

1. Clinical and molecular features of rosacea
2. Molecular properties of stretched skin
3. Clinical and molecular characteristics of skin aging
4. Role of antioxidants in prevention of skin aging
5. Effects of pharmacological treatment of dermatologic disease

GRANT SUPPORT

Dermatology Foundation. Medical Dermatology Career Development Award. "Clinical and Molecular Analysis of Differences Between Rosacea and Photoaging". PI: Yolanda Helfrich. July 2008-July 2009, \$55,000, renewable for up to three years.

National Rosacea Society. Research grant. "Clinical and Molecular Analysis of Differences Between Rosacea and Photoaging". PI: Yolanda Helfrich. July 2008-July 2009, \$25,000.

SCIENTIFIC/SCHOLARLY RESEARCH ACTIVITIES

1. University of Michigan: Prevalence of psychotropic medication use among cosmetic and medical dermatology patients: a comparative study. PI: Jeffrey Orringer, M.D.; Co-investigator: Yolanda Rosi, M.D. 2004-2005
2. University of Michigan: The molecular pathogenesis of striae distensae: a pilot study. PI: Gary Fisher, PhD; Co-investigator: Yolanda Helfrich, M.D. 2004-present
3. University of Michigan: Collection of biofluid samples from patients with skin vascular injury. PI: Yolanda Helfrich, M.D. Sponsor: Pfizer. 2005-present
4. University of Michigan: A phase 3, randomized, double-blind study to evaluate the efficacy and safety of BID application of tacrolimus cream-B 0.1% versus cream vehicle in the treatment of psoriasis. Sponsored by Astellas. Institutional PI: Sewon Kang, M.D., Co-investigator: Yolanda Helfrich, M.D. 2005-present
5. University of Michigan: The ability of Protandim to induce antioxidant enzymes in red blood cells and skin: a pilot study. PI: Yolanda Helfrich, MD. 2006-2008
6. University of Michigan: Molecular and Biochemical characteristics of stretched skin: a pilot study. PI: Yolanda Helfrich, M.D. 2006-present
7. University of Michigan: Tissue Bank for Various Dermatological Conditions of Interest. PI: Sewon Kang, M.D.; Co-investigator: Yolanda Helfrich, M.D. 2006-present
8. University of Michigan: A Phase 2, Multicenter, Randomized, Double-blind, Placebo-controlled Trial of CNTO 1275, a Fully Human Anti-IL-12 Monoclonal Antibody,

- Administered Subcutaneously, in Subjects with Active Psoriatic Arthritis. Sponsored by Johnson & Johnson. Institutional PI: Yolanda Helfrich, M.D. 2006-2008
9. University of Michigan: The effectiveness of UVA1 Irradiation in the treatment of inflammatory dermatoses: an open pilot study. PI: Sewon Kang, MD; Co-investigator: Yolanda Helfrich, M.D. 2006-present
 10. University of Michigan: A Double-Blind, Randomized, Multicenter Pilot Study to Evaluate the Efficacy and Safety of Etanercept 50 mg SC Twice Weekly in the Treatment of Moderate to Severe Lichen Planus. Sponsored by Amgen. Institutional PI: Yolanda Helfrich, M.D. 2006-present
 11. University of Michigan: The ability of N-acetyl cysteine to induce antioxidant enzymes in red blood cells and skin: a pilot study. PI: Yolanda Helfrich, M.D. 2007-2008
 12. The ability of a combination of N-acetyl cysteine (NAC) and Protandim® to induce antioxidant enzymes in red blood cells and skin: a pilot study. PI: Yolanda Helfrich, M.D. 2007-2008
 13. Comparison of Clinical, Histologic, and Immunohistochemical Findings in Rosacea and Photoaged Skin. PI: Yolanda Helfrich, M.D. 2007-present.
 14. Description of Hypertrophic and Atrophic Photoaging: A Clinical and Immunohistologic Study. PI: Dana Sachs, MD. Co-investigator: Yolanda Helfrich, M.D. 2007-present
 15. Comparison of Photoaging and Intrinsic Skin aging in subjects of African origin vs. Caucasians. PI: Yolanda Helfrich, M.D. 2007-present

HONORS AND AWARDS

1993	National Merit Scholar
1993-1994	Robert C. Byrd Honors Scholarship
1997	Swarthmore External Examination Program, Graduated with High Honors
1998	Alexander S. Vida scholarship
2000	Alpha Omega Alpha honor society
2003	“You’re Super” award given in appreciation of patient care
2005	Resident Research Award, Department of Dermatology
2005	“You’re Super” award given in appreciation of patient care
2006	“You’re Super” award given in appreciation of patient care
2007	“You’re Super” award given in appreciation of patient care
2007	W.B. Taylor Resident Teaching Award
2007	Best Doctors in America 2007-2008 database
2008	International Who’s Who of Professional & Business Women

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

2001-present American Academy of Dermatology
2006-present Society of Investigative Dermatology
2006-present Dermatology Foundation
2008-present Women's Dermatologic Society

EDITORIAL POSITIONS, BOARDS, AND PEER-REVIEW SERVICE

2006-present Ad hoc reviewer, *Journal of the American Academy of Dermatology*
2007-present Ad hoc reviewer, *Archives of Dermatology*

TEACHING ACTIVITIES

Residents:

4/2006 "Crack the boards" lecture about preparing for the dermatology boards
5/2006-present Once monthly, lead department diagnostic conference, in which the most challenging and interesting patients are viewed and discussed by residents and faculty
6/2006-present Once monthly, lead the didactic textbook session for residents, in which major dermatology textbooks are read and discussed
12/2006 "Dermatology coding" lecture to dermatology residents
1/2007 "Dermatology jeopardy" lecture for preparing for dermatology boards

Medical students:

2003-2004 MSII Dermatology Sequence, Patient Grand Rounds
2005-2007 Immunopathogenesis of psoriasis and atopic dermatitis lecture to MSII students, MSII Dermatology Sequence, given annually
6/2006-present Once monthly, give a lecture to M3/M4 students on dermatology clerkship
9/2008-present Director of M3/M4 clinical clerkship in dermatology

Institutional Lectures:

1. "Vulvar dermatoses," University of Michigan, Department of Dermatology, Ann Arbor, MI May 2003.
2. "Cutaneous manifestations of tuberculosis," University of Michigan, Department of Dermatology, Ann Arbor, MI November 2003.
3. "Adnexal tumors," University of Michigan, Department of Dermatology, Ann Arbor, MI March 2005
4. "Crack the boards," University of Michigan, Department of Dermatology, Ann Arbor, MI April 2004.
5. "Seeing beyond the spots: Understanding vitiligo," Dermatology Brown Bag Luncheon Series, Department of Dermatology, University of Michigan, October 10, 2006.
6. "Dermatology coding", University of Michigan, Department of Dermatology, Ann Arbor, MI, December 2006.

7. “Dermatology jeopardy board lecture”, University of Michigan, Department of Dermatology, Ann Arbor, MI, January 2007.
8. “So you want to be a dermatologist” University of Michigan Medical School Diversity and Career Development Office Summer Science Academy, June 18, 2007
9. “Immunopathogenesis of psoriasis and atopic dermatitis”, University of Michigan, Department of Dermatology, Ann Arbor, MI, August 2008.

COMMITTEE SERVICE

2002-2005	Residency Education Committee, Department of Dermatology
2004	Residency Review Committee, Department of Dermatology
2006-present	Department of Dermatology Mentorship Program, Resident Mentor, University of Michigan
2006-present	Lean Thinking Committee/Access Work Group, Department of Dermatology, University of Michigan
2008-present	Committee on Student Biomedical Research Programs (SBRP), University of Michigan Medical School.

ORGANIZATIONAL SERVICE

2006-present	Lean Thinking/Access Work Group, Department of Dermatology
2006-2007	Helped design and implement a new teaching note for the Dermatology department, which helped improve documentation and coding

EXTRAMURAL INVITED PRESENTATIONS

1. “Subcutaneous sarcoidosis during interferon-alpha and ribavirin therapy in a patient with hepatitis C,” Gross and Microscopic Symposium, American Academy of Dermatology Meeting, Washington, D.C., 2004.
2. “Intrinsic skin aging: validation of a photonumeric scale and risk factors that accelerate the process,” Society of Investigative Dermatology Meeting, St. Louis, MO, May 2005.
3. “Caffeine consumption enhances the therapeutic effectiveness of methotrexate and sulfasalazine in psoriasis,” Society of Investigative Dermatology Meeting, Philadelphia, PA, May 2006.
4. “Pathogenesis of atopic dermatitis and implications for treatment”, Annual Scientific Meeting, Michigan State Medical Society, Troy, MI, October 22, 2008.

POSTER PRESENTATIONS

1. “Intrinsic skin aging: validation of a photonumeric scale and risk factors that accelerate the process,” **YL Rosi**, Y Lu, S Kang, JJ Voorhees. Society of Investigative Dermatology Meeting, St. Louis, MO, 2005.

2. “Caffeine consumption enhances the therapeutic effectiveness of methotrexate and sulfasalazine in psoriasis.” **YR Helfrich**, P Liao, L Halili, T Hamilton, J Lambert, JJ Voorhees and S Kang. Society of Investigative Dermatology Meeting. Philadelphia, PA, 2006.
3. “Injury enhances TLR2 function and antimicrobial peptide expression through a vitamin D dependent mechanism.” J Schaub, RA Dorschner, AB Coda, AS Buchau, B Brouha, PT Liu, D Kiken, **YR Helfrich**, SW Kang, HZ Elalieh, A Steinmeyer, U Zugel, DD Bikle, RL Modlin, and RL Gallo. Society of Investigative Dermatology Meeting. Los Angeles, CA, 2007.

BIBLIOGRAPHY

Completed Publications in Scientific Journals

Peer-Reviewed

1. **Rosi YL**, Lowe L, and Kang S. Treatment of Hidradenitis Suppurativa with Infliximab in a Patient with Crohn’s Disease. *Journal of Dermatologic Treatment* 2005; 16: 58-62.
2. Orringer JS, **Helfrich YR**, Hamilton T, et al. Prevalence of psychotropic medication use among cosmetic and medical dermatology patients: a comparative study. *Journal of the American Academy of Dermatology* 2006; 54(3); 416-419.
3. Orringer JS, Kang S, Maier L, Johnson TM, Sachs DL, Karimipour DJ, **Helfrich YR**, Hamilton T, Voorhees JJ. A randomized, controlled, split-face clinical trial of 1320-nm Nd:YAG laser therapy in the treatment of acne vulgaris. *Journal of the American Academy of Dermatology* 2007; 56(3):432-8.
4. Schaub, J, Dorschner RA, Coda AB, Buchau AS, Liu PT, **Helfrich YR**, Kang S, Elalieh HZ, Zugel U, Bikel DD, Modlin RL, Gallo RL. Injury enhances TLR2 function and cathelicidin expression through a Vitamin D dependent mechanism. *Journal of Clinical Investigation* 2007 ;117(3):803-811.
5. **Helfrich YR**, Yu L, Ofori A, Hamilton TA, Lambert J, King A, Voorhees JJ, Kang S. Effect of smoking on aging of photoprotected skin: evidence gathered using a new photonumeric scale. *Archives of Dermatology* 2007; 143: 390-402.
6. **Helfrich YR**, Kang S, Hamilton TA, Voorhees JJ. Topical becocalcidiol for the treatment of psoriasis vulgaris: a randomized, placebo-controlled, double-blind, multicentre study. *British Journal of Dermatology* 2007; 157:369-374.
7. Simon NS, Fullen DR, **Helfrich YR**. “Gooseflesh-like” lesions and hypohidrosis. *Archives of Dermatology* 2007; 143: 1323-1328.

8. Skandamis G, Frohm M, Fullen DR, **Helfrich YR**. Extensive flaccid bullae with milia. *Archives of Dermatology*. 2008; 144 :673-678.
9. **Helfrich YR**, Sachs DL, Voorhees JJ. Overview of skin aging and photoaging (Review article). *Dermatology Nursing*. 2008; 20: 177-183.

Non-Peer-Reviewed Publications

1. Sachs DL, **Helfrich YR**, Voorhees JJ. Reversing the signs of aging (Review article). *Advance for Healthy Aging*. 2008; 3: 43-46.

Book Chapters

1. **Helfrich YR**, Sachs DL, Kang S. Topical Vitamin D₃ in *Comprehensive Dermatologic Drug Therapy*, 2nd edition, Stephen E. Wolverton, MD ed., Elsevier, Philadelphia, 2007.

Other Media

1. **Helfrich YR**, Naftanel M. Acne vulgaris (electronic review monograph). *Epocrates® Rx Online*. Last updated 9-14-2008.

Abstracts

1. Yu L, **Rosi Y**, Ofori A, King A, Voorhees JJ, Kang S. Intrinsic skin aging: validation of a photonumeric scale and risk factors that accelerate the process. *J Invest Dermatol*. 2005; 124:A54.
2. **Helfrich YR**, Liao P, Halili L, et al. Caffeine consumption enhances the therapeutic effectiveness of methotrexate and sulfasalazine in psoriasis. *J Invest Dermatol*. 2006; 126:42.
3. Schaubert J, Dorschner RA, Coda AB, Buchau AS, Brouha B, Liu PT, Kiken D, **Helfrich YR**, et al. Injury enhances TLR2 function and antimicrobial peptide expression through a vitamin D dependent mechanism. *J Invest Dermatol*. 2007; 127 (Supp 1): S130.

Date of Last Revision December 19, 2008