Donna F Louie, PhD 303-735-4211

donna.louie@colorado.edu

Educational Background

• PhD in Biochemistry, 1993

University of Health Science Center at San Antonio, San Antonio, TX

• BS in Chemistry, 1987

New Mexico State University, Las Cruces, New Mexico

Academic Employment History

• Associate Teaching Professor for the Arts & Sciences RAP: Fall 2023 - Present

IPHY 2420 Introduction to Nutrition (Fall & Spring semesters)

• Associate Teaching Professor for the Creative Minds RAP: Fall 2022-Spring 2023

IPHY 2420 Introduction to Nutrition

• Associate Teaching Professor for the Environmental and Sciences RAP: Fall 2022- Spring 2023 IPHY 2420 Introduction to Nutrition

Associate Teaching Professor for the Stories and Societies RAP: Fall 2022- Spring 2023

IPHY 2420 Introduction to Nutrition

• Instructor for Libby RAP: Fall 2010-Spring 2022

IPHY 2420 Introduction to Nutrition

(Fall 2020 to Spring, Fall 2021 to Spring 2022)

IPHY 2420 Nutrition for Health and Performance

(Fall 2011; Spring and Fall 2012 to Spring and Fall 2019; Spring 2020)

IPHY 3420 Nutrition for Health and Performance (Spring 2011 semester)

Instructor for Baker RAP: Fall 2019-Spring 2022

IPHY 2420 Introduction to Nutrition

(Fall 2020 to Spring, Fall 2021 to Spring 2022)

IPHY 2420 Nutrition for Health and Performance

(Spring 2020)

Instructor for Sewall RAP: Fall 2019-Spring 2022

IPHY 2420 Introduction to Nutrition

(Fall 2020 to Spring, Fall 2021 to Spring 2022)

IPHY 2420 Nutrition for Health and Performance

(Spring 2020)

• Lecturer for Baker RAP: Fall 2004-Spring 2019

IPHY 2420 Nutrition for Health and Performance

(Fall 2011, Spring and Fall 2012 to Spring and Fall 2017; Spring and Fall 2018)

IPHY 3420 Nutrition (7 semesters)

EBIO 1210 Biology I (5 semesters)

EBIO 1220 Biology II (3.5 semesters)

• Lecturer for Sewall RAP: Spring 2012- Spring 2019

IPHY 2420 Nutrition (Spring 2012, Spring and Fall 2013 semesters; Fall 2014 semester; Fall 2015 semester; Fall 2016; Fall 2017; Spring and Fall 2018; Spring 2019)

• Lecturer for Communication RAP: Fall 2011-Spring 2014

IPHY 2420 (Fall 2011 semester; Spring 2014)

• Lecturer for Global Studies RAP: Fall 2012

IPHY 2420 (Fall 2012)

- Presenter at the Summer Orientation for the Health Professions RAP (June-August, 2012)
 - gave an overview of a RAP and advised students about classes and college in general
- Lecturer for Libby RAP: Spring 2009-Spring 2010

IPHY 3420 (3 semesters)

Postdoctoral Research Associate, 1994-1998

Biochemistry Department, Howard Hughes Medical Institute, University

of Colorado, Boulder, CO (Dr Natalie Ahn)

• Postdoctoral Fellow, 1993-1994

Biochemistry Department, University of Health Science Center at San Antonio, San Antonio, TX (Dr Philip Serwer)

Leadership

Associate Director, Fall 2022 – Spring 2023 (July 2022 – May 2023)

oversaw and sometimes coordinated CM events, like Welcoming Day, the monthly DEI events and the Celebration of the Arts; enrolled students, set-up classroom, performed office administration and finance; set-up/led faculty meetings; created a faculty dossier; coordinated faculty peer-observations; interviewed and hired a program coordinator and student coordinators; coordinated faculty social events; and managed front office when staff was not available.

Instructional Teaching Services

- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2024
 - Mentor for Kelsey Yang to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2024
 - **Mentor** for Natalia Audimoolam to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2024
 - Mentor for Morgan McGraw to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2024
 - Mentor for Kelsey Yang to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2024
 - Mentor for Natalia Audimoolam to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2024
 - **Mentor** for Morgan McGraw to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2023
 - **Mentor** for Gigi Gotzmer to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2023
 - Mentor for Kelsey Yang to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2023
 - **Mentor** for Tova Burton to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2023
 - **Mentor** for Kiran Thiara to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2023
 - **Mentor** for Olivia Lawrence to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2023
 - **Mentor** for Kiera Fisher to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2023
 - **Mentor** for Kelly Janetzko to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2023
 - **Mentor** for Kiran Thiara to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2022
 - **Mentor** for Kelly Janetzko to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2022
 - Mentor for Kate Staiert to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2022
 - **Mentor** for Kiran Thiara to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2022
 - **Mentor** for Natalie Gould to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2022
 - **Mentor** for Kate Staiert to teaching nutrition
- 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2022

- **Mentor** for Amy Jeacock to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2021
 - Mentor for Sophie Choubai to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2021
 - Mentor for Melissa Mcevoy to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2021
 - **Mentor** for Natalie Gould to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2021
 - **Mentor** for Amy Jeacock to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2021
 - Mentor for Sophie Choubai to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2021
 - Mentor for Kelsey Shaver to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2020
 - Mentor for Sophie Choubai to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2020
 - **Mentor** for Kelsey Shaver to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2020
 - Mentor for Lindsay Eversole to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2020
 - **Mentor** for Mackenzie Albrecht to teaching nutrition
- Honor Thesis Advisor for Chelsea Martin, Fall 2019 Fall 2020
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2019
 - Mentor for Amanda Brown to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2019
 - **Mentor** for Ashlyn Fleming to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2019
 - **Mentor** for Alexandra Martin to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2019
 - **Mentor** for Amanda Brown to teaching nutrition
- IPHY 4930: 1-Credit Internship in Integrative Physiology, Fall 2018
 - **Faculty Sponsor** for Emilee Gower's internship at the Avanti Therapy to learn how exercise can help cancer patients recover from treatments and interact with cancer patients
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2018
 - Mentor for Sonya Livitz to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2018
 - **Mentor** for Tessa Riehman-Bryan to teaching nutrition
- IPHY 3010: 1-Credit Undergraduate Teaching in Integrative Physiology, Spring 2018
 - Mentor for Samantha Walisundra to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2017
 - **Mentor** for Samantha Walisundra to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2017
 - Mentor for Mary Lynch to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2017
 - **Mentor** for Sonya Livitz to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2017
 - **Mentor** for Samantha Walisundra to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2017
 - **Mentor** for Mary Lych to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2016
 - Mentor for Samantha Walisundra to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2016
 - Mentor for Heather O'Reilly to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2016

- **Mentor** for Mary Lynch to teaching nutrition
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2015
 - **Mentor** for Heather O'Reilly to teaching nutrition
- On Connor Andrew Folkerth Honor Thesis Committee, Fall 2013- Spring 2015
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Spring 2015
 - **Mentor** for Annie Chung to teaching nutrition
- IPHY 4860: 3-Credit Independent Study, Spring 2015
 - **Faculty Sponsor** for Caitlin Kraft's Independent Study at the Creekside Elementary School to teach nutrition at an afterschool program and at the Neuroscience Outreach Program, where she was the project coordinator
- IPHY 4860: 1-Credit Independent Study, Spring 2015
 - **Faculty Sponsor** for Emily Cohn's Independent Study to write a research paper on the adverse effects of meat-based diet and benefits of plant-based diet
- IPHY 3010: 2-Credit Undergraduate Teaching in Integrative Physiology, Fall 2014
 - Mentor Heather O'Reilly to teaching nutrition
- IPHY 4860: 3-Credit Independent Study, Spring 2014
 - **Faculty Sponsor** for Caitlin Kraft's Independent Study at the Boulder Community School of Integrated Studies to teach nutrition to two fourth grade classes
- IPHY 4939: 4-Credit Internship, Spring 2014
 - **Faculty Sponsor** for Kelsey Proctor's Internship at the Spinal Cord Injury Recovery Project to learn how to help paraplegic and quadriplegic with their exercises
- IPHY 4860: 3-Credit Independent Study, Spring 2014
 - **Faculty Sponsor** for Tiana Lavin's Independent Study at the Women, Child, and Infant Agency to determine the frequency of breastfeeding among low-income families
- IPHY 2910: 1-Practicum in Integrative Physiology, Spring 2014
 - **Faculty Sponsor** for Tiana Lavin's internship at the Women, Child, and Infant Agency to shadow a registered dietician
- IPHY 4930: 5-Credit Internship, Summer 2013
 - **Faculty Sponsor** for Lauren Daily's internship at the PEAK Center at the Craig's Hospital to learn how to help paraplegic and quadriplegic with their exercises
- IPHY 4930: 2-Credit Internship, Fall 2010,
 - **Faculty Sponsor** for Clara Hunt's Internship at Essential Nutrition to assist a registered dietician with clients and designing a nutrition website for children
- Faculty Cosponsor, Fall 2010, for Marcee Lee's Independent Studies and UROP Grant, Department of Ethnic Studies

Teaching Accomplishments

- Invited to Chi Omega Professor Appreciation on October 2, 2024 by my four students: Weezie Dinnhaupt, Kylie Kroll, Meredith Wood, and Millicent Critchfield
- Invited to be a presenter and presented a poster, titled Active Learning in Small-Sized RAP Science Courses Improves Student Satisfaction And May Promote Retention, at the NSF-funded Active Learning Symposium on May 15, 2024 at the University of Colorado, Boulder; also attended the symposium for professional development about active learning
- Invited to conduct an interview about Learning by Design by Holly Fortener, with an honorarium, <u>August 10, 2023</u> to assess the use of active learning techniques learned from the Active Learning Academy Program
- Invited to Chi Omega Professor Appreciation on November 7, 2023 by my student, Grace Wynne
- Invited as a Pearson Publisher Pre-Revision Reviewer for the *Nutrition: An Applied Approach*, 4th ed, by Thompson & Manore, with an honorarium, April 24th 2023 to review the textbook, eText, and the online education platform, Mastering
- Selected to be on the Faculty Learning Community and A & S RAP Quality Teaching Initiative Task Force, with an honorarium, <u>Spring 2023</u> to evaluate and create a set of DEI guidelines/objectives for the RAP faculty and students

- Selected to be on the ASSETT's Active Learning Academy Program, Peer Mentor, with an honorarium, Spring 2022: to apply the researched based instructional strategies to my course and learn to use the COPUS evaluation method
- Selected to be on the ASSETT's Active Learning Academy Program, Learning by Design, with an honorarium, <u>Fall 2022</u> to learn researched based instructional strategies to improve students learning
- Selected to be on the Honor Code Advisory Board, with an honorarium, <u>Fall 2018-Spring 2019</u>: to evaluate student violations of honor code
- Invited Speaker for Dr Christina Nelson's Class, DNCE 2005, Injury Prevention, with an honorarium, March 14, 2019: to teach dance students the basic nutrition for athletes
- Invited Speaker for Dr Nada Diachenko's Class, DNCE 2005, Injury Prevention, with an honorarium, April 17 and 19, 2017: to teach dance students the basic nutrition for athletes
- Invited as a Pearson Publisher's Faculty Advisory Board with an honorarium, November 28, 2016: to review the development of autograded, personalized diet analysis activities using MyDietAnalysis program
- Invited Speaker for Dr Nada Diachenko's Class, DNCE 2005, Injury Prevention, with an honorarium, April 11 and 13, 2016: to teach dance students the basic nutrition for athletes
- Invited to attend the Pearson Introductory Nutrition Forum in San Francisco with an honorarium from March 4-5, 2016: a by-invitation-only meeting; to share teaching challenges and experiences and evaluate their current and future products at the Pearson Publisher Headquarter in San Francisco
- Invited to be in a McGraw Hill's Focus Group with an honorarium, March 5-6, 2015: at the Life Sciences Regional Event on Developing Teaching Excellence to Improve Student Retention and Success at the Brown Palace Hotel in Denver, CO, to review their *Smartbook* and other Connect educational softwares
- Reviewer with an honorarium, <u>August 3, 2015</u>: to review *Chapter 21*: Nutrition and the Aging Adult: Live Long and Prosper; Can you eat your way to a longer, healthier life? of the new nutrition textbook: Scientific American Nutrition for a Changing World, Scientific American and W.H. Freeman publishers
- Reviewer with an honorarium, <u>January 23, 2015</u>: to review the Online Diet Analysis Activities of the new nutrition textbook: Scientific American Nutrition for a Changing World, Scientific American and W.H. Freeman publishers
- Reviewer with an honorarium, October 17, 2014: to review Chapter 19: The College Years, Determinant of Eating Behavior, Alcohol, Disordered Eating- How Food Choices Are Influenced by Social Norms of the new nutrition textbook: Scientific American Nutrition for a Changing World, Scientific American and W.H. Freeman publishers
- Reviewer with an honorarium, <u>May 9, 2014</u>: to review *Chapter 6- The Lipids: The skinny on fat* of the new nutrition textbook: *Scientific American Nutrition for a Changing World*, Scientific American and W.H. Freeman publishers
- Invited to be in a WH Freeman's Focus Group at New Orleans with an honorarium, <u>February 21-22, 2014</u>: to review the new nutrition textbook: *Scientific American Nutrition for a Changing World*, Scientific American and W.H. Freeman publishers
- Reviewer with an honorarium, <u>January 18, 2013</u>: to review the table of contents for the new nutrition textbook: *Scientific American Nutrition for a Changing World*, Scientific American and W.H. Freeman publishers
- Reviewer with an honorarium, <u>April 13, 2012</u>: to review Two Chapters of *Contemporary Nutrition:* A Functional Approach, 4th Edition by Wardlaw/Smith/Collene
- Invited Participant with an honorarium, <u>March 26, 2012</u> in a Nutrition Coverage Survey project for W.H. Freeman Publishers and Scientific American to bring out a new type of introductory level nutrition book
- Participant with an honorarium, Spring 2012 at the FTEP Assessment Institute on Achieving Course Goals: Gathering Evidence About Student Learning for three days: <u>January</u>, 12 and 13; <u>May</u>, 17, 2012

Interviews for News Websites

Multimedia Article by CU Independent on smoking ban at CU, February 5, 2013

• Feature Article in CU-Boulder Today about my class, IPHY 2420, November 15, 2012

Other Teaching Experiences

- Colorado Virtual Academy Homeschool teacher for my daughter, Fall 2008- Summer 2010; Fall 2011 August 2012
- Arts/crafts teacher for Rocky Mountain Chinese School, 2003-2005
- Volunteer lecturer at Bear Creek Elementary School, 1998-2007
- Substitute teacher for Dr. Beth Bennett in EBIO 1210, Continued Education, University of Colorado, 1996-2000; 2004
- **Trainer** for undergraduate, graduate students, and technicians in laboratory research during graduate school and postdoctoral training, 1989-1998
- Teaching assistant and tutor in biochemistry during graduate school, 1988-1990

Research Publications during Postdoctoral Research and Graduate School Patent

1. **Louie DF**, U.S. Patent No. 07/523,766: "High Molecular Weight DNA Compositions for Use in Electrophoresis of Large Nucleic Acids, November 10, 1992.

Authored Publications

- 1. Timothy SL, Hunt, JB, Aveline LD, Jonscher KR, **Louie DF**, Yeh JM, Nahreini TS, Resing KA, Ahn NG, Identification of Novel MAP Kinase Pathway Signaling Targets by Functional Proteomics and Mass Spectrometry. *Molecular Cell* 2000; 6: 1343-1354.
- 2. **Louie DF**, Gloor, KK, Galasinski SC, et al. Phosphorylation and Subcellular Redistribution of High Mobility Group Proteins 14 and 17, Analyzed by Mass Spectrometry. *Protein Science* 2000; 9:170-179.
- 3. McCarthy DL, **Louie DF**, Copley SD. Identification of a Covalent Intermediate between Glutathione and Cysteine 13 Formed during Catalysis of Tetrachlorohydroquinone Dehalogenase. *J. Am. Chem. Soc.* 1997; 119: 11337-11338.
- 4. **Louie DF**, Resing KA, Lewis TS, et al. Mass Spectrometric Analysis of 40 S Ribosomal Proteins from Rat-1 Fibroblasts. *J Biol Chem* (United States) 1996; 271(45): 28189-98.
- 5. **Louie D** and Serwer P (Abstract). Effects of Excluded Volume on the Condensation and Cohesive-ended Joining of Bacteriophage Lambda DNA. *Biophysical J.* 1992; 61: A363.
- 6. Serwer P, **Louie D**, Hayes SJ, Griess GA (1991). Overcoming the Limitations of Gel Electrophoresis: Fractionation of 0.05-0.29 Mb Open Circular DNA. In (Cantor CR, Lim HA, eds.) *Electrophoresis, Supercomputing and the Human Genome. World Scientific*, Singapore. p. 230-234.
- 7. **Louie D** and Serwer P. Effects of Temperature on Excluded Volume-promoted Cyclization and Concatermerization of Cohesive-ended DNA Longer than 0.04 Mb. *Nucleic Acids Res.* 1991; 19: 3047-3054.
- 8. **Louie D** and Serwer P. Blunt-ended Ligation Can Be Used to Produce DNA Ladders with Rung Spacing as Large as 0.17 Mb. *Nucleic Acids Res.* 1990; 18: 3090.
- 9. **Louie D** and Serwer P. A Hybride Mode of Rotating Gel Electrophoresis for Separating Linear and Circular Duplex DNA. *Appl. And Theor. Electrophor.* 1989; 1: 169-173.

Community Service Activities

• President, (2006-2008), volunteer

Rocky Mountain Chinese School, nonprofit organization, Boulder, CO

• Principal, (2005-2006), volunteer

Rocky Mountain Chinese School, nonprofit organization, Boulder, CO

• Vice Principal, (2004-2005), volunteer
Rocky Mountain Chinese School, nonprofit organization, Boulder, CO

• Science Fair Judge (1999-2007), volunteer

Bear Creek Elementary School, Boulder, CO