Andrew Kunihiro, MS, RD

EDUCATION

2019, PhD (expected)	Nutritional Sciences, University of Arizona Advisor: Janet L Funk, MD Dissertation: Curcuminoids in bone-metastatic breast cancer osteolysis and influence of the bone microenvironment on curcuminoid metabolism
2014, MS	Nutritional Science, California State University, Long Beach Advisor: Wendy Reiboldt, PhD Thesis: The relationship between dietary omega-3 and omega-6 fatty acid intake and colorectal cancer
2010, BS	Bioengineering, University of California, Los Angeles
2007	Pre-Nutrition, Orange Coast College

RESEARCH EXPERIENCE

10/14 – Present	Graduate Research Associate, University of Arizona Dissertation: Curcuminoids in bone-metastatic breast cancer osteolysis and influence of the bone microenvironment on curcuminoid metabolism Mentor: Janet Funk, MD
07/14 – 10/14	Graduate Research Associate, University of Arizona Lab Rotation: Vitamin D and prostate cancer risk Mentor: Elizabeth Jacobs, PhD
09/13 – 05/14	Graduate Researcher, California State University, Long Beach MS Thesis: The relationship between dietary omega-3 and omega-6 fatty acid intake and colorectal cancer Mentor: Wendy Reiboldt, PhD
01/14 – 05/14	Graduate Researcher, California State University, Long Beach Department of Nutritional Sciences Topics: Congenital aglossia, Wernicke's aphasia from HSV1 encephalitis Co-Mentors: Long Wang, MD, PhD, RDN, Betty McMicken, PhD
09/09 – 03/10	Undergraduate Researcher, University of California, Los Angeles Department of Bioengineering Topics: Microfluidic synthesis of ^{18}F radionuclide Mentor: R. Michael van Dam, PhD

PEER REVIEWED PUBLICATIONS

Kunihiro A, Brickey JA, Frye JB, Luis PB, Schneider C, Funk JL (2018). *Curcumin is deconjugated in bone by hematopoietic β-glucuronidase to inhibit breast cancer TGFβ signaling.* In Preparation.

Kunihiro A, Brickey JA, Frye JB, Luis PB, Schneider C, Funk JL (2018). *Curcumin, but not curcumin-glucuronide, inhibits Smad-signaling in TGFβ-dependent bone metastatic breast cancer cells and is locally enriched in bone.* In Review.

McMicken BL, **Kunihiro A**, Wang L, Rogers K (2014). Language remediation in a case of Wernicke's aphasia post herpes simplex virus type 1 viral encephalitis. *J Clin Case Rep. 4:11.*

McMicken BL, **Kunihiro A**, Wang L (2014). Do you know of cases of Wernicke's Aphasia Post Herpes Simplex Viral Encephalitis? *Commun Disord Deaf Stud Hearing Aids. 3:1.*

McMicken BL, **Kunihiro A**, Wang L, Von Berg S, Rogers K (2014). Electropalatography in a case of congenital aglossia. *Commun Disord Deaf Stud Hearing Aids.*

McMicken BL, **Kunihiro A**, Wang L, Salles F, Costa PB, Rogers K (2014). Randomized testing of taste discrimination in a case of congenital aglossia. *Journal of Oral Biology and Craniofacial Research.*

REVIEWS

Jacobs ET, Kohler LN, **Kunihiro AG**, Jurutka, PW (2016). Vitamin D and Colorectal, Breast, and Prostate Cancers: A Review of the Epidemiological Evidence. *J Cancer. 7:3.*

CONFERENCES & SYMPOSIA

Kunihiro A, Brickey JA, Frye JB, Luis PB, Schneider C, Funk JL (2018). *Bone-specific activation of a dietary polyphenol inhibiting TGFβ-dependent breast cancer bone metastases.* Cancer and Bone Society, Oxford, UK

Kunihiro A, Brickey JA, Frye JB, Funk JL (2018). *Targeting TGFβ signaling pathways in bone metastatic breast cancer cells to limit metastatic progression using curcuminoids, a turmeric-derived natural product.* American Association for Cancer Research (AACR) Annual Conference, Chicago, IL

Kunihiro A, Frye JB, Luis PB, Schneider C, Funk JL (2017). *Role of hematopoietic β-glucuronidase in bone-specific activation of osteoprotective turmeric-derived dietary polyphenols.* American Society for Bone and Mineral Research (ASBMR), Denver, CO

Kunihiro A, Frye JB, Luis PB, Schneider C, Funk JL (2016). *Site-specific activation of curcuminoids in the breast cancer bone metastases microenvironment.* San Antonio Breast Cancer Symposium; San Antonio, TX

Kunihiro A, Frye JB, Luis PB, Schneider C, Funk JL (2016). *Tissue-specific curcuminoid deglucuronidation for the treatment of metastatic breast cancer bone lesions.* Arizona Physiological Society (APS) Annual Meeting; Tucson, AZ

Kunihiro A, Frye JB, Luis PB, Schneider C, Funk JL (2016). *Site-Specific Deglucuronidation of Turmeric-Derived Curcuminoids in Bone*. University of Arizona Cancer Center Scientific Retreat; Tucson, AZ

Kunihiro A, Frye JB, Luis PB, Schneider C, Funk JL (2016). *Site-Specific Deglucuronidation of Turmeric-Derived Curcuminoids in Bone*. Experimental Biology Conference; San Diego, CA

SEMINARS & PRESENTATIONS

11/2017	Treating breast cancer bone metastases with curcuminoids: Mechanisms and active metabolites. Endocrinology Departmental Seminar
11/2017	Exploiting the bone microenvironment to activate curcuminoids for the treatment of breast cancer bone metastases. Nutritional Sciences Seminar
01/2017	Site-specific metabolism of dietary polyphenols: the role of curcumin as a bone-targeted pro-drug. Endocrinology Departmental Seminar.
03/2016	Career talk to Student Dietetic Association at California State University, Long Beach: *My Nutrition Journey: From RD to PhD*
03/2016	Tissue Specific Curcumin Deglucuronidation for the Treatment of Metastatic Breast Cancer Bone Lesions. Nutritional Sciences Departmental Seminar

TEACHING EXPERIENCE

07/15 – Present	Teaching Assistant, University of Arizona Undergraduate Nutritional Science (various courses)
09/13 – 05/14	Teaching Assistant, California State University, Long Beach
09/11 – 12/11	Supplemental Instruction Leader, California State University, Long Beach Undergraduate General Chemistry Course
07/08 – 12/08	Tutor, University of California, Los Angeles Undergraduate Bioengineering Circuit Design Course

MENTORING EXPERIENCE

09/15 – 06/18	Julia Brickey, Undergraduate Researcher (Funk Lab) Currently a MD student at UNC Chapel Hill

RELATED PROFESSIONAL EXPERIENCE

06/09 – 09/09	Bioengineer Intern, NanoIVD, Inc., Los Angeles, CA

GRANTSMANSHIP

Ruth L. Kirschstein Individual National Research Service Predoctoral Fellowship. "Bone-specific deglucuronidation of turmeric-derived curcuminoids for the treatment of osteolytic disease." NCCIH (NIH), Bethesda, MD ($37,644/yr x2 year). Awarded.

American Society of Nutrition Predoctoral Fellowship, "Bone-specific metabolism of curcumin, a plant-derived polyphenol." ASN, Rockville, MD. Unfunded

HONORS & AWARDS

2018	W.T. McClelland Scholarship, University of Arizona
2017	Ruth Cowden Scholarship, University of Arizona
2017	Darrel E. Goll Graduate Scholarship, University of Arizona
2017	Endocrine Fellow (Forum on Metabolic Diseases), Endocrine Fellows Foundation
2017	DeBell Research Enhancement Award, University of Arizona
2015 – 2018	USDA National Needs Graduate Fellow, University of Arizona
2015	Joe K. Fannin Scholarship, University of Arizona
2014 – 2015	University Fellow, University of Arizona
2013 – 2014	Department Outstanding Thesis Award, CSU, Long Beach
2012 – 2013	Dietetic Intern of the Year, Alabama Dietetic Association
2012 – 2013	Dietetic Intern of the Year, North Alabama Dietetic Association

CREDENTIALS

08/13 – Present	Registered Dietitian

PROFESSIONAL MEMBERSHIPS

2016 – Present	American Association for Cancer Research (AACR)
2015 – 2016	American Society of Bone and Mineral Research (ASBMR)
2014 – Present	American Society of Nutrition (ASN)
2011 – 2014	Academy of Nutrition and Dietetics (AND)

EXTRACURRICULAR ACTIVITIES

03/17 – Present	Student Rep., Inclusive Excellence Committee, Department of NSc, UA
08/16 – 07/17	Student Rep., Graduate Committee, Department of NSc, UA
07/16 – 06/17	Student Rep., ASN Dietary Bioactive Components RIS
07/16 – 06/17	President, Nutritional Sciences Graduate Organization, University of Arizona
07/14 – Present	Member, Nutritional Sciences Graduate Organization, University of Arizona
04/11 – 12/12	Nutrition Volunteer, Cypress Senior Center

01/09 – 12/09 Publicity Chair, Pi Kappa Phi Fraternity, UCLA

SERVICE

2017 – Present Science Fair Judge, Fruchthendler Elementary School, Tucson, Arizona
2016 – Present Travel Grant Judge, Graduate and Professional Student Council, UA

KEY STRENGTHS

Molecular Biology: qPCR, SDS-PAGE, Western blot, mammalian cell culture, mouse models of cancer, flow cytometry, immunohistochemistry, transient transfection

Microscopy: bright-field, fluorescence, phase contrast

Computer: Microsoft Office, ImageJ, GraphPad Prism, SAS, SPSS, Photoshop, Illustrator