Teresa (White) Horm

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Education

University of Arizona, Tucson, AZ

Doctor of Philosophy (Ph.D.) - 2008 - 2013, GPA: 4.00

Major: Molecular and Cellular Biology, Minor: Cancer Biology

Dissertation: The Roles of MUC1 and EGFR in Breast Cancer Progression and Mammary Lactation

University of Washington, Seattle, WA

Bachelor of Science (B.S.) - 2002 - 2005, GPA: 3.43

Major: Biochemistry, Minor: Chemistry

Teaching Experience

Visiting Assistant Professor, Biology Department, Pacific Lutheran University (Tacoma, WA) - 2023-2024

Microbiology - projected: Fall, 2023 Cell Biology - projected: Spring, 2024

Elective course in my specialty, to be developed - projected: Spring, 2024

Instructor, Molecular and Cellular Biology Department, University of Arizona (Tucson, AZ) - 2013-2015

Problem Solving with Genetic Tools – Spring, 2015

Molecular Biology - Fall, 2014

Molecular Biology (online course) - Summer, 2014

Cancer Basics (online course) - Summer, 2014

Cell Biology Honors section - Spring, 2014

Molecular Genetics Honors section - Spring, 2014

Biology of Cancer Honors section – Fall, 2013

Cancer Basics (online course) – Summer, 2013

Teaching Assistant, Molecular and Cellular Biology Department, University of Arizona (Tucson, AZ) – 2009 - 2013

Molecular Genetics – Spring, 2013

Biology of Cancer - Fall, 2012

Cell and Developmental Biology - Fall, 2010

Cell and Developmental Biology - Fall, 2009

Research Experience

Unigen, Inc., Tacoma, WA

Scientist 2 - January 2022-June 2023

Pre-Clinical Research Scientist - May 2016 - December 2021

- Discovered and validated plant extracts and compounds from plant sources for use in nutritional supplements, cosmetics, and medicinal foods through *in vitro* efficacy testing.
- Ran contract research projects for clients and reported findings.
- Manager of the *in vitro* Discovery Lab, including two direct reports.
- Leader of Unigen Safety Committee.

University of Arizona, Tucson, AZ

Post-Doctoral Fellow - August 2013 - September 2015, Principal Investigator: Hanna Fares, Ph.D.

- Identified six genes involved in lysosomal biogenesis and function in *Caenorhabditis elegans*.
- Performed a systematic RNAi screen in three strains of Caenorhabditis elegans.
- Mentored ten undergraduate students per semester in conducting genetic and molecular biological experiments.

University of Washington, Seattle, WA

Research Scientist - October 2005 - July 2008

- Identified antibiotic resistance genes and strains of antibiotic resistant bacteria.
- Managed laboratory inventory and trained new personnel and students.

Awards and Honors

Employee of the Quarter, Unigen, Inc. September 2022 University of Arizona Molecular and Cellular Biology Department

Outstanding Teaching and Mentorship Award, 2013

Achievement Rewards for College Scientists Foundation Scholarship, 2012-2013
Achievement Rewards for College Scientists Foundation Scholarship, 2011-2012
Biochemistry and Molecular and Cellular Biology Training Grant, July 2011-2012

Metastasis Symposium Poster Award, University of Arizona Cancer Center, March 2011

Biochemistry and Molecular and Cellular Biology Training Grant, July 2010-2011

Biochemistry and Molecular and Cellular Biology Training Grant, July 2009-2010

Publications

1. Yimam M, **Horm T**, O'Neal A, Jiao P, Hong M, Jia Q. "UP360, a Standardized Composition from Extracts of *Aloe barbadense*, *Poria cocos*, and *Rosemary officinalis* Protected Against Sepsis and Mitigated Acute Lung Injury in Murine Models." J Med Food. 2023 May 16.

- 2. Yimam M, O'Neal A, **Horm T**, Jiao P, Hong M, Rossiter S, Brownell L, Jia Q. "Antinociceptive and Anti-Inflammatory Properties of Cannabidiol Alone and in Combination with Standardized Bioflavonoid Composition." J Med Food. 2021 Sep;24(9):960-967.
- 3. Yimam M, **Horm T**, Wright L, Jiao P, Hong M, Brownell L, Jia Q. "UP1306: A Composition Containing Standardized Extracts of *Acacia catechu* and *Morus alba* for Arthritis Management." Nutrients. 2019 Jan 26;11(2)272.
- 4. Yimam M, **Horm T**, Wright L, Jiao P, Hong M, Brownell L, Jia Q. "Cartilage Protection and Analgesic Activity of a Botanical Composition Comprised of *Morus alba*, *Scutellaria baicalensis*, and *Acacia catechu*." Evid Based Complement Alternat Med. 2017;2017:7059068.
- 5. Yimam M, Lee YC, Wright L, Jiao P, **Horm T**, Hong M, Brownell L, Jia Q. "A Botanical Composition Mitigates Cartilage Degradations and Pain Sensitivity in Osteoarthritis Disease Model." J Med Food. 2017 Jun;20(6):568-576.
- Gee K, Zamora D, Horm T, George L, Upchurch C, Randall J, Weaver C, Sanford C, Miller A, Hernandez S, Dang H, Fares H. "Regulators of Lysosome Function and Dynamics in Caenorhabditis elegans." G3 (Bethesda). 2017 Mar 10;7(3)991-1000.
- 7. **Horm TM**, Schroeder JA. "MUC1 and metastatic cancer: expression, function and therapeutic targeting." Cell Adh Migr. 2013 Mar-Apr;7(2):187-98.
- 8. **Horm TM**, Bitler BG, Broka DM, Louderbough JM, Schroeder JA. "MUC1 drives c-Met-dependent migration and scattering." Mol Cancer Res. 2012 Dec;10(12):1544-54.
- 9. Thompson AC, Nuñez M, Davidson R, **Horm T**, Schnittker K, Hart MV, Suarez AM, Tsao TS. "Mitigation of isolation-associated adipocyte interleukin-6 secretion following rapid dissociation of adipose tissue." J Lipid Res. 2012 Dec;53(12):2797-805.
- Rhodes LD, Nguyen OT, Deinhard RK, White TM, Harrell LW, Roberts MC. "Characterization of Renibacterium salmoninarum with reduced susceptibility to macrolide antibiotics by a standardized antibiotic susceptibility test." Dis Aquat Organ. 2008 Aug 7;80(3):173-80 (as Teresa White).
- 11. Soge OO, Beck NK, **White TM**, No DB, Roberts MC. "A novel transposon, Tn6009, composed of a Tn916 element linked with a *Staphylococcus aureus* mer operon." J Antimicrob Chemother. 2008 Oct;62(4):674-80 (as Teresa White).

Patents

- 1. Qi Jia, Ping Jiao, Mesfin Yimam, **Teresa Horm**. (2023). *Compositions and methods for managing or improving bone disorders, joint disorders, cartilage disorders, or a combination thereof*. (U.S. Patent Number US11554153B2, US20200206292A1)
- 2. Sandip K. Nandy, **Teresa Horm**, Kelly Rose Dawkins. (2022). *Series of compounds for Treatment of Skin Diseases and Other Conditions*. (U.S. Patent Number US20220411356A1).
- Mesfin Yimam, Teresa Horm, Qi Jia, Lidia Alfaro Brownell, Ping Jiao. (2022). Compositions for Regulating Homeostasis of Cortisol and Improving Sleep Quality and Methods of Use and Production Thereof. (U.S. Patent Number US20220387366A1).
- 4. Sandip K. Nandy, **Teresa Horm**, Kelly Rose Dawkins. (2022). *Series of compounds for treatment of skin diseases and other conditions*. (U.S. Patent Number US11414366B2, US20200115307A1).

- 5. Mesfin Yimam, **Teresa Horm**, Qi Jia, Lidia Brownell, Alexandria O'Neal. (2022). *Standardized Bioflavonoid Composition for Regulation of Homeostasis of Host Defense Mechanism*. (U.S. Patent Number US20220031654A1).
- 6. Mesfin Yimam, Ping Jiao, **Teresa Horm**, Lidia Brownell, Mei Hong, Alexandria O'Neal, Qi Jia. (2022). Aloe Based Compositions Comprising Polysaccharides and Polyphenols for Regulation of Homeostasis of Immunity. (U.S. Patent Number US20220016196A1).
- 7. Mesfin Yimam, Mei Hong, Ping Jiao, **Teresa Horm**, Kelly Dawkins, Alexandria O'Neal, Qi Jia. (2022). *Compositions and Methods for Regulating Homeostasis of Chondrocytes, Extracellular Matrix, Articular Cartilage, and Phenotype of Arthritis*. (U.S. Patent Number US20220000964A1).
- 8. Qi Jia, Ping Jiao, Mesfin Yimam, **Teresa Horm**. (2020). *Compositions and methods for managing or improving bone disorders, joint disorders, cartilage disorders, or a combination thereof*. (U.S. Patent Number US10583161B2, US20180064779A1).

Service

Treasurer, GIFT International Foundation, 2017 – present

Science Presentation Judge, Federal Way High School, 2018-present

Scholarship Application Reader, Cambodian American Community Council of Washington, 2020

Study Zone Volunteer, King County Library System, 2018

Homework Helper, Seattle Public Library, 2016-2017

Vision to Your Future Undergraduate Recruitment Event Volunteer, University of Arizona, 2014

Undergraduate Biological Research Program Small Group Mentor, University of Arizona, 2014

Vision to Your Future Undergraduate Recruitment Event Volunteer, University of Arizona, 2013

Tucson Festival of Books Volunteer for the University of Arizona MCB Department, 2013

University of Arizona MCB Department Undergraduate Recruitment Panelist, 2012

University of Arizona - Arizona Biological and Biomedical Sciences Program Recruitment Committee, 2011

University of Arizona Biochemistry and Molecular and Cellular Biology/Cell and Molecular Medicine Research Retreat Committee, 2009

Meetings Attended

American Society of Pharmacognosy, Portland, OR, July 2017

American Society for Cell Biology, New Orleans, LA, December 2013

American Association for Cancer Research Special Conference on Tumor Invasion and Metastasis, San Diego, CA, January 2013

Poster: Horm TM, Bitler BG, Broka DM, Louderbough JV, and Schroeder, JA. "MUC1 drives c-Met-dependent migration and scattering."

American Association for Cancer Research: Molecularly Targeted Therapies: Mechanisms of Resistance Special Conference, San Diego, CA, May 2012

Department of Defense Congressional Directed Medical Research Program Era of Hope Meeting, Orlando, FL, August 2011

Poster: Louderbough JV, Brown JB, Nagle R, and Schroeder JA. "CD44 basal-to-epithelial switch in breast and prostate cancer."

American Association for Cancer Research 101st Annual Meeting, Washington, D.C., April 2010