

## **William R. Swindell, DO, PhD**

Assistant Professor

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### **EDUCATION**

- 8/1998 – 8/2000 Bachelor of Science (BS)  
Major: Biology, Minor: Chemistry. *Magna cum laude*  
Bowling Green State University, Bowling Green, OH
- 8/2000 – 8/2005 Doctor of Philosophy (PhD)  
Biological Sciences. Specialization: Genetics  
Bowling Green State University, Bowling Green, OH
- 8/2005 – 5/2007 Master of Science (MS)  
Statistics. Specialization: Bioinformatics  
Michigan State University, East Lansing, MI
- 7/2015 – 5/2019 Doctor of Osteopathic Medicine (DO)  
Ohio University Heritage College, Athens, OH

### **POSTDOCTORAL TRAINING**

- 5/2007 – 6/2010 Research Fellowship  
University of Michigan School of Medicine, Ann Arbor, MI  
Departments of Pathology and Dermatology  
Mentors: Dr. Richard A. Miller, MD, PhD, Dr. James T. Elder, MD, PhD, Dr. Johann E. Gudjonsson, MD, PhD.
- 6/2010 – 5/2012 Research Fellowship  
Brigham & Women's Hospital, Division of Genetics, Boston, MA  
Harvard Medical School, Department of Genetics, Boston, MA  
Mentors: Dr. Martha L. Bulyk, PhD, Dr. Norbert Perrimon, PhD
- 6/2019 – 6/2022 Internal Medicine Residency  
The Jewish Hospital-Mercy Health, Cincinnati, OH.  
Mentors: Dr. Imran Naqvi, MD, Dr. Barry Brook, MD.

### **ACADEMIC APPOINTMENTS**

- 5/2012 – 7/2015 Research Investigator Faculty  
University of Michigan School of Medicine, Ann Arbor, MI  
Department of Dermatology
- 07/2022 – Present Assistant Professor  
UT Southwestern Medical Center, Dallas, TX  
Department of Internal Medicine

## **CURRENT LICENSURE & BOARD CERTIFICATION**

- ▶ American Board of Internal Medicine (2022 - present).
- ▶ State of Texas Medical License (2022 - present).

## **PROFESSIONAL MEMBERSHIPS**

- ▶ American College of Physicians (ACP). June 2018 – Present.
- ▶ Texas Medical Association (TMA). October 2022 – Present.

## **HONORS & AWARDS**

- ▶ Elected to the *Phi Beta Kappa* undergraduate honor society (08/2000)
- ▶ Excellence in teaching award. Dept. of Biological Sciences, Bowling Green State University (11/16/2002).
- ▶ Linda and Larry Oman Graduate Scholarship (\$700). Dept. of Biological Sciences, Bowling Green State University (05/2003).
- ▶ Outstanding graduate student teaching award. Dept. of Biological Sciences, Bowling Green State University (12/17/2004).
- ▶ Graduate dissertation non-service fellowship. Dept. Biological Sciences, Bowling Green State University (08/2004).
- ▶ Graduate student award for interdisciplinary bioinformatics research (\$100). Dept. of Probability and Statistics, Michigan State University (06/2006).
- ▶ Distinguished Dissertation Award (\$500). Presented to the best dissertation submitted to the Bowling Green State University Graduate College in 2005-2006 (awarded 05/2007).
- ▶ Ruth L. Kirschstein National Research Service Award (T32 AG000114-24). University of Michigan Medical School, Dept. of Pathology (08/2007).
- ▶ Ruth L. Kirschstein National Research Service Award (T32 AR007197-32). University of Michigan Medical School, Dept. of Dermatology (08/2009).
- ▶ Poster competition award, 2nd place (\$500). Ohio Osteopathic Symposium. Biomedical/clinical science category. Columbus, OH (04/27/2019).
- ▶ Outstanding research award. Ohio University Heritage College commencement awards ceremony. Athens, OH (05/10/2019).
- ▶ Biomedical science award. Ohio University Heritage College commencement awards ceremony. Athens, OH (05/10/2019).

## **TEACHING ACTIVITIES**

### ***Courses Taught***

- ▶ Environment of Life (BIO 101). Bowling Green State University, Department of Biological Sciences. Laboratory instructor (01/2001 – 05/2001).

- ▶ Molecular methods in Ecology & Evolution (BIO 582). Bowling Green State University, Department of Biological Sciences. Laboratory instructor (01/2001 – 05/2001)
- ▶ Human anatomy & Physiology (BIO 331). Bowling Green State University, Department of Biological Sciences. Laboratory instructor (08/2001 – 08/2004).
- ▶ Statistical Methods (STT 201). Michigan State University, Department of Statistics and Probability. Instructor (08/2005 – 05/2007).

### ***Clinical Supervision***

- ▶ Medicine wards teaching attending. 11/04/23 - 11/17/23<sup>†</sup>
- ▶ Medicine wards sub-internship preceptor. 11/04/23 - 11/17/23<sup>†</sup>
- ▶ Medicine wards senior resident. 05/31/22 - 06/30/22<sup>‡</sup>
- ▶ Medicine wards senior resident. 07/01/21 - 07/26/21<sup>‡</sup>
- ▶ Medicine wards senior resident. 09/22/20 - 10/19/20<sup>‡</sup>

<sup>†</sup>Clements University Hospital (Dallas, TX)

<sup>‡</sup>The Jewish Hospital – Mercy Health (Cincinnati, OH)

### ***Education Administration***

- ▶ Core Faculty interviewer. UT Southwestern Internal Medicine residency program. 10/2023-02/2024.

## **RESEARCH INTERESTS**

- ▶ Bioinformatics and health data analytics.
- ▶ Inflammatory mechanisms of aging and disease.
- ▶ Amyotrophic lateral sclerosis.

## **GRANT SUPPORT**

01/01/2013 – 12/31/2014

American Skin Association Carson Family Research Scholar Award

"Dissection of inflammatory- and cytokine-driven shifts in gene expression in psoriasis lesions" (Principal Investigator, \$150,000 total costs)

07/15/2004 – 07/14/2005

National Science Foundation Dissertation Improvement Grant (DEB-0407891)

"Selection and Inbreeding Depression: Effects of Inbreeding Rate and Inbreeding Environment" (Co-Principal Investigator, \$11,970 total costs)

## **EDITORIAL POSITIONS & PEER-REVIEW SERVICE**

Frontiers in Endocrinology, Review Editor (07/2015 - Present)  
Frontiers in Endocrinology, Associate Editor (06/2023 - Present)  
Frontiers in Genetics, Review Editor (08/2011 - 04/2022)  
Frontiers in Genetics, Associate Editor (04/2022 - Present)

*Ad hoc* Reviewer (No. reviews completed):

- ▶ Ageing Research Reviews (2)
- ▶ Aging Cell (10)
- ▶ Animal Conservation (2)
- ▶ Annals of the Rheumatic Diseases (2)
- ▶ Archives of Dermatological Research (2)
- ▶ Bioinformatics (2)
- ▶ Biological Aging: Methods and Protocols, Second Edition (1)
- ▶ BMC Bioinformatics (1)
- ▶ BMC Genomics (6)
- ▶ BMC Systems Biology (4)
- ▶ British Journal of Dermatology (5)
- ▶ British Journal of Nutrition (1)
- ▶ Clinical, Cosmetic and Investigational Dermatology (1)
- ▶ Clinical Interventions in Aging (1)
- ▶ Current Medicinal Chemistry (2)
- ▶ Diabetes, Metabolic Syndrome and Obesity (1)
- ▶ Drug Discovery Today (1)
- ▶ Evidence-Based Complementary and Alternative Medicine (2)
- ▶ Evolution (1)
- ▶ Evolutionary Bioinformatics (1)
- ▶ Experimental Dermatology (1)
- ▶ Experimental Gerontology (5)
- ▶ Free Radical Biology & Medicine (1)
- ▶ Frontiers in Endocrinology (3)
- ▶ Frontiers in Genetics (1)
- ▶ Frontiers in Physiology (12)
- ▶ Genetica (1)
- ▶ Genetics (2)
- ▶ Genome Biology (2)
- ▶ Indian Journal of Dermatology, Venereology, and Leprology (1)
- ▶ International Journal of Biological Sciences (1)
- ▶ International Journal of Cosmetic Science (2)
- ▶ International Journal of Molecular Science (1)
- ▶ Ireland HSC R&D Division grant review (1)
- ▶ Journal of the American Aging Association (AGE) (2)
- ▶ Journal of Allergy and Clinical Immunology (2)
- ▶ Journal of Clinical Bioinformatics (1)
- ▶ Journal of Dermatology (1)

- ▶ Journal of Endocrinology (2)
- ▶ Journal of Feline Medicine and Surgery (1)
- ▶ Journal of Gerontology Biological Sciences (5)
- ▶ Journal of Investigative Dermatology (25)
- ▶ Journal of Tissue Engineering and Regenerative Medicine (2)
- ▶ Mechanisms of Ageing and Development (5)
- ▶ Metabolites (2)
- ▶ Molecular Genetics and Metabolism (1)
- ▶ National Science Foundation (1)
- ▶ Nature Communications (10)
- ▶ Neurobiology of Aging (1)
- ▶ Open Access Emergency Medicine (1)
- ▶ Plant Biology (1)
- ▶ Plant Science (1)
- ▶ PLoS ONE (9)
- ▶ Poland National Science Centre OPUS (1)
- ▶ Proceedings of the National Academy of Sciences (1)
- ▶ Psoriasis: Targets and Therapy (2)
- ▶ Rejuvenation Research (2)
- ▶ Science Translational Medicine (1)
- ▶ Scientific Reports (1)

## **ORAL PRESENTATIONS**

### *Reverse Chronological Order*

- (8) A simple ABCD score to stratify patients with respect to the probability of survival following in-hospital CPR. Bon Secours Mercy Health Graduate Medical Education Research Symposium. Virtual presentation. September 27, 2021.
- (7) Expression profiling of psoriasis lesions: Disease mechanisms, clinical biomarkers & GWAS interpretation. Scleroderma Lecture Series. University of Texas Health Science Center. Houston, Texas. March 13, 2020.
- (6) Imiquimod has strain-dependent effects in mice and does not uniquely model human psoriasis. Society for Investigative Dermatology annual meeting. Portland, Oregon. April 28, 2017.
- (5) Psoriasis drug development and GWAS interpretation through *in silico* analysis of transcription factor binding sites. Society for Investigative Dermatology annual meeting, Plenary session. Atlanta, Georgia. May 9, 2015.
- (4) Transcription Factors associated with Insulin Stimulation in Drosophila S2 Cells. Brigham and Women's Hospital, Division of Genetics Research Seminar. Boston, MA. October 4, 2011.

- (3) Comparative analysis of microarray data and common responses to caloric restriction. Which genes are most important? San Antonio Nathan Shock Center Conference on Aging. Bandera, Texas. October 25, 2008.
- (2) How long will my mouse live? Machine learning approaches for prediction of mouse lifespan. University of Michigan Geriatrics Symposium, Ann Arbor, Michigan. April 18, 2008.
- (1) Inbreeding effects and the selection response of bottlenecked populations. Midwest Ecology and Evolution Conference. Bowling Green, Ohio. May 10, 2002.

## **BIBLIOGRAPHY**

### *Peer-reviewed Journal Publications (Reverse Chronological Order)*

- (101) Uppala R, Sarkar MK, Young K, Ma F, Vemulapalli P, Wasikowski R, Plazyo O, **Swindell WR**, Maverakis E, Gharaee-Kermani M, Billi AC, Tsoi LC, Kahlenberg MJ, Gudjonsson JE. HERC6 regulates STING activity in a sex-biased manner through modulation of LATS2/VGLL3 Hippo signaling. *iScience*. *In press*.
- (100) Shao S, Sun Z, Chu M, Chen J, Cao T, **Swindell WR**, Bai Y, Li Q, Ma J, Zhu Z, Schuler A, Helfrich Y, Billi AC, Li Z, Hao J, Xiao C, Dang E, Gudjonsson JE, Wang G. FPR1 contributes to epidermal barrier dysfunction-induced skin inflammation through NLRC4-dependent keratinocyte activation. *British Journal of Dermatology*, *In press*.
- (99) Meyer TA, **Swindell WR**, Chaudhuri RK. 2023. Acetyl zingerone: A photostable multifunctional skincare ingredient that combats features of intrinsic and extrinsic skin aging. *Antioxidants* 12: 1168.
- (98) Wiedemann J, Billi AC, Bocci F, Kashgari G, Xing E, Tsoi LC, Tang L, **Swindell WR**, Wasikowski R, Xing X, Ma F, Gharaee-Kermani M, Kahlenberg JM, Harms PW, Maverakis E, Nie Q, Gudjonsson JE, Andersen B. 2023. Differential cell composition and split epidermal differentiation in human palm, sole, and hip skin. *Cell Reports* 42: 111994.
- (97) **Swindell WR**, Bojanowski K, Singh P, Randhawa M, Chaudhuri RK. 2023. Bakuchiol and ethyl (linoleate/oleate) synergistically modulate endocannabinoid tone in keratinocytes and repress inflammatory pathway mRNAs. *JID Innovations* 3:100178.
- (96) Parish AJ, **Swindell WR**. 2022. Metformin has heterogeneous effects on model organism lifespans and is beneficial when started at an early age in *Caenorhabditis elegans*: a systematic review and meta-analysis. *Aging Cell* 21(12): e13733.

- (95) **Swindell WR**, Bojanowski K, Chaudhuri RK. 2022. Isosorbide fatty acid diesters have synergistic anti-inflammatory effects in cytokine-induced tissue culture models of atopic dermatitis. *International Journal of Molecular Sciences* 23(22): 14307.
- (94) **Swindell WR**, Bojanowski K, Chaudhuri RK. 2022. Transcriptomic analysis of fumarate compounds identifies unique effects of isosorbide di-(methyl fumarate) on NRF2, NF-kappaB and IRF1 pathway genes. *Pharmaceuticals (Basel)* 15(4): 461.
- (93) Godsel LM, Roth-Carter QR, Koetsier JL, Tsoi LC, Huffine AL, Broussard JA, Fitz GN, Lloyd SM, Kweon J, Burks HE, Hegazy M, Amagai S, Harms PW, Xing X, Kirma J, Johnson JL, Urciuoli G, Doglio LT, **Swindell WR**, Awatramani R, Sprecher E, Bao X, Cohen-Barak E, Missero C, Gudjonsson JE, Green KJ. 2022. Translational implications of Th17-skewed inflammation due to genetic deficiency of a cadherin stress sensor. *Journal of Clinical Investigation* 132(3):e144363.
- (92) Skaug B, Lyons MA, **Swindell WR**, Salazar GA, Wu M, Tran T, Charles J, Vershel CP, Mayes MD, Assassi S. 2022. Large-scale analysis of longitudinal skin gene expression in systemic sclerosis reveals relationships of immune cell and fibroblast activity with skin thickness and a trend towards normalization over time. *Annals of the Rheumatic Diseases* 81(4):516-523.
- (91) Shao S, Chen J, **Swindell WR**, Tsoi LC, Xing X, Ma F, Uppala R, Sarkar MK, Plazyo O, Billi AC, Wasikowski R, Smith KM, Honore P, Scott VE, Maverakis E, Kahlenberg JM, Wang G, Ward NL, Harms PW, Gudjonsson JE. 2021. Phospholipase A2 enzymes represent a shared pathogenic pathway in psoriasis and pityriasis rubra pilaris. *JCI Insight* 6(20): e151911.
- (90) **Swindell WR**, Randhawa M, Quijas G, Bojanowski K, Chaudhuri RK. 2021. Tetrahexyldecyl ascorbate (THDC) degrades rapidly under oxidative stress but can be stabilized by acetyl zingerone to enhance collagen production and antioxidant effects. *International Journal of Molecular Sciences* 22(16): 8756.
- (89) Bojanowski K, Ibeji CU, Singh P, **Swindell WR**, Chaudhuri RK. 2021. A sensitization-free dimethyl fumarate (DMF) pro-drug, isosorbide di-(methyl fumarate) (IDMF), provides a topical treatment candidate for psoriasis. *JID Innovations* 1(4):100040.
- (88) Shao S, Tsoi LC, **Swindell WR**, Chen J, Uppala R, Billi AC, Xing X, Zeng C, Sarkar MK, Wasikowski R, Jiang Y, Kirma J, Sun J, Plazyo O, Wang G, Harms PW, Voorhees JJ, Ward N, Ma F, Pellegrini M, Merleev A, Perez White B, Modlin RL, Andersen B, Maverakis E, Weidinger S, Kahlenberg JM, Gudjonsson JE. 2021. IRAK2 has a critical role in promoting feed-forward amplification of epidermal inflammatory responses. *Journal of Investigative Dermatology* 141 (10): 2436-2448.

- (87) Bojanowski K, **Swindell WR**, Cantor S, Chaudhuri RK. 2021. Isosorbide di-(linoleate/oleate) stimulates pro-differentiation gene expression to restore the epidermal barrier and improve skin hydration. *Journal of Investigative Dermatology* 141(6):1416-1427.
- (86) **Swindell WR**, Gibson CG. 2021. A simple ABCD score to stratify patients with respect to the probability of survival following in-hospital cardiopulmonary resuscitation. *Journal of Community Hospital Internal Medicine Perspectives* 11(3): 334-342.
- (85) **Swindell WR**, Bojanowski K, Chaudhuri RK. 2020. A standardized Terminalia chebula fruit extract alters dermal and epidermal gene expression to influence skin architecture and barrier formation. *The European Journal of Dermatology* 30(5): 469-492.
- (84) **Swindell WR**, Bojanowski K, Chaudhuri RK. 2020. A novel fumarate, isosorbide di-(methyl fumarate) (IDMF), replicates astrocyte transcriptome responses to dimethyl fumarate (DMF) but specifically down-regulates genes linked to a reactive phenotype. *Biochemical and Biophysical Research Communications* 532(3): 475-481.
- (83) Billi AC, Ludwig JE, Fritz Y, Rozic R, **Swindell WR**, Tsoi LC, Gruzka D, Abdollahi-Roodsaz S, Xing X, Diaconu D, Uppala R, Camhi MI, Klenotic PA, Sarkar MK, Husni ME, Scher JU, McDonald CM, Kahlenberg JM, Midura RJ, Gudjonsson JE, Ward NL. 2020. KLK6 expression in skin induces PAR1-mediated psoriasiform dermatitis and inflammatory joint disease. *Journal of Clinical Investigation* 130(6):3151-3157.
- (82) Tsoi LC, Stölzl D, Wehkamp U, Sun J, Gerdes S, Sarkar MK, Hübenthal M, Zeng C, Rodriguez E, Uppala R, Xing X, Billi AC, **Swindell WR**, Shefler A, Chen J, Patrick MT, Harms PW, Kahlenberg JM, Perez White BE, Maverakis E, Gudjonsson JE, Weidinger S. 2020. Progression of acute-to-chronic atopic dermatitis is associated with quantitative rather than qualitative changes in cytokine responses. *Journal of Allergy and Clinical Immunology* 145(5):1406-1415.
- (81) Gibson CG, **Swindell WR**, Strickland B, Ott SJ, Rosenberg IL. 2020. Frequency and outcomes of venous thrombus embolism in hospitalized patients with Behçet's disease. *International Journal of Clinical Rheumatology* 15(3): 67-72.
- (80) Hoffman JM, Poonawalla A, Icyuz M, **Swindell WR**, Wilson L, Barnes S, Sun LY. 2020. Transcriptomic and metabolomic profiling of long-lived growth hormone releasing hormone knock-out mice: Evidence for altered mitochondrial function and amino acid metabolism. *Aging (Albany NY)* 12(4):3473-3485.

- (79) Skaug B, Khanna D, **Swindell WR**, Hinchcliff M, Frech TM, Steen VD, Hant NF, Gordon JK, Shah AA, Zhu L, Zheng WJ, Browning JL, Barron AMS, Wu M, Visvanathan S, Baum P, Franks JM, Whitfield ML, Shanmugam VK, Domsic RT, Castelino FV, Bernstein EJ, Wareing N, Lyons MA, Ying J, Charles J, Mayes MD, PRESS investigators, Assassi S. 2020. Global skin gene expression profile of early diffuse cutaneous systemic sclerosis shows a prominent innate and adaptive inflammatory profile. *Annals of the Rheumatic Diseases* 79(3):379-386.
- (78) **Swindell WR**, Bojanowski K, Chaudhuri RK. 2020. A zingerone analog, acetyl zingerone, bolsters matrix synthesis, inhibits MMPs, and represses IL-17A target gene expression. *Journal of Investigative Dermatology* 140(3):602-614.
- (77) **Swindell WR**, Gau JT. 2019. Pyoderma gangrenosum-like lesion in an older adult: A case report and literature review. *Journal of the American Osteopathic Association* 119(10): 700-703.
- (76) **Swindell WR**, Kruse CPS, List EO, Berryman DE, Kopchick JJ. 2019. ALS blood expression profiling identifies new biomarkers, patient subgroups, and evidence for neutrophilia and hypoxia. *Journal of Translational Medicine* 17(1):170.
- (75) Yu J, Zhu H, Taheri S, Mondy W, Kirstein C, **Swindell WR**, Ko D, Kindy MS. 2019. GM6 attenuates Alzheimer's disease pathology in APP mice. *Molecular Neurobiology* 56(9):6386-6396.
- (74) Tsoi LC, Rodriguez E, Degenhardt F, Baurecht H, Wehkamp U, Volks N, Szymczak S, **Swindell WR**, Sarkar M, Raja K, Patrick M, Gao Y, Uppala R, Perez-White BE, Getsios S, Harms P, Maverakis E, Elder JT, Franke A, Gudjonsson JE, Weidinger S. 2019. Atopic dermatitis is an IL-13 dominant disease with greater molecular heterogeneity compared to psoriasis. *Journal of Investigative Dermatology* 139(7):1480-1489.
- (73) **Swindell WR**, Bojanowski K, Kindy MS, Chau RMW, Ko D. 2018. GM604 regulates developmental neurogenesis pathways and the expression of genes associated with amyotrophic lateral sclerosis. *Translational Neurodegeneration* 7:30.
- (72) Selman C, **Swindell WR**. 2018. Putting a strain on diversity. *EMBO Journal* 37(22): e100862.
- (71) Sarkar MK, Hile GA, Tsoi LC, Xing X, Liu J, Liang Y, Berthier CC, **Swindell WR**, Patrick MT, Shao S, Tsou PS, Uppala R, Beamer MA, Srivastava A, Bielas SL, Harms PW, Getsios S, Elder JT, Voorhees JJ, Gudjonsson JE, Kahlenberg JM. 2018. Photosensitivity and type I IFN responses in cutaneous lupus are driven by epidermal derived interferon kappa. *Annals of the Rheumatic Diseases* 77(11): 1653-1664.

- (70) **Swindell WR**, List EO, Berryman DE, Kopchick JJ. 2018. Transcriptional profiling identifies strain-specific effects of caloric restriction and opposite responses in human and mouse white adipose tissue. *Aging (Albany NY)* 10(4): 701-746.
- (69) **Swindell WR**, Beamer MA, Sarkar MK, Loftus S, Fullmer J, Xing X, Ward NL, Tsoi LC, Kahlenberg MJ, Liang Y, Gudjonsson JE. 2018. RNA-seq analysis of IL-1B and IL-36 responses in epidermal keratinocytes identifies a shared MyD88-dependent gene signature. *Frontiers in Immunology* 9:80.
- (68) **Swindell WR**, Sarkar MK, Liang Y, Xing X, Baliwag J, Elder JT, Johnston A, Ward NL, Gudjonsson JE. 2017. RNA-seq identifies a diminished differentiation gene signature in primary monolayer keratinocytes grown from lesional and uninvolved psoriatic skin. *Scientific Reports* 7(1):18045.
- (67) Mehta NN, Teague H, **Swindell WR**, Baumer Y, Ward NL, Xing X, Baugous B, Johnston A, Joshi AA, Silverman J, Barnes DH, Wolterink L, Nair RP, Stuart PE, Playford M, Voorhees JJ, Sarkar MK, Elder JT, Gallagher K, Ganesh SK, Gudjonsson JE. 2017. IFN- $\gamma$  and TNF- $\alpha$  synergism may provide a link between psoriasis and inflammatory atherogenesis. *Scientific Reports* 7(1):13831.
- (66) **Swindell WR**. 2017. Rapamycin in mice. *Aging (Albany NY)* 9(9):1941-1942.
- (65) Sarkar MK, Kaplan N, Tsoi LC, Xing X, Liang Y, **Swindell WR**, Hoover P, Aravind M, Baida G, Clark M, Voorhees JJ, Nair RP, Elder JT, Budinova I, Getsios S, Gudjonsson JE. 2017. Endogenous glucocorticoid deficiency in psoriasis promotes inflammation and abnormal differentiation. *Journal of Investigative Dermatology* 137(7):1474-1483.
- (64) Lambert S, **Swindell WR**, Tsoi LC, Stoll SW, Elder JT. 2017. Dual role of Act1 in keratinocyte differentiation and host defense: TRAF3IP2 silencing alters keratinocyte differentiation while inhibiting IL-17 responses. *Journal of Investigative Dermatology* 137(7):1501-1511.
- (63) **Swindell WR**. 2017. Meta-analysis of 29 experiments evaluating the effects of rapamycin on lifespan in the laboratory mouse. *Journal of Gerontology Biological Sciences* 72(8):1024-1032.
- (62) Liang Y, Xing X, Beamer MA, **Swindell WR**, Sarkar MK, Wolterink L, Voorhees JJ, Kahlenberg JM, Harms PW, Johnston A, Gudjonsson JE. 2017. Six-transmembrane epithelial antigens of the prostate comprise a novel inflammatory nexus in patients with pustular skin disorders. *Journal of Allergy and Clinical Immunology* 139(4):1217-1227.
- (61) Ma S, Gobis K, **Swindell WR**, Chaudhuri R, Bojanowski R, Bojanowski K. 2017. Synthesis and activity of the salicylic acid ester of bakuchiol in psoriasis-

surrogate keratinocytes and skin substitutes. *Clinical and Experimental Dermatology* 42(3): 251-260.

- (60) **Swindell WR\***, Michaels KA, Sutter AJ, Diaconu D, Fritz Y, Xing X, Sarkar MK, Liang Y, Tsoi A, Gudjonsson JE\*, Ward NL\*. 2017. Imiquimod has strain-dependent effects in mice and does not uniquely model human psoriasis. *Genome Medicine* 9(1): 24 [\*Equal contributions].
- (59) Fritz Y\*, Klenotic PA\*, **Swindell WR\***, Yin Z, Groft SG, Zhang L, Baliwag J, Camhi MI, Diaconu D, Young AB, Foster AM, Johnston A, Gudjonsson JE, McCormick TS, Ward NL. 2017. Induction of alternative proinflammatory cytokines accounts for sustained psoriasiform skin inflammation in IL-17C+IL-6KO mice. *Journal of Investigative Dermatology* 137(3): 696-705 [\*Equal contributions]
- (58) Liang Y, Tsoi LC, Xing X, Beamer M, **Swindell WR**, Sarkar MK, Berthier CC, Stuart PE, Harms PW, Nair RP, Elder JT, Voorhees JJ, Kahlenberg M, Gudjonsson JE. 2017. VGLL3-regulated gene network as a promoter of gender biased autoimmune diseases. *Nature Immunology* 18(2):152-160.
- (57) Inkeles MS, Teles RMB, Pouldar D, Andrade P, Madigan CA, Lopez D, Ambrose M, Noursadeghi M, Sarno EN, Rea TH, Ochoa MT, Iruela-Arispe ML, **Swindell WR**, Ottenhoff THM, Geluk A, Bloom BR, Pellegrini M, Modlin RL. 2016. Cell type deconvolution with immune pathways identifies gene networks of host defense and immunopathology in leprosy. *JCI Insight* 1(15): e88843.
- (56) Xing X, Liang Y, Sarkar MK, Wolterink L, **Swindell WR**, Voorhees JJ, Harms PW, Kahlenberg JM, Johnston A, Gudjonsson JE. 2016. IL-17 responses are the dominant inflammatory signal linking inverse, erythrodermic and chronic plaque psoriasis. *Journal of Investigative Dermatology* 136(12): 2498-2501.
- (55) **Swindell WR**, Xing X, Fritz Y, Diaconu D, Simon DI, Ward NL, Gudjonsson JE. 2016. Deficiency of myeloid-related proteins 8 and 14 (Mrp8/Mrp14) does not block inflammaging but prevents steatosis. *Oncotarget* 7(24):35535-35551.
- (54) **Swindell WR**, Sarkar MK, Liang Y, Xing X, Gudjonsson JE. 2016. Cross-disease transcriptomics: Unique IL-17A signaling in psoriasis lesions and an autoimmune PBMC signature. *Journal of Investigative Dermatology* 136(9):1820-1830.
- (53) Rittié L, Tejasvi T, Harms PW, Xing X, Nair RP, Gudjonsson JE, **Swindell WR**, Elder JT. 2016. Sebaceous gland atrophy in psoriasis: An explanation for psoriatic alopecia? *Journal of Investigative Dermatology* 136(9):1792–1800.
- (52) Stoll SW, Stuart PE, **Swindell WR**, Tsoi LC, Li B, Gandarillas A, Lambert S, Johnston A, Nair RP, Elder JT. 2016. The EGF Receptor Ligand Amphiregulin Controls Cell Division via FoxM1. *Oncogene* 35(16):2075-2086.

- (51) Stout MB\*, **Swindell WR\***, Zhi X, Rohde K, List EO, Berryman DE, Kopchick JJ, Gesing A, Fang Y, Masternak MM. 2015. Transcriptome profiling reveals divergent expression shifts in brown and white adipose tissue from long-lived GHRKO mice. *Oncotarget* 6(29):26702-26715. [\*Equal contributions]
- (50) **Swindell WR**, Remmer HA, Sarkar MK, Xing X, Barnes DH, Wolterink L, Voorhees JJ, Nair RP, Johnston A, Elder JT, Gudjonsson JE. 2015. Proteogenomic analysis of psoriasis reveals discordant and concordant changes in mRNA and protein abundance. *Genome Medicine* 7(1):86.
- (49) Assassi S, **Swindell WR**, Wu M, Tan FD, Khanna D, Furst DE, Tashkin DP, Jahan-Tigh RR, Mayes MD, Gudjonsson JE, Chang JT. 2015. Dissecting the heterogeneity of skin gene expression patterns in systemic sclerosis. *Arthritis & Rheumatology* 67(11):3016-3026.
- (48) Satterstrom FK, **Swindell WR**, Laurent GL, Vyas S, Bulyk ML, Haigis MC. 2015. Nuclear respiratory factor 2 induces SIRT3 expression. *Aging Cell* 14(5):818-825.
- (47) Li Y, Lei D, **Swindell WR**, Xia W, Weng S, Fu J, Worthen CA, Okubo T, Johnston A, Gudjonsson JE, Voorhees JJ, Fisher GJ. 2015. Age-associated increase of skin fibroblast-derived prostaglandin E2 contributes to reduced collagen levels in elderly human skin. *Journal of Investigative Dermatology* 135(9):2181-2188.
- (46) **Swindell WR**, Sarkar MK, Stuart PE, Voorhees JJ, Elder JT, Johnston A, Gudjonsson JE. 2015. Psoriasis drug development and GWAS interpretation through *in silico* analysis of transcription factor binding sites. *Clinical and Translational Medicine* 4:13.
- (45) Tsoi LC, Iyer MK, Stuart PE, **Swindell WR**, Gudjonsson JE, Tejasvi T, Sarkar MK, Li B, Ding J, Voorhees JJ, Kang HM, Nair RP, Chinnaiyan AM, Abecasis GR, Elder JT. 2015. Analysis of long non-coding RNAs highlights tissue-specific expression patterns and epigenetic profiles in normal and psoriatic skin. *Genome Biology* 16:24.
- (44) Inkeles MS, Scumpia PO, **Swindell WR**, Lopez D, Teles RMB, Graeber TG, Meller S, Homey B, Elder JT, Gilliet M, Modlin RL, Pellegrini M. 2015. Comparison of Molecular Signatures from Multiple Skin Diseases Identifies Mechanisms of Immunopathogenesis. *Journal of Investigative Dermatology* 135(1):151-159.
- (43) Gordon WM, Zeller MD, Klein RH, **Swindell WR**, Ho H, Espetia F, Gudjonsson JE, Baldi PF, Andersen B. 2014. A GRHL3-regulated repair pathway suppresses immune-mediated epidermal hyperplasia. *Journal of Clinical Investigation* 124(12):5205-5218.

- (42) Montoya D, Inkeles MS, Liu PT, Realegeno S, Teles RMB, Vaidya P, Munoz MA, Schenk M, **Swindell WR**, Chun R, Zavala K, Hewison M, Adams JS, Horvath S, Pellegrini M, Bloom BR, Modlin RL. 2014. IL-32 is a molecular marker of a host defense network in human tuberculosis. *Science Translational Medicine* 6(250): 250ra114.
- (41) **Swindell WR**, Xing X, Voorhees JJ, Elder JT, Johnston A, Gudjonsson JE. 2014. Integrative analysis of RNA-seq and microarray data reveals GC content and gene length biases in the psoriasis transcriptome. *Physiological Genomics* 46(15):533-546.
- (40) **Swindell WR**, Stuart PE, Voorhees JJ, Elder JT, Johnston A, Gudjonsson JE. 2014. Cellular dissection of psoriasis for transcriptome analyses and the post-GWAS era. *BMC Medical Genomics* 7:27.
- (39) Demontis F, Patel VK, **Swindell WR**, Perrimon N. 2014. Inter-tissue control of the nucleolus via a myokine-dependent longevity pathway. *Cell Reports* 7(5):1481-1494.
- (38) Johnston A, Guzman AM, **Swindell WR**, Wang F, Kang S, Gudjonsson JE. 2014. Early tissue responses in psoriasis to the anti-TNF- $\alpha$  biologic etanercept suggest reduced IL-17R expression and signaling. *British Journal of Dermatology* 171(1):97-107.
- (37) Li B, Tsoi LC, **Swindell WR**, Gudjonsson JE, Tejasvi T, Johnston A, Ding J, Stuart PE, Xing X, Kochkodan JJ, Voorhees JJ, Kang HM, Nair RP, Abecasis GR, Elder JT. 2014. Transcriptome analysis of psoriasis in a large case-control sample: RNA-seq provides new insights into disease mechanisms. *Journal of Investigative Dermatology* 134(7):1828-1838.
- (36) **Swindell WR**, Johnston A, Xing X, Voorhees JJ, Elder JT, Gudjonsson JE. 2013. Modulation of epidermal transcription circuits in psoriasis: New links between inflammation and hyperproliferation. *PLoS ONE* 8(11):e79253.
- (35) Sun LY, Spong A, **Swindell WR**, Fang Y, Hill C, Huber JA, Boehm JD, Westbrook R, Salvatori R, Bartke A. 2013. Growth hormone-releasing hormone disruption extends lifespan and regulates response to caloric restriction in mice. *eLife* 2:e01098.
- (34) **Swindell WR**, Johnston A, Voorhees JJ, Elder JT, Gudjonsson JE. 2013. Dissecting the psoriasis transcriptome: Inflammatory- and cytokine-driven gene expression in lesions from 163 patients. *BMC Genomics* 14:527.
- (33) Johnston A, Xing X, **Swindell WR**, Kochkodan J, Riblett M, Nair R, Stuart PE, Ding J, Voorhees JJ, Elder JT, Gudjonsson JE. 2013. Susceptibility-associated

- genetic variation at IL12B enhances Th1 polarization in psoriasis. *Human Molecular Genetics* 22(9):1807-1815.
- (32) **Swindell WR**, Johnston A, Xing X, Little A, Robichaud P, Voorhees JJ, Fisher GJ, Gudjonsson JE. 2013. Robust shifts in S100a9 expression with aging: A novel mechanism for chronic inflammation. *Scientific Reports* 3:1215.
- (31) Gordon K, Kochkodan HB, Lin SY, Kaplan N, Johnston A, **Swindell WR**, Hoover P, Schlosser BJ, Elder JT, Gudjonsson JE, Getsios S. 2013. Alteration of the EPHA2/EPHRIN-A signaling axis in psoriatic epidermis. *Journal of Investigative Dermatology* 133(3):712-722.
- (30) **Swindell WR**, Xing X, Stuart PE, Chen CS, Aphale A, Nair RP, Voorhees JJ, Elder JT, Johnston A, Gudjonsson JE. 2012. Heterogeneity of inflammatory and cytokine networks in chronic plaque psoriasis. *PLoS ONE* 7(3): e34594.
- (29) **Swindell WR**, Cummings SR, Sanders JL, Caserotti P, Rosano C, Satterfield S, Strotmeyer ES, Harris TB, Simonsick EM, Cawthon PM, for the Health ABC study. 2012. Data mining identifies digit symbol substitution test score and serum cystatin C as dominant predictors of mortality in older men and women. *Rejuvenation Research* 15(4):405-413.
- (28) **Swindell WR**, Johnston A, Sun L, Xing X, Fisher GJ, Bulyk ML, Elder JT, Gudjonsson JE. 2012. Meta-profiles of gene expression during aging: Limited similarities between mouse and human and an unexpectedly decreased inflammatory signature. *PLoS ONE* 7(3):e33204.
- (27) **Swindell WR**. 2012. Dietary restriction in rats and mice: A meta-analysis and review of the evidence for genotype-dependent effects on lifespan. *Ageing Research Reviews* 11(2):254-270.
- (26) Minor RK, Baur JA, Ward TM, Csiszar A, Mercken EM, Abdelmohsen K, Shin Y-K, Canto C, Scheibye-Knudsen M, Krawczyk M, Irusta PM, Hubbard BP, Zhang Y, Lehrmann E, White AA, **Swindell WR**, Pearson KJ, Becker KG, Bohr VA, Gorospe M, Egan JM, Talan MI, Auwerx J, Westphal CH, Ellis JL, Ungvari Z, Vlasuk GP, Sinclair DA, Elliott PJ, de Cabo R. 2011. SRT1720 improves survival and healthspan of obese mice. *Scientific Reports* 1:70.
- (25) **Swindell WR**, Johnston A, Carbajal S, Han G, Wohn C, Lu J, Xing X, Nair RP, Voorhees JJ, Elder JT, Wang X-J, Sano S, Prens EP, DiGiovanni J, Pittelkow MR, Ward NL, Gudjonsson JE. 2011. Genome-wide expression profiling of five psoriasis mouse models identifies similarities and differences with human psoriasis. *PLoS ONE* 6(4):e18266.
- (24) **Swindell WR**. 2011. Metallothionein and the biology of aging. *Ageing Research Reviews* 10(1):132-45.

- (23) **Swindell WR**, Ensrud KE, Cawthon PM, Cauley JA, Cummings SR, Miller RA, Study of Osteoporotic Fractures Research Group. 2010. Indicators of "Healthy Aging" in older women (65-69 years of age). A data-mining approach based on prediction of long-term survival. *BMC Geriatrics* 10:55.
- (22) **Swindell WR**, Johnston A, Gudjonsson JE. 2010. Transcriptional profiles of leukocyte populations provide tools for interpreting gene expression patterns associated with high fat diet in mice. *PLoS ONE* 5(7):e11861.
- (21) **Swindell WR**, Masternak MM, Bartke A. 2010. In vivo analysis of gene expression in long-lived mice lacking the pregnancy-associated plasma protein A (PappA) gene. *Experimental Gerontology* 45(5):366-374.
- (20) **Swindell WR**. 2009. Genes and gene expression modules associated with caloric restriction and aging in the laboratory mouse. *BMC Genomics* 10:585.
- (19) **Swindell WR**. 2009. Perspective: heat shock proteins in long-lived worms and mice with insulin / insulin-like signaling mutations. *Aging (Albany NY)* 6(1):573-577.
- (18) **Swindell WR**, Masternak MM, Kopchick JJ, Conover CA, Bartke A, Miller RA. 2009. Endocrine regulation of heat shock protein mRNAs in long-lived dwarf mice. *Mechanisms of Ageing and Development* 130(6):393-400.
- (17) **Swindell WR**. 2009. Accelerated failure time models provide a useful statistical framework for aging research. *Experimental Gerontology* 44(3):190-200.
- (16) **Swindell WR**. 2008. Genes regulated by caloric restriction have unique roles within transcriptional networks. *Mechanisms of Ageing and Development* 129(10):580-592.
- (15) Pearson KJ, Baur JA, Lewis KN, Peshkin L, Price NL, Labinskyy N, **Swindell WR**, Kamara D, Minor RK, Perez E, Jamieson HA, Zhang Y, Dunn SR, Sharma K, Pleshko N, Woollett LA, Csiszar A, Ikeno Y, Le Couteur D, Elliott PJ, Becker KG, Navas P, Ingram DK, Wolf NS, Ungvari Z, Sinclair DA, de Cabo R. 2008. Resveratrol delays age-related deterioration and mimics transcriptional aspects of dietary restriction without extending lifespan. *Cell Metabolism* 8(2):157-168.
- (14) **Swindell WR**, Harper JM, Miller RA. 2008. How long will my mouse live? Machine learning approaches for prediction of mouse lifespan. *Journal of Gerontology Biological Sciences* 63(9):895-906.
- (13) **Swindell WR**. 2008. Comparative analysis of microarray data identifies common responses to caloric restriction among mouse tissues. *Mechanisms of Ageing and Development* 129(3):138-153.

- (12) **Swindell WR**. 2007. Gene expression profiling of long-lived dwarf mice: Longevity-associated genes and relationships with diet, gender and aging. *BMC Genomics* 8:353.
- (11) **Swindell WR**. 2007. Genotype-by-age interaction and identification of longevity-associated genes from microarray data. *Age* 29(2-3):97-102.
- (10) **Swindell WR**, Huebner M, Weber AP. 2007. Plastic and adaptive gene expression patterns associated with temperature stress in *Arabidopsis thaliana*. *Heredity* (Edinb) 99(2):143-150.
- (9) **Swindell WR**, Huebner M, Weber AP. 2007. Transcriptional profiling of *Arabidopsis* heat shock proteins and transcription factors reveals extensive overlap between heat and non-heat stress response pathways. *BMC Genomics* 8:125.
- (8) **Swindell WR**. 2006. The association among gene expression responses to nine abiotic stress treatments in *Arabidopsis thaliana*. *Genetics* 174(4):1811-1824.
- (7) **Swindell WR**, Bouzat JL. 2006. Associations between environmental stress, selection history, and quantitative genetic variation in *Drosophila melanogaster*. *Genetica* 127(1-3):311-320.
- (6) **Swindell WR**, Bouzat JL. 2006. Reduced inbreeding depression due to historical inbreeding in *Drosophila melanogaster*: evidence for purging. *Journal of Evolutionary Biology* 19(4):1257-1264.
- (5) **Swindell WR**, Bouzat JL. 2006. Selection and inbreeding depression: Effects of inbreeding rate and inbreeding environment. *Evolution* 60(5):1014-1022.
- (4) **Swindell WR**, Bouzat JL. 2006. Ancestral inbreeding reduces the magnitude of inbreeding depression in *Drosophila melanogaster*. *Evolution* 60(4):762-767.
- (3) **Swindell WR**, Bouzat JL. 2006. Gene flow and adaptive potential in *Drosophila melanogaster*. *Conservation Genetics* 7(1):79-89.
- (2) **Swindell WR**, Bouzat JL. 2006. Inbreeding depression for male survivorship parameters in *Drosophila melanogaster*: Implications for senescence theory. *Genetics* 172(1):317-327.
- (1) **Swindell WR**, Bouzat JL. 2005. Modeling the adaptive potential of isolated populations: Experimental simulations using *Drosophila*. *Evolution* 59(10):2159-2169.

*Abstracts/Posters (Reverse Chronological Order)*

- (57) Chaudhuri RK, **Swindell WR**, Bojanowski K, Singh P. Bakuchiol and ethyl (linoleate/oleate) synergistically modulate endocannabinoid tone in keratinocytes and repress type I interferon, TNF and COX-2 Pathways [Society of Cosmetic Chemists Annual Meeting. December 12-14, 2022. Los Angeles, CA].
- (56) Gudjonsson JE, Chaskar PD, **Swindell WR**, Van Delm W, Piketty C, Julia V, Krishnaswamy JK. Deciphering the regulatory program that modulates interleukin 31 receptor A expression in keratinocytes. [51st European Society for Dermatology Research (ESDR) Annual Meeting. September 28 - October 01, 2022. Amsterdam, The Netherlands].
- (55) Uppala R, Sarkar MK, **Swindell WR**, Tsoi LC, Kahlenberg J, Billi A, Gudjonsson JE. HERC6 negatively regulates type I interferon activity in keratinocytes through modulation of STING-IRF3 signaling. *Journal of Investigative Dermatology* 142 (8): S76 [Society for Investigative Dermatology Annual Meeting. May 18 - 21, 2022. Portland, OR].
- (54) Billi A, Ma F, Gharaee-Kermani M, Xing X, Plazyo O, Schuler A, Wasikowski R, **Swindell WR**, Nakamura M, Helfrich Y, Kahlenberg J, Lee J, Tsoi L, Voorhees J, Fisher GJ, Gudjonsson JE. Pervasive immune dysfunction characterizes photoaged skin. *Journal of Investigative Dermatology* 142 (8): S22. [Society for Investigative Dermatology Annual Meeting. May 18 - 21, 2022. Portland, OR].
- (53) Xu B, Tan Y, Musai J, **Swindell W**, Sakar M, Gudjonsson J, Kahlenberg J, Hile G. 2021. A Novel Requirement for IFN $\beta$ 1 Signaling for IFN $\kappa$  Induction in Keratinocytes. *Arthritis Rheumatol* 73 (suppl 9): 3114-3115. American College of Rheumatology Convergence Annual meeting [November 9, 2021, virtual conference].
- (52) Skaug B, Lyons M, **Swindell W**, Salazar G, Charles J, Vershel C, Mayes M, Assassi S. 2020. Large-scale examination of longitudinal skin gene expression and its associations with skin thickness in systemic sclerosis. American College of Rheumatology Convergence Annual meeting [November 5 - 9, 2020, all-virtual].
- (51) **Swindell WR**, Meyer T, Premi S, Bojanowski K, Chaudhuri R. 2020. Acetyl zingerone opposes deleterious effects of skin aging by bolstering matrisome synthesis, neutralizing oxidative stress and inhibiting DNA damage. *Journal of Investigative Dermatology* 140(7):S111. [Society for Investigative Dermatology Annual Meeting. May 13 - 16, 2020. virtual conference].
- (50) Roth-Carter QR, Godsel L, Koetsier JL, Broussard JA, Burks HE, Fitz G, Huffine AL, Amagai S, Lloyd S, Kweon J, Tsoi LC, **Swindell WR**, Urciuoli G, Missero C, Bao X, Gudjonsson JE, Green KJ. 2020. Desmoglein 1 deficiency in knockout

- mice impairs epidermal barrier formation and results in a psoriasis-like gene signature in E18.5 embryos. *Journal of Investigative Dermatology* 140(7):S26. [Society for Investigative Dermatology Annual Meeting. May 13 - 16, 2020. Virtual Conference].
- (49) **Swindell WR**, Kruse CPS, List EO, Berryman DE, Kopchick JJ. ALS blood expression profiling identifies new biomarkers, patient subgroups, and evidence for neutrophilia and hypoxia. [Ohio Osteopathic Association Symposium. April 27, 2019. Columbus, OH]
- (48) **Swindell WR**, Bojanowski K, Kindy MS, Chau RMW, Ko D. 2019. GM604 regulates developmental neurogenesis pathways and the expression of genes associated with amyotrophic lateral sclerosis. *Neurotherapeutics* 16(3):917. [29th International Symposium on ALS/MND. December 7 - 9, 2018. Glasgow, UK; ASENT 21st annual meeting. March 25 – 28, 2019. Rockville, MD]
- (47) **Swindell WR**, Gudjonsson JE, Ward NL. 2019. A new innovative approach combining comparative transcriptomics from three unique psoriasis models to identify predictive PsA biomarkers. *Journal of Investigative Dermatology* 139: S172. [3rd Inflammatory Skin Disease Summit. December 12 – 15, 2018. Vienna, Austria; Society for Investigative Dermatology Annual Meeting. May 8 – 11, 2019. Chicago, IL]
- (46) Ludwig J, Gruzka D, Fritz Y, Rozic R, **Swindell WR**, Uppala R, Sarkar MK, Midura R, Gudjonsson JE, Ward NL. KLK6-PAR1 signaling drives psoriasiform manifestations in skin and bone and blockade of PAR1 in explanted psoriasis patient skin decreases key psoriasis transcripts. [3rd Inflammatory Skin Disease Summit. December 12 – 15, 2018. Vienna, Austria]
- (45) **Swindell WR**, Gau JT. Pyoderma gangrenosum-like lesion in an elderly patient: A case report and literature review. [American College of Physicians Ohio/Air Force Chapter Meeting. October 4, 2018. Columbus, OH]
- (44) Tsoi LC, Rodrigues E, Degenhardt F, Baurecht H, Wehkamp U, Volks N, Szymczak S, **Swindell W**, Sarkar M, Raja K, Patrick MT, Gao Y, Uppala R, Perez White BE, Getsios S, Harms P, Maverakis E, Elder JT, Franke A, Gudjonsson JE, Weidinger S. 2018. Atopic dermatitis is an IL-13/IL10 driven disease with high molecular heterogeneity compared to psoriasis. *Journal of Investigative Dermatology* 138: S81. [Society for Investigative Dermatology Annual Meeting. May 16-19, 2018. Orlando, FL]
- (43) Sarkar MK, Hile G, Tsoi LC, Xing X, Liu J, Liang Y, Berthier CC, **Swindell WR**, Patrick M, Tsou P, Uppala R, Beamer M, Srivastava A, Bielas S, Harms P, Getsios S, Elder JT, Voorhees JJ, Kahlenberg JM, Gudjonsson JE. 2018. Photosensitivity and heightened type I IFN responses in cutaneous lupus are driven by elevated interferon kappa. *Journal of Investigative Dermatology* 138:

- S12. [Society for Investigative Dermatology Annual Meeting. May 16-19, 2018. Orlando, FL]
- (42) Beamer M, **Swindell W**, Tsoi LC, Liang Y, Sarkar M, Xing X, McDonald H, Voorhees JJ, Scott V, Gudjonsson JE. 2018. Characterization of eicosanoid species altered in psoriatic skin. *Journal of Investigative Dermatology* 138: S155. [Society for Investigative Dermatology Annual Meeting. May 16-19, 2018. Orlando, FL]
- (41) Fritz Y, Ludwig J, Rozic R, **Swindell W**, Midura R, Gudjonsson J, Ward N. 2018. KLK6-PAR1 signaling drives psoriasiform manifestations in skin and bone. *Journal of Investigative Dermatology* 138: S4. [Society for Investigative Dermatology Annual Meeting. May 16-19, 2018. Orlando, FL]
- (40) Kindy M, **Swindell WR**, Bojanowski K, Lupinacci P, Bowser R, Nir R, Westlin M, Evans J, Shum T, Chau R, Ko D. 2018. GM6, an endogenous multiple-target regulator that provides a novel therapeutic strategy for treatment of ALS and other neurodegenerative diseases. *Neurotherapeutics* 15(3): 820-821. [ASENT 20th annual meeting. March 07 – 10, 2018. Rockville, MD].
- (39) Valko K, Ivanova-Berndt G, Beswick P, **Swindell WR**, Kindy M, Ko D. Application of biomimetic HPLC to estimate lipophilicity, protein and phospholipid binding of potential peptide therapeutics. [17th PhysChem Forum. April 17, 2018. Basel, Switzerland].
- (38) Kindy M, **Swindell WR**, Bojanowski K, Lupinacci P, Bowser R, Nir R, Westlin M, Shum T, Chau R, Ko D. 2017. GM604 - A Multiple-Target Regulator that Provides a Novel Therapeutic Strategy for Treatment of ALS and Other Neurodegenerative Diseases. *F1000Research* 6:2125 [doi: 10.7490/f1000research.1115152.1] [28th International Symposium on ALS/MND. December 8 – 10, 2017. Boston, MA].
- (37) Liang Y, Tsoi LC, Xing X, **Swindell WR**, Berthier CC, Harms PW, Elder JT, Voorhees JJ, Kahlenberg JM, Gudjonsson JE. 2017. A VGLL3-regulated gene network as a promoter of sex-biased autoimmune diseases. *Cell Symposia: Human Immunity*. October 22 - 24, 2017. Banff, Canada.
- (36) Assassi S, Khanna D, Hinchcliff M, Steen VD, Hant F, Gordon JK, Shah AA, Ying J, **Swindell W**, Zheng W, Zhu L, Shanmugam VK, Domsic RT, Castellino FV, Bernstein EJ, Frech TM. 2017. Cell Type Specific Gene Expression Analysis of Early Systemic Sclerosis Skin Shows a Prominent Activation Pattern of Innate and Adaptive Immune System in the Prospective Registry for Early Systemic Sclerosis (PRESS) Cohort [abstract]. *Arthritis Rheumatol* 69 (suppl 10). [ACR/ARHP Annual Meeting. November 3 – 8, 2017. San Diego, CA].

- (35) **Swindell WR**, Michaels K, Sutter A, Diaconu D, Fritz Y, Xing X, Sarkar MK, Liang Y, Tsoi LC, Gudjonsson JE, Ward NL. 2017. Imiquimod has strain-dependent effects in mice and does not uniquely model human psoriasis. *Journal of Investigative Dermatology* 137:S111. [Society for Investigative Dermatology Annual Meeting. April 26 – 29, 2017. Portland, OR].
- (34) Beamer MA, **Swindell WR**, Tsoi L, Tsou P, Li Y, Sarkar MK, Xing X, Liang Y, Fisher GJ, Gudjonsson JE. 2017. High resolution transcriptome profiling identifies gene expression signatures unique to normal human keratinocytes, dermal fibroblasts, and endothelial cells. *Journal of Investigative Dermatology* 137:S89. [Society for Investigative Dermatology Annual Meeting. April 26 – 29, 2017. Portland, OR].
- (33) **Swindell WR**, Bojanowski K, Kindy M, Shum T, Chau R, Ko D. 2017. GM604 for Parkinson's Disease treatment: Pre-clinical findings and results from a pilot placebo-controlled trial. *F1000Research* 6:28 [doi: 10.7490/f1000research.1113600.1]
- (32) **Swindell WR**, Bojanowski K, Kindy M, Shum T, Chau R, Ko D. 2016. GM604 represses tau and down-regulates expression of mitochondrial genes associated with Alzheimer's disease. *F1000Research* 5:2915 [doi: 10.7490/f1000research.1113565.1]
- (31) **Swindell WR**, Bojanowski K, Kindy M, Shum T, Chau R, Ko D. 2016. GM604 down-regulates SOD1 and alters expression of 89 genes associated with amyotrophic lateral sclerosis. *F1000Research* 5:2836 [doi: 10.7490/f1000research.1113511.1]
- (30) Gudjonsson J, **Swindell WR**, Michaels K, Sutter A, Diaconu D, Fritz Y, Xing X, Sarkar M, Liang Y, Tsoi A, Ward N. 2016. Imiquimod has strain-dependent effects in mice and does not uniquely model human psoriasis. *Exp. Dermatol.* 25 (Suppl. 4): 34-35 [2nd Inflammatory Skin Disease Summit. November 16-19, 2016. New York, NY].
- (29) Fritz Y, Klenotic P, **Swindell WR**, Yin Z, Groft S, Zhang L, Baliwag J, Camhi M, Diaconu D, Young A, Foster A, Johnston A, Gudjonsson J, McCormick T, Ward N. 2016. Induction of alternative proinflammatory cytokines accounts for sustained psoriasiform skin inflammation in IL-17C+IL-6 KO mice. *Exp. Dermatol.* 25 (Suppl. 4): 34 [2nd Inflammatory Skin Disease Summit. November 16-19, 2016. New York, NY].
- (28) Rittié L, Harms PW, Xing X, **Swindell WR**, Gudjonsson JE, Elder JT. 2016. Generation of a gene expression signature for sebaceous glands by transcriptome comparison of psoriasis and sebaceous hyperplasia. *Journal of Investigative Dermatology* 136:S58 [Society for Investigative Dermatology Annual Meeting. May 11 - 14, 2016. Scottsdale, AZ].

- (27) Xing X, Liang Y, Sarkar MK, Liza W, Voorhees JJ, Harms PW, **Swindell WR**, Kahlenberg JM, Johnston A, Gudjonsson JE. 2016. Shared and unique inflammatory processes and transcriptome changes in inverse and erythrodermic psoriasis compared to plaque psoriasis. *Journal of Investigative Dermatology* 136:S48 [Society for Investigative Dermatology Annual Meeting. May 11 - 14, 2016. Scottsdale, AZ].
- (26) Ventrella R, Hoover P, **Swindell WR**, Gudjonsson JE, Getsios S. Transcriptome analysis of cell-cell adhesion and communication complexes during human keratinocyte differentiation in 2-D and 3-D culture models. Northwestern University Skin Disease Research Center Annual Retreat. Chicago, Illinois. July 28, 2015.
- (25) Kaplan N, Perez White BE, Zheng J, Hoover P, Ventrella R, **Swindell WR**, Gudjonsson JE, Wang B, Getsios S. 2015. Ephrin-A ligand loss enhances keratinocyte migration via ligand-independent EphA2 action. *Journal of Investigative Dermatology* 135:S125 [Society for Investigative Dermatology Annual Meeting. May 6 - 9, 2015. Atlanta, GA].
- (24) Johnston A, Xing X, Wolterink L, Barnes DH, **Swindell WR**, Sarkar MK, Kahlenberg JM, Harms PW, Gudjonsson JE. 2015. IL-1 and IL-36 are the dominant cytokines in generalized pustular psoriasis. *Journal of Investigative Dermatology* 135:S95 [Society for Investigative Dermatology Annual Meeting. May 6 - 9, 2015. Atlanta, GA].
- (23) **Swindell WR**, Sarkar MK, Stuart PE, Voorhees JJ, Elder JT, Johnston A, Gudjonsson JE. 2015. Psoriasis drug development and GWAS interpretation through in silico analysis of transcription factor binding sites. *Journal of Investigative Dermatology* 135:S76 [Society for Investigative Dermatology Annual Meeting. May 6 - 9, 2015. Atlanta, GA].
- (22) Elder JT, Tsoi LC, Iyer MK, Stuart PE, **Swindell WR**, Gudjonsson JE, Tejasvi T, Sarkar MK, Li B, Ding J, Voorhees JJ, Kang HM, Nair RP, Chinnaiyan AM, Abecasis G. 2015. Analysis of long non-coding RNAs highlights tissue-specific expression patterns and epigenetic profiles in normal and psoriatic skin. *Journal of Investigative Dermatology* 135:S75 [Society for Investigative Dermatology Annual Meeting. May 6 - 9, 2015. Atlanta, GA].
- (21) Sarkar MK, Johnston A, **Swindell WR**, Xing X, Finkielsztejn A, Getsios S, Gudjonsson JE. 2015. Topoisomerase 2 $\beta$  impacts gene-length bias in psoriasis through altered epidermal differentiation. *Journal of Investigative Dermatology* 135:S68 [Society for Investigative Dermatology Annual Meeting. May 6 - 9, 2015. Atlanta, GA].

- (20) **Swindell WR**, Johnston A, Ganesh S, Gallagher K, Ward NL, Xing X, Sarkar MK, Nair RP, Elder JT, Gudjonsson JE. 2015. Shared inflammatory signatures between atherosclerotic plaques and psoriasis skin. *Journal of Investigative Dermatology* 135:S45 [Society for Investigative Dermatology Annual Meeting. May 6 - 9, 2015. Atlanta, GA].
- (19) Koneva LA, Zhang Y, **Swindell WR**, Virani S, Virani A, Carey TE, Rozek LS, Sartor MA, University of Michigan Head and Neck SPORE. 2015. Immune, keratinocyte, and fibroblast expression signatures distinguish HNSCC samples by HPV status. *Cancer Research*, vol. 75. Supplement 15. Abstract 2180. [AACR 106th Annual Meeting. April 18-22, 2015. Philadelphia, PA].
- (18) **Swindell WR**, Johnston A, Ward NL, Xing X, Sarkar MK, Nair RP, Elder JT, Gudjonsson JE. Shared inflammatory signatures between atherosclerotic plaque and psoriasis skin. 7th International Congress Psoriasis: From Gene to Clinic. London, England. December 11 – 13, 2014.
- (17) Koneva LA, Zhang Y, **Swindell WR**, Virani S, Virani A, Carey TE, Rozek LS, Sartor MA, University of Michigan Head and Neck SPORE. Cell type specific gene expression signatures distinguish HPV-positive from HPV-negative HNSCC samples. University of Michigan Comprehensive Cancer Center 26th Annual Cancer Research Fall Symposium. Ann Arbor, Michigan. October 24, 2014.
- (16) Sarkar MK, **Swindell WR**, Xing X, Haynes E, Getsios S, Johnston A, Gudjonsson JE. Gene Length Bias in Psoriasis and its Relationship to Topoisomerase-2 $\beta$  Function. A. Alfred Taubman Medical Research Institute 7th annual symposium. Ann Arbor, Michigan. October 10, 2014.
- (15) **Swindell WR**, Ward NL, Johnston A, Gudjonsson JE. 2014. Overlapping transcriptome signatures between atherosclerotic plaque and psoriasis skin. *Journal of Investigative Dermatology* 134:S21 [Society for Investigative Dermatology Annual Meeting. May 7 - 10, 2014. Albuquerque, NM].
- (14) Stoll SW, **Swindell WR**, Johnston A, Elder JT. 2014. Amphiregulin supports G2/M progression via FoxM1 and inhibits differentiation in human keratinocytes. *Journal of Investigative Dermatology* 134:S89 [Society for Investigative Dermatology Annual Meeting. May 7 - 10, 2014. Albuquerque, NM].
- (13) Rittié L, Tejasvi T, Tsoi LC, **Swindell WR**, Nair RP, Elder JT. 2014. Microanatomy of psoriasis: Sebaceous gland atrophy contributes to downregulation of lipid metabolism genes. *Journal of Investigative Dermatology* 134:S43 [Society for Investigative Dermatology Annual Meeting. May 7 - 10, 2014. Albuquerque, NM].
- (12) Lambert S, **Swindell WR**, Tsoi LC, Drumright BL, Stoll SW, Nair RP, Elder JT. 2013. Gene expression signature of TRAF3IP2-silenced keratinocytes reveals

- unexpected effects on KC differentiation and cytokine responses. *Journal of Investigative Dermatology* 133:S40 [Society for Investigative Dermatology Annual Meeting. May 8 - 11, 2013. Edinburgh, Scotland].
- (11) Xing X, Johnston A, **Swindell WR**, Stuart PR, Nair RP, Voorhees JJ, Elder JT, Gudjonsson JE. 2013. Opposing effects of the IL12B and IL23R psoriasis associated risk alleles on Th1 and Th17 responses in psoriatic skin. *Journal of Investigative Dermatology* 133:S41 [Society for Investigative Dermatology Annual Meeting. May 8 - 11, 2013. Edinburgh, Scotland].
- (10) Stoll SW, Rittié L, Lambert S, Johnston A, **Swindell WR**, Stuart PE, Elder JT. 2013. Amphiregulin cytoplasmic domain regulates G2/M in human keratinocytes. *Journal of Investigative Dermatology* 133:S158 [Society for Investigative Dermatology Annual Meeting. May 8 - 11, 2013. Edinburgh, Scotland].
- (9) Johnston A, Xing X, **Swindell WR**, Kochkodan J, Nair RP, Stuart PE, Ding J, Voorhees JJ, Elder JT, Gudjonsson JE. 2012. Susceptibility-associated genetic variation at IL12B enhances Th1 polarization in psoriasis. *Journal of Investigative Dermatology* 132:S23 [Society for Investigative Dermatology Annual Meeting. May 9 - 12, 2012. Raleigh, NC].
- (8) Baerveldt EM, Onderdijk AJ, Wohn C, Kant M, Florencia EF, Hekking-Weijma IJ, Walbeehm ET, **Swindell WR**, Gudjonsson JE, Prens EP. 2012. Denervation impairs clinical development of imiquimod-induced psoriasiform skin inflammation in mice. *Journal of Investigative Dermatology* 132:S17 [Society for Investigative Dermatology Annual Meeting. May 9 - 12, 2012. Raleigh, NC].
- (7) Satterstrom FK, **Swindell WR**, Bulyk ML, Haigis MC. 2012. Bioinformatic and molecular investigation of Sirt3 expression. *BMC Proc* 6(Suppl 3): P40. [Metabolism, Diet and Disease. May 29 – 31, 2012. Washington, DC].
- (6) **Swindell WR**, Xing X, Chen C, Nair RP, Voorhees JJ, Elder JT, Johnston A, Gudjonsson JE. 2011. Heterogeneity in the inflammatory network in chronic plaque psoriasis. *Journal of Investigative Dermatology* 131:S4 [Society for Investigative Dermatology Annual Meeting. May 4 - 7, 2011. Phoenix, AZ].
- (5) **Swindell WR**, Johnston A, Carbajal S, Han G, Wohn C, Lu J, Xing X, Nair RP, Voorhees JJ, Elder JT, Wang X, Sano S, Prens EP, DiGiovanni J, Pittelkow MR, Ward NL, Gudjonsson JE. 2011. Genome-wide expression profiling of five mouse models identifies similarities and differences with human psoriasis. *Journal of Investigative Dermatology* 131:S3 [Society for Investigative Dermatology Annual Meeting. May 4 - 7, 2011. Phoenix, AZ].
- (4) **Swindell WR**, Johnston A, Baerveldt E, Elder JT, Prens EP, Ward NL, Gudjonsson JE. 2010. Whole-genome transcriptional profiling for the evaluation of psoriasis-like mouse models. *Journal of Investigative Dermatology* 130:S93

[Society for Investigative Dermatology Annual Meeting. May 5 - 8, 2010. Atlanta, GA].

- (3) **Swindell WR**, Masternak MM, Kopchick JJ, Conover CA, Bartke A, Miller RA. 2009. Endocrine regulation of heat shock protein mRNA levels in long-lived dwarf mice. [University of Michigan Geriatrics Symposium. April, 2009. Ann Arbor, MI].
- (2) **Swindell WR**, Harper JM, Miller RA. 2008. How long will my mouse live? Machine learning approaches for prediction of mouse lifespan. [University of Michigan Geriatrics Symposium. April 18, 2008. Ann Arbor, MI].
- (1) **Swindell WR**, Bouzat JL. Inbreeding effects and the selection response of small populations. [Society for the Study of Evolution / Society of Systematic Biologists annual meeting. June 28 - July 2, 2002. Urbana-Champaign, IL].