Atlanta, GA
- Invited Trainee Dinner Host, 2016 SID Meeting, Scottsdale, AZ
- Invited Abstract Reviewer, “Epidermal Structure and Function”, 2016 SID Meeting, Scottsdale, AZ
- Invited Session Moderator/Abstract Reviewer, “Epidermal Structure and Function”, 2016 SID Meeting, Scottsdale, AZ
- Invited Speaker Post-doc PhD retreat, 2017 SID Meeting, Portland, OR
- Invited Speaker Post-doc PhD retreat, 2019 SID Meeting, Chicago, IL
- Invited Irwin H. Blank Forum Moderator, “Modern Genetic Analysis Applied to Cutaneous Cancer”, 2019 SID Meeting, Chicago, IL
- Organizer & Invited Speaker, Future Leaders retreat, 2020 SID Meeting (virtual)
- Invited Session Moderator/Abstract Reviewer, “Epidermal Structure and Function”, 2020 SID Meeting (virtual)

MAJOR INVITED PROFESSORSHIPS AND LECTURESHIPS:

- 2001 Seminar, Virology Discussion Group Lecture Series, Center for AIDS Research, University of Alabama at Birmingham, Birmingham, AL
- 2006 Selected oral presentation, National Human Genome Research Institute Annual Retreat, Gettysburg, PA
- 2007 Concurrent Mini-symposium presentation, 68th Society of Investigative Dermatology Annual Meeting, Los Angeles, CA
- 2008 Selected oral presentation, Montagna Symposium on the Biology of the Skin, “The Biologic Basis of Psoriasis”, Gleneden Beach, OR
- 2009 Selected oral presentation, Montagna Symposium on the Biology of the Skin, “Genetic-Epigenetic Basis of Skin Diseases”, Gleneden Beach, OR
- 2009 Seminar, Department of Dermatology, University of Pennsylvania, “Genomics of Epidermal Differentiation: Insights into Atopic Dermatitis and Psoriasis”, Philadelphia, PA
- 2010 Plenary presentation, 70th Society of Investigative Dermatology Annual Meeting, Atlanta, GA
- 2011 Invited Speaker, Department of Genetics Seminar, “Regulation of Skin Barrier Formation: Development and Disease”, Washington University in St. Louis, St. Louis, MO
- 2011 Invited Speaker, Washington University of St. Louis, DBBS Human and Statistical Genetics Annual Retreat, St. Louis, MO
- 2012 Selected oral presentation, “The Genetics of Epidermal Differentiation Complex Activation”, Nature Genetics-sponsored Dermatogenetics Special Meeting, Miami, FL
- 2012 Invited Speaker, Lung Biology and Genetics Conference, Pulmonary and Critical Care Division, “Switching on the Skin Barrier”, Washington University in St. Louis, St. Louis, MO
- 2012 Invited Speaker, Genomics Workshop, “‘Just Browsing’ – Demonstration of Online Browsers”, 75th Society of Investigative Dermatology Annual Meeting, Raleigh, NC
- 2012 Invited Speaker, “The Skin Barrier in Development and Disease”, DBBS Summer Seminar Series, Washington University in St. Louis, St. Louis, MO

- 2012 Invited Speaker, MSTP “Meet the Assistant Professor” Seminar Series, “Dissecting the Skin Barrier Using Genomics”, Washington University in St. Louis, St. Louis, MO
- 2012 Invited Speaker, DBBS Human and Statistical Genetics Student-run Seminar, “The 3 A’s of Skin Barrier: Activation, Atopy, and Adaptation”, Washington University School of Medicine, St. Louis, MO
- 2012 Invited Speaker, DBBS Molecular Genetics and Genomics/Computational and Systems Biology Annual Retreat, “The 3 A’s in Skin Barrier: Activation, Atopy and Adaptation”, Washington University in St. Louis, New Haven, MO
- 2012 Invited Speaker, Seminars in Clinical Research, “Mechanisms of Activation and Atopy in the Skin Barrier: A Genomics Approach”, Rockefeller University, New York, NY
- 2013 Plenary presentation, “Modulation of a Locus Control Region in the Epidermal Differentiation Complex Chromatin Architecture is Required for Epidermal Differentiation”, International Investigative Dermatology Meeting, Edinburgh, Scotland
- 2013 Invited Speaker, “The Skin Barrier in Development and Disease”, DBBS Summer Seminar Series, Washington University in St. Louis, St. Louis, MO
- 2013 Invited Speaker, Skin Disease Research Center Seminar Series, “The 3 A’s in Skin Barrier: Activation, Atopy, and Adaptation”, University of Colorado Denver School of Medicine, Aurora, CO
- 2015 Concurrent Mini-symposium presentation, “Novel Regulatory Variants Identified in Adult Atopic Dermatitis by Targeted Deep Sequencing Alter Enhancer Function”, 73rd Society of Investigative Dermatology Annual Meeting, Atlanta, GA
- 2016 Invited Speaker, “Enhancer-promoter interactions and control of gene expression in keratinocytes”, 2nd International Skin Epigenetic Symposium, Bradford, UK
- 2016 Invited Speaker, “Enhancer-promoter interactions and control of gene expression in keratinocytes”, National Institute of Arthritis, Musculoskeletal, and Skin Diseases, Bethesda, MD
- 2017 Concurrent Mini-symposium presentation, “Positive Selection for an involucrin/sperm mitochondria cysteine rich protein haplotype associated with epidermal function in modern humans”, 75th Society of Investigative Dermatology Annual Meeting, Portland, OR
- 2017 Concurrent Mini-symposium presentation, “Targeted sequencing of *FLG* identifies novel filaggrin loss-of-function mutations in pediatric African American patients with severe atopic dermatitis”, 75th Society of Investigative Dermatology Annual Meeting, Portland, OR
- 2017 Invited Keynote Speaker, Annual Pinnell Center for Investigative Dermatology Research Symposium, Department of Dermatology, Duke University, Durham, NC
- 2018 Invited Speaker, Duhring Grand Rounds Lecture, Department of Dermatology, University of Pennsylvania, Philadelphia, PA
- 2018 Invited Speaker, Molecular Biosciences Seminar Series, Department of Molecular Biosciences, Northwestern University, Evanston, IL
- 2018 Concurrent Mini-symposium presentation, “Discovery of filaggrin loss-of-function variants R788* in Hispanic and SS316* in African-American/Native American children with atopic dermatitis”, 5th International Investigative Dermatology Meeting, Orlando, FL
- 2018 Invited Speaker, Research Visiting Professor Seminar Series, Department of Dermatology, Johns Hopkins University, Baltimore, MD
- 2019 Invited Speaker, Satellite Symposium on Skin Epigenetics, 77th Annual Meeting of the Society of Investigative Dermatology, Chicago, IL
- 2019 Invited Speaker, Understanding Genetic Variation: Three Cutting-Edge Research Studies in Diverse Populations, 18th Annual Biomedical Research Conference for Minority Students (ABRCMS), Anaheim, CA

- 2019 Invited Entrepreneur-in-Training, Center for Emerging Technologies (CET) of the Cortex Innovation Community, Square One Program, St. Louis, MO
- 2020 Invited Level Next Entrepreneur-in-Training, Center for Emerging Technologies (CET) of the Cortex Innovation Community, Square One Program, St. Louis, MO
- 2020 Invited Speaker, UCI SKIN: A Skin Biology Resource Center Distinguished Speakers Series, University of California, Irvine, CA
- 2020 Invited Speaker, Henry Ford Distinguished Seminar Series, Henry Ford Health System, Detroit, MI
- 2020 Invited Speaker, Department of Developmental Biology, Washington University in St. Louis School of Medicine, St. Louis, MO

CONSULTING RELATIONSHIP AND BOARD MEMBERSHIP:

- 2020 Founder and Chief Executive Officer, Evoly Skin, LLC, St. Louis, MO

RESEARCH SUPPORT:

ACTIVE

a. Governmental

Principal Investigator

NIH R56 AR075427, "Skin Barrier Adaptation", National Institute of Arthritis and Musculoskeletal and Skin Diseases, 9/1/2020 – 8/31/2021

Principal Investigator

NIH R01 AR065523, "Chromatin Remodeling of the Epidermal Differentiation Complex", National Institute of Arthritis and Musculoskeletal and Skin Diseases, 3/1/2015 – 2/28/2021 with No-Cost Extension

Consultant

NIH R35GM122557, "Maximizing Investigator's Research Award: Diversifying the Scientific Workforce", National Institute of General Medical Sciences, 6/5/2017 – 3/31/2022

b. Non-governmental

Principal Investigator

Leadership and Entrepreneurial Acceleration Program (LEAP) #1055, "Novel Skincare Cosmetic to Seal the Skin and Treat Vitamin D Deficiency", Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship and Center for Drug Discovery, 7/1/2019 – 12/31/2020

PENDING

a. Governmental

Principal Investigator (Multi-PI) (Co-PI: Hu, Hongzhen)

NIH R01AR077400-01A1, "Molecular and Cellular Basis of Glucocorticoid-induced Inhibition of itching", National Institute of Arthritis and Musculoskeletal and Skin Diseases, 9/1/2020 – 8/31/2025

Principal Investigator (Multi-PI) (Co-PI: Ma, Liang)

NIH R21HD105368, "Elucidating SMCP Activity for Sperm Function", National Institute of Child Health and Human Development, 4/1/2021 – 3/31/2023

PAST

a. Governmental

Principal Investigator

“Characterization of Enhancers in the Epidermal Differentiation Complex”, NIH R00 AR055948
National Institute of Arthritis and Musculoskeletal and Skin Diseases, 8/1/2010 – 7/31/2014

Principal Investigator

NIH K99 AR055948, “Characterization of Enhancers in the Epidermal Differentiation Complex”, National
Institute of Arthritis and Musculoskeletal and Skin Diseases, 5/1/2008 - 7/01/2010, Intramural NHGRI

Co-Investigator (PI: Davidson, Steve)

NIH R21 AR068012 “Functional Characterization and Sensitization of Human Prurireceptors in vitro”, National
Institute of Arthritis and Musculoskeletal and Skin Diseases, 6/1/2016 – 5/31/2018

b. Non-governmental

Principal Investigator

“Development and Disease of Skin Barrier”, Washington University School of Medicine Dean’s Faculty Diversity
Scholar, 8/1/2010 – 7/30/2013

PATENTS AND INVENTION DISCLOSURES:

Compositions and Methods for Treating Skin Diseases, Disorders, or Conditions, EFS ID 37449169, Application
Number 62914732, Filed USPTO 10/15/2019

Enhancer Regulation of *Smcp* and the function of *Smcp* for sperm function, WUSTL T-018539, 3/20/18

TEACHING TITLE AND RESPONSIBILITIES:

Lecturer	2011 and 2013	Ethics, BIO 5011
Lecturer	2011 – present	Fundamentals of Mammalian Genetics, BIO 5285
Lecturer	2012 – present	Advanced Genetics, BIO 5491

TRAINING/MENTEE RECORD:

Current Trainees/Mentees

Graduate Student Supervised

Alina Schmidt	2018 – present	DBBS Human and Statistical Genetics (NIH R25GM103757 trainee [2017-2019]; NIH T32HG000045 trainee [2020-present]; HHMI Gilliam Fellow WashU Nominee)
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Undergraduate Student Supervised

Natasha Ramakrishnan	2020 – present	Biology 500 Independent Work
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Postdoctoral Trainee Supervised

Mary Elizabeth Mathyer	2019 – present	Sun Pharma/SID Innovation Fellowship (\$25,000, 1/1/2020 – 6/30/2020)
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Thesis Committee Advisees (Chair where indicated)

Nina Beri (Chair)
Wenjun Kong
Manasi Malik
Kit Yee Clarice Hong
Brent Bidy

DBBS Molecular Genetics and Genomics
DBBS Computational and Systems Biology
Medical Scientist Training Program
DBBS Molecular Genetics and Genomics
DBBS Molecular Genetics and Genomics

Past Trainees/Mentees

Graduate Students Supervised

Mary Elizabeth Mathyer	3/2013 – 11/2019	DBBS Molecular Genetics and Genomics (NIH T32GM007067 trainee)
Inez Y. Oh, PhD	4/2012 – 8/2016	DBBS Human and Statistical Genetics
Ashley M. Quiggle, PhD	10/2013 – 8/2016	DBBS Molecular Genetics and Genomics
Zane A. Goodwin, PhD	3/2013 – 7/2017	DBBS Computational and Systems Biology (NIH T32HG000045 trainee)

Postdoctoral Trainees Supervised

Twinkal Pansuriya, PhD	7/2012 – 5/2013	
Jessica Geahlen, PhD	10/2012- 6/2013	
Erin A. Brettmann, PhD	3/2017 – 1/2020	Sun Pharma/SID Innovation Fellowship (\$75,000, 7/1/2018 – 12/30/2019)

MA/MD Thesis Supervised

Kara Gulewicz	6/2011 – 5/2012	MA/MD program
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Postbac Students Supervised

Wendell Jones	8/2012 – 6/2013	Genome Institute OGR URM (NIH R25GM103757 trainee)
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Undergraduate Students Supervised

David Cho	9/2018 – 5/2018	Biology 200 Independent Work
Grace Kroner	9/2012 – 5/2014	Biology 200/500 Independent Work (Florence Moog WashU Full Scholar)

Graduate Students Supervised (Rotations)

Farid Kadyrov		DBBS Developmental, Regenerative, and Stem Cell Biology
Amir Kucharski		Medical Scientist Training Program
Dylan Lawrence		DBBS Computational and Systems Biology
Wenjun Kong		DBBS Computational and Systems Biology
Lilian Antunes		DBBS Human and Statistical Genetics
Brian Earley		DBBS Molecular Genetics and Genomics
Ann Guggisberg		DBBS Molecular Genetics and Genomics
Sarah DeGenova		DBBS Molecular Genetics and Genomics
Temi Adebisi		Medical Scientist Training Program
Igor Nikolsky		DBBS Computational and Statistical Biology
Erica Pehrsson		DBBS Molecular Genetics and Genomics

Thesis Committee Advisees

Jared Andrews		DBBS Molecular Genetics and Genomics
Casey Bartow-McKenny, PhD (University of Pennsylvania)		Genomics and Computational Biology
James R. Allen, PhD		DBBS Molecular Genetics and Genomics

Dana King, PhD
Cailin Joyce, PhD
Nicole Renaud, PhD
Tae-Hwi "Linus" Schwantes-An, PhD

DBBS Molecular Genetics and Genomics
DBBS Molecular Genetics and Genomics
DBBS Human and Statistical Genetics
DBBS Human and Statistical Genetics

Chair of Qualifying Exam Committee Advisees

Christina Mikulka
Lindsay Parnell
Kayla Nygaard

DBBS Molecular Genetics and Genomics
DBBS Molecular Genetics and Genomics
DBBS Molecular Genetics and Genomics

Qualifying Exam Committee

Ann Guggisberg
Shamika Ketkar-Kulkarni
Mingchao Xie
Sohini Sengupta
Wei Liang
Nina Beri
Wenjun Kong
Emilee Kotnik
Brian Lenny

DBBS Molecular Genetics and Genomics
DBBS Human and Statistical Genetics
DBBS Computational and Systems Biology
DBBS Computational and Systems Biology
DBBS Molecular Genetics and Genomics
DBBS Molecular Genetics and Genomics
DBBS Computational and Systems Biology
DBBS Molecular Genetics and Genomics
DBBS Molecular Genetics and Genomics

MA/MD Thesis Committee

Elaine Otchere

MA, MD

Medical Students Supervised (Summer)

Cynthia Wang
Jacob Hanin
Emily Gurnee
Emily Beck
Mackenzie Asel
Colleen Cotton

WUSM
UMKC
Duke University, Doris Duke scholar
WUSM
WUSM
WUSM

Undergraduate Students Supervised (Summer)

Azia Gnahore

Genome Institute OGR URM
(NIH R25GM103757 trainee)
Genome Institute OGR URM
(NIH R25GM103757 trainee)
Washington University of St. Louis URM
Genome Institute OGR URM
(NIH R25GM103757 trainee)
Genome Institute OGR URM
(NIH R25GM103757 trainee)
AMGEN Scholar

Sierra Louis-Gene

Kassandra Diaz
Paloria Hills

Breeana Baker

Anna Sankovsky

High School Students Supervised (Summer)

Nhi Bui
Andrew Efimov
Maresha Perry

Young Scientist Program URM
John Burroughs
Genome Institute URM SEPA (STEM K-12)
(NIH R25OD021908 trainee)

BIBLIOGRAPHY:

Peer reviewed manuscripts

Nickerson JM, Mody V, **de Guzman CG**, Heron KA, Marciante K, Boatright J, Si JS, Lin ZY. Degenerative Diseases of the Retina. New York: Plenum Press; 1995. Chapter 44, Ligand-binding properties of recombinant human IRBP; p. 395-402.

de Guzman CG, Warren AW, Zhang Z, Gartland L, Erickson P, Drabkin H, Hiebert S, Klug CA. Hematopoietic stem cell expansion and distinct myeloid developmental abnormalities in a murine model of the AML1-ETO translocation. *Mol Cell Biol*. 2002 Aug; 22(15):5506-17.

Zhang Z, Cotta CV, Stephan RP, **de Guzman CG**, Klug CA. Enforced expression of EBF in hematopoietic stem cells restricts lymphopoiesis to the B cell lineage. *EMBO J*. 2003 Sep; 22(18):4759-69.

de Guzman CG, Johnson A, and Klug CA. The ETO domain is necessary for the developmental abnormalities associated with AML1-ETO expression in the hematopoietic stem cell compartment in vivo. *Blood Cells Mol Dis*. 2003 Mar-Apr; 30(2): 201-6.

Kim HG, **de Guzman CG**, Swindle CS, Cotta CV, Gartland L, Scott EW, Klug CA. The ETS-family transcription factor, PU.1, is necessary for the maintenance of fetal liver hematopoietic stem cells. *Blood*. 2004 Dec; 104(13): 3894-900.

de Guzman Strong C, Wertz P, Wang C, Yang F, Meltzer PS, Andl T, Millar SE, Ho IC, Pai SY, Segre JA. Lipid defect underlies selective skin barrier impairment of an epidermal-specific deletion of Gata-3. *Journal of Cell Biology*. 2006 Nov; 175(4): 661-70.

de Guzman Strong C, Conlan S, Deming CB, Cheng J, Sears KE, Segre JA. A milieu of regulatory elements in the epidermal differentiation complex syntenic block: implications for atopic dermatitis and psoriasis. *Hum Mol Genet*. 2010 Apr; 19(8):1453-60.

Gittler JK, Shemer A, Suárez-Fariñas M, Fuentes-Duculan J, Gulewicz KJ, Wang CQF, Mitsui H, Cardinale I, **de Guzman Strong C**, Krueger JG, Guttman-Yassky E. Progressive activation of Th2/Th22 characterizes acute and chronic atopic dermatitis. *J Allergy Clin Immunol*. 2012 Dec; 130(6): 1344-54.

Dalal J, Roh JH, Maloney SE, Akuffo A, Shah S, Yuan H, Wamsley B, Jones WB, **de Guzman Strong C**, Holtzman D, Heintz N, Dougherty JD. Translational profiling of hypocretin neurons identifies candidate molecules for sleep regulation. *Genes and Development*. 2013 Mar; 27(5): 565-78.

Suárez-Fariñas M, Dhingra D, Gittler J, Shemer A, Cardinale I, **de Guzman Strong C**, Krueger JG, Guttman-Yassky E. Intrinsic atopic dermatitis (AD) shows similar Th2 and higher Th17 immune activation compared to extrinsic AD. *J Allergy Clin Immunol*. 2013 Aug; 132(2): 361-70.

Khattari S, Shemer A, Rozenblit M, Suárez-Fariñas M, Dhingra N, Czarnowicki T, Finney RL, Zheng X, Xu H, Cardinale I, **de Guzman Strong C**, Gonzalez J, Krueger JG. Cyclosporine in patients with atopic dermatitis modulates activated inflammatory pathways and reverses epidermal pathology. *J Allergy Clin Immunol*. 2014 Jun; 133(6): 1626-34.

Oh IY, Albea DM, Goodwin ZA, Quiggle AM, Baker BP, Guggisberg AM, Geahlen JH, Kroner GM, **de Guzman Strong C**. Regulation of the dynamic chromatin architecture of the Epidermal Differentiation Complex is mediated by a c-Jun/AP-1-modulated enhancer. *J Invest Dermatol*. 2014 Sept; 134(9): 2371-80. ***featured commentary and cover of the journal**

Matkovich SJ, Edwards JR, Grossenheider TC, **de Guzman Strong C**, Dorn II GW. Epigenetic coordination of embryonic heart transcription by dynamically regulated lncRNAs. *Proc Natl Acad Sci*. 2014 Aug; 111(33): 12264-9.

Quiggle AM, Goodwin ZA, Marfatia TR, Kumar MG, Ciliberto H, Bayliss SJ, **de Guzman Strong C**. Low filaggrin monomer repeats in African-American pediatric patients with moderate to severe atopic dermatitis. *JAMA Dermatology*. 2015 May; 151(5): 557-59.

Noda S, Suárez-Fariñas M, Ungar B, Kim, **de Guzman Strong, C.**, Xu H, Peng X, Estrada YD, Nakajima S, Honda T, Shin JU, Lee H, Krueger JG, Lee KH, Kabashima K, Guttman-Yassky E. The Asian atopic dermatitis phenotype combines features of atopic dermatitis and psoriasis with increased Th17 polarization. *J Allergy Clin Immunol*. 2015 Nov; 136(5): 1254-64.

Esaki H, Brunner PM, Renert-Yuval Y, Czarnowicki T, Huynh T, Tran G, Lyn S, Rodriguez G, Immaneni S, Johnson DB, Bauer B, Fuentes-Duculan J, Zheng X, Peng X, Estrada YD, Xu H, **de Guzman Strong C**, Suárez-Fariñas M, Krueger JG, Paller AS, Guttman-Yassky, E. (2016) Early onset pediatric atopic dermatitis is Th2, but also Th17 polarized in skin. *J Allergy Clin Immunol*. 2016 Dec; 138(6):1639-1651.

Goodwin ZA and **de Guzman Strong C**. Recent Positive Selection in Genes of the Mammalian Epidermal Differentiation Complex, *Front Genet*. 2017 Jan 10; 7:227. doi: 10.3389/fgene.2016.00227.

Reinl EL*, Goodwin ZA*, Raghuraman N, Lee G, Jo Y, Gezahegn B, Pillai MK, Cahill AG, **de Guzman Strong C**, England SK. Novel Oxytocin Receptor Variants Associated with Oxytocin Non-Responsiveness in Women, *Am J Obstet Gynecol*. 2017 Aug; 217(2): 214.e1-214.e8. doi: 10.1016/j.ajog.2017.04.036. (*co-first authors)

Bambouskova M, Gorvel L, Lampropoulou V, Sergushichev A, Loginicheva E, Johnson K, Korenfeld D, Mathyer ME, Gorvel L, Kim H, Huang LH, Duncan D, Bregman H, Keskin A, Santeford A, Apte RS, Sehgal R, Johnson B, Amarasinghe GK, Soares MP, Satoh T, Akira S, **de Guzman Strong C**, Auclair K, Roddy T, Biller S, Jovanovic M, Klechevsky E, Stewart KM, Randolph GJ, Artyomov MN. Electrophilic stress induced by itaconate and its derivatives regulates ATF-IkB ζ inflammatory axis independently of Nrf2 induction. *Nature*. 2018 Apr; 556 (7702):501-504.

Mathyer ME, Quiggle AM, Wong XFCC, Denil SLIJ, Kumar MG, Ciliberto HM, Bayliss SJ, Common JE, **de Guzman Strong C**. Tiled array-based sequencing identifies enrichment of loss-of-function variants in the highly homologous filaggrin gene in African American children with severe atopic dermatitis. *Exp Dermatology*. 2018 May 23; doi.org/10.1111/exd.13691, Epub 2018 May 23.

Brettmann EA, Oh IY, **de Guzman Strong C**. High-throughput identification of gene regulatory sequences using next-generation sequencing of circular chromosome conformation capture (4C-seq). *J Vis Exp*. 2018 Oct 5; (140). doi: 10.3791/58030.

Margolis DJ, Mitra N, Berna R, Hoffstad O, Kim BS, Yan A, Zaenglein AL, Fuxench ZC, Quiggle AM, **de Guzman Strong C**, Wong XFCC, Common JE. Associating Filaggrin copy number variation and atopic dermatitis in African-Americans: challenges and opportunities. *Journal of Dermatological Science* 2020 Apr; 98(1): 58-60.

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