CURRICULUM VITAE Jodi L. Johnson, Ph.D. Research Assistant Professor

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EDUCATION:

1994-1998 - Washington State University, Pullman, Washington, B.S., Microbiology 2000-2007 - Oregon Health & Science University, Portland, Oregon, Ph.D., Molecular and Medical Genetics

POSTDOCTORAL TRAINING:

2007-2010 - Laboratories of R. Stephen Lloyd, Ph.D. and Amanda McCullough, Ph.D. Center for Research on Occupational and Environmental Toxicology, Oregon Health & Science University, Portland, Oregon. Post-doctoral Fellow researching DNA damage repair and cellular responses to ultraviolet light exposure.

2010-2011 - Laboratory of Kathleen Green, Ph.D. Departments of Pathology and Dermatology, Northwestern University, Chicago, Illinois. Post-doctoral Fellow researching the roles of cell-cell adhesion desmosomal proteins in epithelial morphogenesis and protection against carcinogenesis following exposure to environmental stressors, including ultraviolet light.

ACADEMIC APPOINTMENTS:

2011-present – Research Assistant Professor, Departments of Pathology and Dermatology, Northwestern University Feinberg School of Medicine

AWARDS, HONORS, AND DISTINCTIONS:

1995-1997 - Howard Hughes Research Fellow, WSU

1994-1995 - Glenn Terrell Presidential scholarship, WSU

1995-1998 - Jack L. Stokes, Walter and Pauline Harris, and Elizabeth R. Hall Microbiology scholarships, WSU 2004 - Tartar Trust Fellowship, OHSU

2004 and 2006 - Travel awards to the 12th and 13th annual International p53 Workshops

2004-2007 - Training grant in the Molecular Basis of Skin Pathology, OHSU

2007-2009 - Training grant in Environmental Toxicology, OSU/OHSU

2008 - Travel award to the 34th American Society for Photobiology Meeting

2008 - OHSU School of Medicine Alliance Outstanding Journal Article Award

2009 - Travel award to the 69th annual Society for Investigative Dermatology Meeting

AWARDS, HONORS, AND DISTINCTIONS CONTINUED:

2010-2011 - Training grant in Signal Transduction and Cancer, Northwestern University
2011 - OHSU School of Medicine Paper of the Month Award
2013 - Travel award to the 62nd annual Montagna Symposium on the Biology of Skin

PROFESSIONAL SOCIETY MEMBERSHIPS, OFFICES, AND COMMITTEE ASSIGNMENTS:

Member, Society for Investigative Dermatology Member, American Medical Writers Association Board of Directors, Society for Investigative Dermatology (2010-2012) Education Committee, Society for Investigative Dermatology (2010-2015)

PROFESSIONAL AND SCIENTIFIC SERVICE:

2004 – Present - Mentorship presentations about becoming a scientist at elementary through high school level public schools

2008 and 2009 - Invitation to and participation in the American Academy of Dermatology's Skin Disease Research Day, Washington, D.C.

2010-2012 – Co-facilitator of Northwestern University's Epithelial Biology Research Seminar Series 2011-2014 - Service on the selection committee and lecturer for the Northwestern University Lurie Comprehensive Cancer Center's annual Continuing Umbrella of Research Experience (CURE) Summer Program for Underserved Students

2012 – Program Chair for the first PhD Career Development Retreat for the Society of Investigative Dermatology, North Carolina, May, 2012

2012 – Member of advisory panel to Northwestern University Dean of Graduate Studies to discuss mentorship and career development opportunities for post-doctoral fellows.

2012 – Member of planning committee for Northwestern University Pathology Department's Annual Scientific Retreat

2013-2015 – Program Chair for 2014 and 2015 PhD Career Development Retreats for the Society of Investigative Dermatology

TEACHING:

2010 - **Duke University and Northwestern University**: Interviewed for post-doctoral positions with the Cancer Prevention, Detection, and Control Program integrating basic sciences and population sciences in cancer research (Duke) and with the Pathology and Dermatology Departments under direction of Dr. Kathleen Green (Northwestern). "*Delivery of a DNA repair enzyme to skin cells initiates rapid repair of UV-induced DNA damage*."

2011 - **71**st **Annual Society for Investigative Dermatology Meeting**: Served as one of 7 scientists on a panel to discuss mentorship before an audience of ~130 trainees and young investigators.

2011-2014 – Northwestern University CURE summer program – "How to Read a Scientific Journal Article."

2012 - Northwestern University: Two seminars in the Pathology and Dermatology Departments, "Role of Desmosomal Proteins in Epidermal Responses to UV Exposure."

TEACHING CONTINUED:

2012 – Northwestern University: Pathology departmental retreat, oral presentation, "Loss of Desmoglein 1 disrupts epidermal differentiation following ultraviolet light exposure."

2012 – 72nd Annual Society for Investigative Dermatology Meeting: Oral presentation, "What can I do for the SID and what can the SID do for me? Educational and Leadership Opportunities For Young Investigators and Trainees Within the SID."

2013 - Northwestern University: Seminar for Lurie Cancer Center's Tumor Cell Biology Seminar Series, "The Desmosomal Protein Desmoglein 1 Aids in Epidermal Differentiation and Recovery Following Ultraviolet Light Exposure - Implications for Skin Cancer Prevention."

2013 - Northwestern University: Seminar for Pathology Department's Calandra Seminar Series, "The Desmosomal Protein Desmoglein 1 Aids in Epidermal Recovery Following Ultraviolet Light Exposure."

2013 – **Northwestern University:** Bench to Bedside Seminar for Dermatology Department in collaboration with June Robinson, MD, "*Skin cancer in kidney transplant patients with different skin types.*"

2014 - Northwestern University: Skin Disease Research Center Retreat, "Study of keratinocyte biology from kidney transplant patients with different skin types."

2015 – 74th Annual Society for Investigative Dermatology Meeting Cutaneous Surgery Research Symposium: Oral presentation, "Immunosuppression and ethnicity influence keratinocyte differentiation in kidney transplant recipients."

TRAINEES:

2012 – Mentor, Northwestern University Lurie Comprehensive Cancer Center's annual CURE Summer Program for Underserved Students – Ada Agidi, Spelman College

2013 - Mentor to Joan Ramon Guitart, Northwestern University

EDITORIAL RESPONSIBILITIES:

2015-present - Associate Editor for Research Techniques Made Simple, Journal of Investigative Dermatology

REVIEWER RESPONSIBILITIES:

- 2011 Reviewer for PLoS One
- 2014 Reviewer for Journal of Investigative Dermatology
- 2015 Reviewer for JAMA Dermatology

RESEARCH GRANTS/CONTRACTS:

July, 2009 – May, 2010 - PI, Dermatology Foundation Research Grant - "The Impact of DNA Repair by Chlorella Virus Pyrimidine Dimer Glycosylase in UVB-Exposed Skin Cells." \$20,000.

July 1, 2012 – June 30, 2015 – PI, Dermatology Foundation Research Career Development Award – "Role of Cell Anchoring Desmosomal Proteins in the Epidermal Responses to UV Exposure." \$55,000/year.

July 1, 2013 - July 31, 2015 – PI, Northwestern University Skin Disease Research Center Pilot and Feasibility Grant – "Study of keratinocyte biology from kidney transplant patients with different skin types." \$25,000/year.

INVITED LECTURES:

2013 – University of Minnesota: Invited seminar speaker for the Center for Drug Design, "*Targeting DNA Damage Repair or Epidermal Differentiation Pathways for Prevention of Skin Cancer.*"

SCHOLARLY BIBLIOGRAPHY:

Peer Reviewed Research Articles:

1. Chaudhary J, **Johnson J**, Kim G, Skinner MK. Hormonal Regulation and Differential Actions of the Helix-Loop-Helix Transcriptional Inhibitors of Differentiation (Id1, Id2, Id3, and Id4) in Sertoli Cells. Endocrinology. 2001 May; 142(5):1727-36.

2. **Johnson J**, Lagowski J, Sundberg A, Lawson S, Liu Y, Kulesz-Martin M. p73 loss triggers conversion to squamous cell carcinoma reversible upon reconstitution with TAp73α. Cancer Research. 2007, 67 (16): 7723-7730.

3. **Johnson J**, Lagowski J, Lawson S, Liu Y, Kulesz-Martin M. p73 expression modulates p63 and Mdm2 protein presence in complex with p53 family-specific DNA target sequence in squamous cell carcinogenesis. Oncogene. 2008, 27(19): 2780-2787.

4. Johnson J, Lowell B, Ryabinina O, Lloyd RS, McCullough A. TAT-mediated delivery of a DNA repair enzyme to skin cells rapidly catalyzes repair of UV-induced DNA damage. Journal of Investigative Dermatology. 2011, 131(3): 753-761. (*Cover Featured Article, Editorial Commentary in the same issue of the Journal of Investigative Dermatology).

5. Harmon R, Simpson C, Johnson J, Koetsier J, Dubash A, Najor N, Sarig O, Sprecher E, Green K. Desmoglein-1/Erbin interaction suppresses ERK activation to support epidermal differentiation. Journal of Clinical Investigation. 2013, 123 (4): 1556-1570. (*Editorial Commentary in the same issue of the Journal of Clinical Investigation).

6. Johnson J, Koetsier J, Sirico A, Agidi A, Antonini D, Missero C, Green K. The desmosomal protein desmoglein 1 aids recovery of epidermal differentiation after acute ultraviolet light exposure. Journal of Investigative Dermatology. 2014, 134 (8): 2154-2162.

7. **Johnson J**, Hoover P, Jovanovic B, Green K, Friedewald J, Robinson J. Epidermal desmoglein 1 expression is reduced in kidney transplant recipients compared with immunocompetent patients. June 11, 2016 epub ahead of print, Journal of Investigative Dermatology. doi: 10.1016/j.jid.2016.06.001, PMID: 27302902

SCHOLARLY BIBLIOGRAPHY CONTINUED:

Invited Reviews:

1. **Johnson J**, Lagowski J, Sundberg A, Kulesz-Martin M. p53 family activities in development and cancer: relationship to melanocyte and keratinocyte carcinogenesis. Progress in Dermatology. 2005 June, 39(2).

2. Johnson J, Najor N, Green K. Desmosomes: Regulators of Cellular Signaling and Adhesion in Epidermal Health and Disease. Cold Spring Harbor Perspectives in Medicine. 2014 November, 4(11). doi:10.1101/CSHPERSPECT.a015297. (*Cover Featured Article).

3. Guitart J, **Johnson J**, Chien W. Research Techniques Made Simple: The Application of CRISPR-Cas and Genome Editing in Investigative Dermatology. In Press, Journal of Investigative Dermatology.

Symposium Proceedings:

1. Kulesz-Martin M, Lagowski J, Fei S, Pelz C, Sears R, Broome Powell M, Halaban R, **Johnson J**. Melanocyte and keratinocyte carcinogenesis: p53 family protein activities and intersecting mRNA expression profiles. The Journal of Investigative Dermatology Symposium Proceedings. 2005, 10(2): 142-152.

Meeting Report:

1. Johnson JL. First Society for Investigative Dermatology Career Development Retreat for Ph.D. Trainees in Dermatological Science. Journal of Investigative Dermatology. 2012, 132(9): 2126-2128.

Editorial

1. **Johnson JL**. Communication is key. Research Techniques Made Simple. Journal of Investigative Dermatology. 2015, 135: 2-3. doi:10.1038/jid.2015.257.

PRESENTATIONS AND MEETING ABSTRACTS (Past five years only):

Published Abstracts:

1. **Johnson J**, Amargo E, Koetsier J, Green K. Loss of Desmoglein 1 disrupts epidermal differentiation following ultraviolet light exposure. 72nd Annual Meeting of the Society for Investigative Dermatology, Raleigh, NC, 2012. Journal of Investigative Dermatology. April, 2012, 132 (Supplement 1S). Abstract 116 (S20).

2. **Johnson J**, Koetsier J, Green K. The cell-cell adhesion protein Desmoglein 1 and the histone deacetylase inhibitor Trichostatin A aid in recovery of epidermal differentiation after ultraviolet light exposure. International Investigative Dermatology meeting, Edinburgh, Scotland, 2013. Journal of Investigative Dermatology. April, 2013, 133 (Supplement 1S). Abstract 895 (S152).

PRESENTATIONS AND MEETING ABSTRACTS CONTINUED (Published, past five years only):

3. **Johnson J**, Green K, Friedewald J, Robinson J. Immunosuppression and ethnicity influence keratinocyte differentiation in kidney transplant recipients. Oral Presentation: 74th Annual Meeting of the Society for Investigative Dermatology, Atlanta, GA, 2015. Journal of Investigative Dermatology. May, 2015, 135 (Supplement 1S). Abstract 105 (S18).

4. Rosaria Mollo M, Cirillo L, **Johnson J**, Polishchuk E, Polishchuk R, Antonini D, Missero C. A Hay-Wells syndrome mouse model reveals a crucial function for p63 in regulating skin mechanical integrity and thymic stromal lymphopoietin levels. 45th Annual European Society for Dermatological Research, Rotterdam, The Netherlands, 2015. Journal of Investigative Dermatology. September, 2015, 135 (Supplement 2S). Abstract 327 (S57).

5. Lee S, Harmon R, Nekrasova O, **Johnson J**, Green K. The antioxidant enzyme peroxiredoxin 1 stabilizes desmoglein 1 at the plasma membrane to promote epidermal differentiation. 75th Annual Meeting of the Society for Investigative Dermatology, Scottsdale, AZ, 2016. Journal of Investigative Dermatology. May, 2016, 136 (Supplement 1S). Abstract 336 (S59).

6. **Johnson J**, Koetsier J, Godsel L, Todorovic V, Green K. Novel roles for plakophilin 3 in cell cycle regulation in head and neck squamous cell carcinoma cells. 75th Annual Meeting of the Society for Investigative Dermatology, Scottsdale, AZ, 2016. Journal of Investigative Dermatology. May, 2016, 136 (Supplement 1S). Abstract 099 (S18).

Other Abstracts and Presentations:

1. **Johnson J**, Koetsier J, Green K. The desmosomal protein Desmoglein 1 and the histone deacetylase inhibitor Trichostatin A aid recovery of epidermal differentiation after ultraviolet light exposure. 62nd Annual Montagna Symposium on the Biology of Skin, Stevenson, WA 2013.

2. Rosaria Mollo M, Cirillo L, Antonini D, Russo C, Sirico A, Osterburg C, **Johnson J**, Sinha S, Dötsch V, Missero C. Novel functional and mechanistic insights into the pathogenesis of AEC syndrome. 7th International p63/p73 Workshop, Boston, MA 2016.