

## EDUCATION

Ph.D. Molecular Pathology, University of California, San Diego 2004-2008  
B.S. Microbiology, Michigan State University 1993-1996

## POST-DOCTORAL RESEARCH EXPERIENCE

Research Scientist 2013-present  
University of Washington  
Senior Fellow 2008-2013  
University of Washington

## PRE-DOCTORAL RESEARCH EXPERIENCE

Research Associate 2000-2004  
VAMC / University of California, San Diego  
Research Associate 1998-2000  
The Scripps Research Institute, San Diego, CA

## PUBLICATIONS: JOURNAL ARTICLES

**Cecil DL**, Holt GE, Park K, Gad E, Rastetter L, Childs JS, Higgins DM, Disis ML. Elimination of IL-10 inducing Th epitopes from an IGFBP-2 vaccine ensures potent anti-tumor activity. *Cancer Res.*, 2014.

Disis ML, Gad E, Herendeen DR, Lai VP, Park KH, **Cecil DL**, O'Meara MM, Treuting PM, Lubet RA. A Multiantigen Vaccine Targeting Neu, IGFBP-2, and IGF-IR Prevents Tumor Progression in Mice with Preinvasive Breast Disease. *Cancer Prev Res (Phila)*. 2013. 6(12):1273-82.

**Cecil DL**, Park K, Gad E, Childs JS, Higgins DM, Plymate SR, Disis ML. T-helper I immunity, specific for the breast cancer antigen insulin-like growth factor-I receptor (IGF-IR), is associated with increased adiposity. *Breast Cancer Res Treat*. 2013. 139(3):657-665.

**Cecil DL**, Terkeltaub R. Arterial calcification is driven by RAGE in *Enpp1*<sup>-/-</sup> mice. *J Vasc Res*. 2011. 48(3):227-235.

**Cecil DL**, Appleton CTG, Polewski MD, Mort JS, Schmidt AM, Bendele A, Beier F, Terkeltaub R. The pattern recognition receptor CD36 is a chondrocyte hypertrophy marker associated with suppression of catabolic responses and promotion of repair responses to inflammatory stimuli. *J Immunol*. 2009. 182 (8):5024-5031.

**Cecil DL**, Terkeltaub R. Transamidation by Transglutaminase 2 transforms S100A11 calgranulin into a pro-catabolic cytokine for chondrocytes. *J Immunol*. 2008. 180(12): 8378-8385.

**Cecil DL**, Johnson K, Rediske J, Lotz M, Schmidt AM, Terkeltaub R. Inflammation-induced chondrocyte hypertrophy is driven by receptor for advanced glycation end products. *J Immunol*. 2005. 175(12):8296-8302.

**Cecil DL**, Rose DM, Terkeltaub R, Liu-Bryan R. Role of interleukin-8 in PiT-1 expression and CXCR1-mediated inorganic phosphate uptake in chondrocytes. *Arthritis Rheum*. 2005. 52(1):144-154.

Liu R, Lioté F, Rose DM, **Merz D**, Terkeltaub R. Proline-rich tyrosine kinase 2 and Src kinase signaling transduce monosodium urate crystal-induced nitric oxide production and matrix metalloproteinase 3 expression in chondrocytes. *Arthritis Rheum*. 2004. 50(1):247-258.

**Merz D**, Liu R, Johnson K, Terkeltaub R. IL-8/CXCL8 and GRO $\alpha$ /CXCL1 induce chondrocyte hypertrophic differentiation. *J Immunol*. 2003. 171(8):4406-4415.

Williams GS, Martinez A, Montalbano A, Tang A, Mauhar A, Ogwaro KM, **Merz D**, Chevillard C, Riblet R, Feeney AJ. Unequal VH gene rearrangement frequency within the large VH7183 gene family is not due to recombination signal sequence variation, and mapping of the genes shows a bias of rearrangement based on chromosomal location. *J Immunol*. 2001. 167(1):257-263.

Love VA, Lugo G, **Merz D**, Feeney AJ. Individual V(H) promoters vary in strength, but the frequency of rearrangement of those V(H) genes does not correlate with promoter strength nor enhancer-independence. *Mol Immunol*. 2000. 37(1-2):29-39.

## **PUBLICATIONS: BOOK CHAPTERS**

Auci DL, **Cecil DL**, Herendeen D, Broussard E, Liao J, Holt GE, Disis ML. Clinical application of plasmid based cancer vaccines. In: *Gene Therapy of Cancer*, 3<sup>rd</sup> ed. Lattime & Gerson, editors. 2013.

Phan-Lai V, **Cecil D**, Holt G, Herendeen D, Kievit F, Zhang M, Disis ML. Epitope-based vaccines for cancer. In: *Cancer Vaccines*, 2<sup>nd</sup> ed., Bot A, Obrocea M, and Marincola F, editors. 2011.

## **ORAL PRESENTATIONS**

**Cecil DL**, Park KH, Gad, E, Rastetter L, Disis, ML. IGF-IR-specific vaccination suppresses growth factor receptor activation in tumor cells. Marsha Rivkin Ovarian Cancer Research Symposium, 2012.

**Cecil DL**, Gad E, Higgins D, Childs J, Disis ML. Vaccination with peptides in IGF-IR that induce robust Th1 immunity with limited immunosuppression significantly inhibit tumor growth in a model of triple-negative breast cancer. Department of Defense Breast Cancer Research Program Era of Hope Meeting, 2011.

**Cecil DL**, Park K, Gad E, Higgins D, Childs J, Disis ML. Self-proteins of IGFBP-2 contain Class II epitopes that may preferentially induce a self-regulatory response. Marsha Rivkin Ovarian Cancer Research Symposium, 2010.

**Cecil DL**, Polewski MD, Terkeltaub R. Arterial calcification is driven by RAGE in Enpp1-/- mice, Annual Scientific Meeting of The North American Vascular Biology Organization, 2009.

**Cecil DL**, Appleton CT, Beier F, Terkeltaub R. Expression of the patterning receptor CD36 is chondroprotective by disengaging inflammation from dysregulated chondrocyte differentiation and function. Annual Scientific Meeting of The Osteoarthritis Research Society International, 2007.

**Cecil DL**, Terkeltaub R. TG2-catalyzed transamidation of K3 and Q102 residues transforms latent S100A11 calgranulin into an inducer of matrix catabolism and hypertrophic differentiation in chondrocytes. Annual Scientific Meeting of The Osteoarthritis Research Society International, 2006.

**Cecil DL**, Johnson K, Rediske J, Lotz M, Schmidt AM, Terkeltaub R. Osteoarthritis is Driven by RAGE. Annual Scientific Meeting of the American College of Rheumatology, 2004.

**Merz D**, Rose DM, Liu R, Terkeltaub R. The Phosphate transporter PiT-1 is upregulated in osteoarthritic cartilage and promotes chondrocyte hypertrophy. Annual Scientific Meeting of the American College of Rheumatology, 2003.

**Merz D**, Terkeltaub R, Liu R. IL-8 induces chondrocyte hypertrophy by a Pyk-2 signal transduction pathway. Annual Scientific Meeting of the American College of Rheumatology, 2002.

## **ABSTRACTS**

**Cecil DL**, Holt G, Herendeen D, Gad E, Rastetter L, Park KH, Disis ML. Developing antigen-specific Th1 epitope based vaccines by excluding immunosuppressive peptide sequences. American Association of Cancer Research Annual Meeting. 2012.

**Cecil DL**, Gad E, Rastetter L, Disis ML. Vaccination targeting IGF-IR sensitizes tumors to tamoxifen therapy in an anti-estrogen resistant mouse model. American Association of Cancer Research Annual Meeting. 2012.

**Cecil DL**, Park K, Gad E, Disis ML. IGF-IR peptide vaccine inhibits tumor growth via IFN-g-dependent biologic remodeling of the tumor. American Association of Cancer Research Annual Meeting, 2010.

**Cecil DL**, Park K, Gad E, Higgins D, Childs J, Disis ML. IGF-IR is a tumor antigen in patients with breast cancer. International Society of Biologic Therapy of Cancer Annual Meeting, 2009.

**Cecil DL**, Park K, Gad E, Higgins D, Childs J, Disis ML. IGF-IR peptide-based vaccines inhibit tumor growth in a murine model of breast cancer. International Society of Biologic Therapy of Cancer Annual Meeting, 2009.

**INVITED SPEAKER**

Mexican Northwest Oncology Group. "Targeted immunotherapy in ovarian cancer." 2013.

**GUEST LECTURES**

University of Washington, Department of Pharmaceutics. "Development of Cancer Vaccines." 2013.

The Art Institute of Seattle. "Cancer Immunotherapy: How do we design effective vaccines targeting self-proteins?" 2012.

**RESEARCH FUNDING**

Department of Defense Breast Cancer Research Program Post-Doctoral Fellowship 2010-2013  
"Development of a Vaccine Targeting Triple Negative Breast Cancer."