

**Curriculum Vitae**  
Joslynn S. Lee  
Fort Lewis College  
Department of Chemistry and Biochemistry

**EDUCATION**

University of Minnesota Medical School, Duluth, MN  
Post-doctoral Research Associate 2014-2015  
Mentor: Matthew G. Slattery, Ph.D.

Northeastern University, Boston, MA  
Ph.D. in Chemistry 2008-2014  
Mentor(s): Mary Jo Ondrechen, Ph.D. and Graham Jones, Ph.D.

Fort Lewis College, Durango, CO  
B.S. Biochemistry and Cellular & Molecular Biology 2002-2006  
Mentor: Leslie Sommerville, Ph.D.

**PROFESSIONAL APPOINTMENTS**

Fort Lewis College, Durango, CO 2019-current  
Assistant Professor of Biochemistry  
Department of Chemistry and Biochemistry

Howard Hughes Medical Institute, Chevy Chase, MD 2017-2019  
Science Education Fellow  
Undergraduate and Graduate Programs (UGP)

Cold Spring Harbor Laboratory, Cold Spring Harbor, NY 2015-2017  
Data Science Educator  
DNA Learning Center (DNALC)

Vertex Pharmaceuticals Inc., Cambridge, MA 2006-2008  
Research Associate  
Drug Innovative Pharmacokinetics (DIPK) - Discovery Bioanalytical Chemistry group

**RESEARCH AND TEACHING GRANTS**

*HHMI Inclusive Excellence (IE3) Grant* 09/2022  
Funding awarded; written jointly with Dr. Steve Fenster, Dr. Joanna Gordon-Casey, Sherri Spriggs  
Project Title: Increasing Capacity to Support Equitable and Inclusive Learning Environments for Introductory-level STEM Students across the LCC2 Learning Community

*Colorado Outdoor Equity Grant* 05/2022  
Funding awarded to FLC: \$25,020 (over 2 years)  
Project Title: First-year launch Chemistry on the Trail

*Monitoring Environmental Microbiome (MEM) Workshop* 06/2021  
Internal grant at University of Colorado School of Medicine and University of Colorado Cancer Center with Dr. Larry Hunter. Funded to develop advanced bioinformatics of microbiome data science.  
Funding awarded: \$100,000 (over 5 years)  
Project Title: Colorado Biochemical Informatics Training Program

*Chan Zuckerberg Initiative Essential Open Source Software (EOSS) Diversity & Inclusion Grants* 08/2021  
Co-wrote grant with Dr. Greg Caporaso (PI) Northern Arizona University  
Funding awarded to FLC: \$57,000 (over 2 years)  
Project Title: EOSS-DI-0000000019 Engaging Native American Students in Scientific Computing with QIIME 2

## RESEARCH AND TEACHING GRANTS

<i>Fort Lewis College Experiential &amp; Community-Engaged Learning (EXCEL)</i> Funding awarded: \$642	2023
<i>Fort Lewis College Traditional Scholarship/Research (TS/R)</i> Funding awarded: \$1989.00	2022
<i>Fort Lewis College Traditional Scholarship/Research (TS/R)</i> Funding awarded: \$1984.51; written jointly with Dr. Callie Cole	2021
<i>Fort Lewis College Teaching, Innovation, Pedagogy and Assessment (TIPA)</i> Funding awarded: \$2338	2021
<i>Fort Lewis College Traditional Scholarship/Research (TS/R)</i> Funding awarded: \$1950	2020
<i>Biomedical Learning and Student Training (BLaST) program Equipment Proposal</i> Funding awarded: \$11,928; written jointly with Dr. Jeff McFarlane	2020
<i>Fort Lewis College Open Educational Resources (OER) Grant</i> Funding awarded: \$750/faculty; written jointly with Dr. Bill Collins, Dr. Kenny Miller, Dr. Aimee Morris	2020
<i>Fort Lewis College Teaching and Learning Team (TLT) Faculty Learning Circle</i> Funding awarded: \$500/faculty; written jointly with Dr. Joanna Casey-Gordon and Dr. Melissa Clutter	2019
<i>Fort Lewis College Title III: Pilot student research</i> Funding awarded: \$3500	2019
<i>NIH T15 LM009451-12S1 Hunter, Larry (PI)</i> Collaborated with Larry Hunter, Director, Center for Computational Pharmacology & Computational Bioscience Program at School of Medicine at the University of Colorado Denver. Funding awarded: \$75,000 <u>Project Title:</u> Colorado Biochemical Informatics Training Program	09/2018 – 06/2019
<i>NIH SEPA R25OD16511-03S1 Micklos, David (PI)</i> Co-wrote grant for partial salary support to develop microbiome data analysis material for high school students. Funding awarded: \$80,000 <u>Project Title:</u> NIH Big Data to Knowledge (BD2K) Initiative Supplemental.	08/2016 – 07/2017

## RESEARCH AND TEACHING GRANTS SUBMITTED/DECLINED

<i>NSF Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences</i> Funding: \$187,779 (over 2 years) PI <u>Project Title:</u> LEAPS-MPS Exploring the microbial community of the Silverton Acidic Mine Drainage (AMD) Declined funding; Scoring: E/VG/G/F	01/2022
---	---------

## FELLOWSHIPS AND AWARDS

2023	Kavli Frontiers in Science Fellow
2020	STEM Trading Card from Science Delivered!
2020	Fort Lewis College Chemistry Department Alumni Award
2015	National Postdoctoral Association - National Cancer Institute (NCI) Travel Award
2015	Travel award Committee for the Advancement of Women Chemists (COAch)
2014	Cold Spring Harbor Lab Computational and Comparative Genomics Scholarship
2013	Presidential Volunteer Service Award from the White House – Bronze
2012	Protein Society Finn Wold Travel Award to San Diego, CA
2012	St. Jude's Hospital National Graduate Student Symposium (NGSS) Speaker

## FELLOWSHIPS AND AWARDS (continued)

2011	Travel Award to AISES National Conference, Minneapolis, MN
2011	ISMB/ECCB International Conference Travel Award to Vienna, Austria
2010	National Science Foundation - Graduate Research Fellowship Program
2010	NSF-IGERT Nanomedicine Traineeship at Northeastern University
2010	Graduate Student Oral Presentation (1 <sup>st</sup> Place) AISES National Conference
2010	AISES Sequoyah Fellow
2008	Vertex Team VOCAP (*2nd highest company award)
2006	Fort Lewis Chemistry Department Senior Award
2005	Fort Lewis College Dean's List
2004-2006	Minority Access for Research Careers (MARC) U*STAR Fellow

## TEACHING EXPERIENCE

### Assistant Professor of Chemistry, Fort Lewis College, Durango, CO

2019 – current

Currently teaching general chemistry I/II lecture and laboratories and general biochemistry I/II lecture and laboratory courses. During Fall 2019/Spring 2020, I supervised a dually enrolled high school undergraduate student to design DNA crosslinking molecules *in silico*. The student advanced to the CO State (2<sup>nd</sup> place) and the Virtual Regeneron ISEF 2020 (virtual). Fall 2020, I designed and taught the online version of CHEM 150 Fundamentals of Chemistry I Atoms and Molecules Lab ONLINE. Summer 2021, three students working on a microbial community analysis project. Fall 2021, developed a new advanced topics CHEM 454 Computational Chemistry course. Fall 2022, I developed a new first-year launch course called Chemistry on the Trail.

### Monitoring Environmental Microbiomes, Fort Lewis College, Durango, CO

05/2022 – current

Five-day workshops for undergraduate students to gain experience in the wet and computation labs around the environmental microbiome. Funding for this by University of Colorado – Anschutz campus through 05/2026. The workshop 2022 was hosted at Fort Lewis College in collaboration with Dr. Jennifer Lowell (Public Health).

### Cultural and Academic Research Experience (CARE), Northern Arizona University, Flagstaff, AZ

June-July 2019, July 2020, July 2021, July 2022

I co-lead the CARE program is a new program designed for high school students to gain biomedical and science research experience along with developing professional skills. I designed course material for the 10-week (2019) and virtual 4-week (2020) programs. In 2019, I piloted my microbial community analysis course-based research experience project. In 2020, I updated and wrote new kitchen chemistry labs to perform at home. I supervised a total of four undergraduate peer mentors for the program in which we set-up the lab and organized day-to-day tasks. In 2022, published the Chemistry and Culture workbook piloted during these teaching opportunities.

### Instructor & Curriculum Development, The Carpentries, Oakland, CA

2016 – current

These two-day workshops teach foundational coding and data science skills. For this volunteer position, I traveled to various locations and co-organized/taught six workshops. I am an active and certified instructor for the organization. In 2019-2020, I served on Executive Council that meets once a month to strategize the organization's finances and strategic goals. In 2021, I joined the Diversity, Equity and Inclusion committee to review and update Carpentries curriculum and build a new Cultural, Ethical, Legal, and Social Implications (CESLI) curriculum.

### Science Education Fellow, Howard Hughes Medical Institute, Chevy Chase, MD

Microbiome CRE Training, Little Big Horn Community College, Crow, MT

07/2018

I developed the documentation, training material and led instruction for teaching faculty. The material covered UNIX Commands, how to run QIIME2 Software Analysis and inclusive teaching practices in the classroom. GitHub online material: <https://github.com/joslynnlee/qiime2-workflow-cyverse/wiki>

### Genomic Science and Leadership Initiative Workshop

05/2016-05/2019

These are five-day workshops for undergraduate students to gain experience in the wet and computation labs. Funding for this was through grants from the National Science Foundation and National Institutes of Health. The workshops were hosted at Fort Lewis College and University of Colorado – Auraria campus, Denver, CO. I

collaborated with Dr. Jennifer Lowell (Public Health) and began a research project studying the waterways of the San Juan Watershed.

### **TEACHING EXPERIENCE (continued)**

Science Education Alliance (SEA) – Phage Hunters Advancing Genomics and Evolutionary Sciences (PHAGES) 08/2017, 06/2018  
I led the teaching for 20 NIH Summer Interns who were high school and undergraduate students. We followed training material from the SEA-PHAGES program.

HMI Science Education Alliance (SEA) – Phage Hunters Advancing Genomics and Evolutionary Sciences (PHAGES) 2017-2018  
I was a teaching assistant for these seven-day workshops that trained undergraduate faculty in the areas of microbial methods and bioinformatics.

**Data Science Educator, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY** 06/2016  
RNA-Seq for the Next Generation Virtual Workshop  
This two-week virtual faculty training workshop supported undergraduate faculty to learn statistical language R to perform RNA-Seq analysis. I designed the material and taught 2 full-days of the course.

CyVerse Tools and Services Workshop 2016  
These two-day workshops were designed for undergraduate/graduate students, postdocs and faculty to train them in computational infrastructure for the NSF-funded project, CyVerse. I co-taught 6 workshops at 4 different universities and 2 conferences.

**Post-doctoral Fellow, University of Minnesota Medical School, Duluth, MN** 2014-2015  
Introduction to Molecular Modeling  
Designed and taught one-week lecture and lab course targeted for the high school and undergraduate level.

**Graduate Student, Northeastern University, Boston, MA** 2011 and 2012  
Advanced Lab Techniques, Molecular Modeling Section  
This week-long course was targeted for the first-year chemistry graduate students. I designed the materials and taught the course.

Undergraduate General Chemistry 1 Lab 2009  
Assisted a professor for three sections of general chemistry course for non-chemistry Majors.

Undergraduate Honors General Chemistry 1 2008-2009  
Assisted a professor for three recitation sections of a general chemistry course for honors majors. I also taught one section of the lab. This accelerated course covered two sections of general chemistry in one semester.

**Undergraduate Student, Fort Lewis College, Durango, CO** 2004-2006  
Undergraduate Student Tutor  
I worked for the LSAMP program's Individual Tutor Services (one-on-one) for Biochemistry I and General Chemistry I & II.

### **MENTORING EXPERIENCE**

**Assistant Professor of Chemistry, Fort Lewis College, Durango, CO** 2019-current  
CZI – Chan Zuckerberg Initiative  
NSF RENAUI – National Science Foundation Research Engaging Native American Undergraduates  
FYRE - FLC Chemistry and Biochemistry Department First-Year Research Experience  
NIH-BLAST – National Institutes of Health Biomedical Learning and Student Training

<b>Mentee Name</b>	<b>Dates</b>	<b>Mentee Position</b>	<b>URM</b>	<b>Project/Product</b>	<b>Current Position</b>
Dawson Bell	01/23 - current	Research Student, CHEM 499 course	No	Computational Analysis of Carboxyspermidine decarboxylase	Current FLC student
Avey Lander	01/23- current	Research Student, FYRE funded	Yes	GKM microbiome analysis	Current FLC student
Jack Demmert	08/22- current	Research Student, Pay it Forward funded	Yes	GKM microbiome analysis	Current FLC student
Garrett Payer	08/22- 12/22	Research Student, BLAST funded	No	Upper Animas Microbiome with Dr. Heidi Steltzer	2022 FLC graduate
Johnette Ostlund	01/22- current	Research Student, FYRE funded	No	GKM Whole Genome Nanopore Sequencing	Current FLC student
Kai Brantley	01/22- current	Research Student, U-RISE funded	Yes	RNA-Seq project with Dr. David Blake	Current FLC student
Carlos Sanchez	05/22- 09/22	Research Student, CZI funded	Yes	CZI Air Quality and computing	Current FLC student
Cherisse Charley	01/22- 05/22	Research Student, RENAU funded	Yes	GKM microbiome analysis	Current FLC student
Braxton Bruce	01/22- 05/22	Research Student, BLAST funded	No	GKM microbiome analysis	2022 FLC graduate
Jacob Bollinger	09/21- 05/22	Research Student, RENAU funded	Yes	DD-PCR project with Dr. Christie Chatterley	2022 FLC graduate
Kamron Whitewater	05/21- 05/22	RENAU Summer Research	Yes	GKM microbiome analysis	2022 FLC graduate
Shundiina Fisaga	05/21- 09/06	RENAU Summer Research	Yes	GKM microbiome analysis	FLC Student
Haylee Steffes	05/21- 09/06	RENAU Summer Research	Yes	GKM microbiome analysis	2022 FLC graduate
Milo Acheson-Adams	01/20- 05/21	Research Student, Start-up funded	Yes	Generated bioinformatics pipeline for microbiome analysis	2021 FLC graduate; PhD Student Florida State University
Emily McWilliams	01/20- 12/20	Research Student, Title III Research	Yes	Body farm microbiome analysis	2020 FLC Graduate
Jessica Smith	01/20- 05/21	Research Student	Yes	Purple Air Quality Data Analysis Project with Dr. Joanna Gordon Casey	Current FLC Student
ShawnaRay Yazzie	01/20- 05/20	Research Student	Yes	GKM microbiome analysis	2020 FLC Graduate
Kylie Guiles	11/19- 05/21	High School Research Student	No	Advanced to the 2020 CO State (2 <sup>nd</sup> place) and the Virtual Regeneron ISEF 2020 science fair	Dual High School Student; Current undergraduate Denver University

## MENTORING EXPERIENCE (con't)

### Graduate Student, Northeastern University, Boston, MA

#### Mentoring NEU Summer REU Program

2010-2013

Served as a mentor for three undergraduate students participating in NEU's research experience program. I met with the daily and helped on their computational research project.

- 1) Roberto Tapia, May – August 2013, "Computationally Guided Drug Discovery of Human Prostate Specific Membrane Antigen (PSMA) Inhibitors." Currently an OBGYN intern at Rush Medical College.
- 2) Dorothy Tovar, May – August 2012, "Function prediction on a Co-enzyme A Disulfide Reductase family protein from *Clostridium difficile*." Received her Ph.D, in microbiology from Stanford University in 2022.
- 3) Martha Torres, May – August 2010, "Determine the functional sites of proteins using homology models of the protein structures." Received her Ph.D. in physical chemistry from UCLA in 2013.

## RESEARCH EXPERIENCE

### *University of Minnesota Medical School, Duluth campus, Duluth, MN*

2014-2015

#### Post-doctoral Fellow

I worked in the lab of Dr. Matthew G. Slattery using high throughput *in vitro* approaches and tissue-specific genomics to explore transcription factor-DNA binding specificity and measure the effect of DNA polymorphisms on transcription factor-DNA interactions. I gained experience in sequencing approaches (ChIP-seq, RNA-seq, SELEX-seq.), genomic analysis tools (command line and in GALAXY), programming languages (python/R), PBS scripting on UMinnesota's supercomputing center.

### *Northeastern University, Boston, MA*

2008-2014

#### Graduate Research Assistant

I worked in the labs of Dr. Mary Jo Ondrechen and Dr. Graham B. Jones. For Project 1: I designed an automated computational method (C++/Java), SALSA, to classify the biochemical functional roles of proteins within a superfamily. The method predicts the function of proteins with known structure and unknown function or with an assigned hypothetical function. For Project 2: I screened small molecules *in silico* to target the human A2A adenosine receptor in order to identify hypoxic tumors for purposes of detecting early stage cancer. Collaborated with medicinal chemists and cellular biologists to develop and test *in vivo* small molecules.

### *Fort Lewis College, Durango, CO*

2004-2006

#### Undergraduate Research Assistant

Under the MARC program, I worked in the lab of Dr. Leslie Sommerville and investigated the metabolic processes of *Acidobacterium capsulatum* in hopes of understanding bioremediation. I used structural data, practiced bacterial culturing techniques, purified proteins and performed selected protein assays using a UV spectrometer and HPLC for analysis.

### *Dartmouth Medical School, Hanover, NH*

2005

#### Undergraduate Research Assistant

Under the Summer Undergraduate Research Fellowship (SURF) program, I worked in the lab of Dr. Harry Higgs. I investigated lymphocyte cell surface protrusions using scanning electron microscopy (SEM) and fluorescence microscopy to determine their role in cell motility and metastasis.

## PUBLICATIONS

*Original Research Articles* (\*\*with FLC undergraduate students, †corresponding author, \* with undergraduate students)

†\*\* **Lee, JS**, Lowell, JL, Whitewater, K, Roane, TM, Miller, CS, Chan, AP, Sylvester, A, Jackson, D, Hunter, LE. (2022) Monitoring Environmental Microbiomes (MEM): Alignment of Microbiology and Computational Biology Competencies within a Culturally Integrated Curriculum and Research Framework. [Molecular Ecology Resources](#). *SUBMITTED*

## PUBLICATIONS (con't)

†Network, T. G. D. S. C., Alcazar, R., Alvarez, M., Arnold, R., Ayalew, M., Best, L. G., **Lee, JS**, et al. & Xie, X. (2022). Diversifying the Genomic Data Science Research Community. *Genome Research*. <http://doi:10.1101/gr.276496.121>

\*\*Hinckley, JL, Bingman, MT, **Lee, JS**, Bradley, CP, and Cole, CA. (2022) Volatile Profile Survey of Five Apple Varieties Grown in Southwest Colorado from Juice to Finished, Dry-Hopped Cider. *Journal of the American Society of Brewing Chemists*. <https://doi.org/10.1080/03610470.2021.2013645>

Johnson, DM, Wells, MB, Fox, R., **Lee, JS**, Loganathan, R., Levings, D., Bastien, A. Slattery, MG, and Andrew, DJ. (2020). CrebA increases secretory capacity through direct transcriptional regulation of the secretory machinery, a subset of secretory cargo, and other key regulators. *Traffic*, **21**: 9.

Bolyen, E., Rideout, J.R., Dillon, M.R., ... **Lee, JS**, et al. Caporaso, JC. Reproducible, interactive, scalable and extensible microbiome data science using QIIME 2. (2019) *Nat Biotechnol*, **37**: 1091.

Mills, CL, Garg, R., **Lee, JS**, Tian, L., Suciu, A., Cooperman, GD, Beuning, PJ, and Ondrechen, MJ (2018), Functional classification of protein structures by local structure matching in graph representation. *Protein Science*, **27**: 1125-1135.

Zhang, Y., Lee, JK, Toso, EA, **Lee, JS**, Choi SH, Slattery, MG, Aihara, H., Kyba, M. (2016). DNA-binding sequence specificity of DUX4. *Skelet Muscle* **6**: 8.

Loganathan, R., **Lee, JS**, Wells, MB, Slattery, MG, Andrew, DJ. (2016) Ribbon regulates morphogenesis of the *Drosophila* embryonic salivary gland through both transcriptional repression and activation. *Dev Biol* **409**(1): 234-250.

Lacher, S., **Lee, JS**, Wang, X., Campbell, M.R., Bell, DA, Bell, Slattery, MG. (2015) Beyond antioxidant genes in the ancient Nrf2 regulatory network. *Free Radical Biology and Medicine*. Special Issue: Nrf2 Regulated Redox Signaling and Metabolism in Physiology and Medicine. **88**, Part B: 452-465.

Thomas, R., **Lee, JS**, Chevalier, V., Selesniemi, K., Hatfield, S., Ondrechen, MJ, Sitkovsky, M, Jones, GB. (2013) Design and evaluation of xanthine based adenosine receptor antagonists: Potential hypoxia targeted immunotherapies. *Bioorganic & Medicinal Chemistry*. **21**, **23**, 7453-7464.

Wang. Z., Yin, P., **Lee, JS**, Parasuram, R., Somarowthu, S., Ondrechen, MJ. (2013) "Protein Function Annotation with Structurally Aligned Local Sites of Activity (SALSAs), *BMC Bioinformatics*. **14**(Suppl 3):S13.

Parasuram, R., **Lee, JS**, Yin, P., Somarowthu, S., Ondrechen, MJ. (2010) Functional Classification of Protein 3D Structures From Predicted Local Interaction Sites. *Journal of Bioinformatics and Computational Biology*. **8**, SI1, 1-15.

### Chapters in Books

**Lee, JS** and MJ Ondrechen. (2011) Electrostatic Properties for Protein Functional Site Prediction. In: Kihara, D. (1st Ed.) *Protein Function Prediction for Omics Era*. (pp. 183-196) USA: Springer.

### Textbook

†Lee, N.; **Lee, J.**; Genchev, J. R.; Collison, C. G., REActivities: General Chemistry Lab Workbook. 1st ed.; [XanEdu](http://XanEdu): 2022. ISBN: 978-1-71147-067-2.

### General articles

**Lee, JS**. (2021) Chemical and Engineering News (C&EN) newsletter series on How to Land Your First Job, "Put together an impressive CV or resume."

## PRESENTATIONS

### Scientific and Education Presentations

#### *“Training and Engaging Indigenous Undergrads in Microbiome Research”*

- 2023 Poster Presentation, Kavli Frontiers in Science Symposium, National Academies of Science, Irvine, CA  
2023 Invited Oral Presentation, Precision Health & Genomics: Indigenous Mentoring and Ethics (PRIME) Seminar Series, University of Colorado Anschutz Medical Campus, Aurora, CO  
2023 Invited Oral Presentation, Full Circle of Native and Indigenous Scientists in Quantitative Biology” symposium, University of California San Francisco, San Francisco, CA

#### *“Exploring the Microbial Communities of the San Juan Watershed”*

- 2022 Invited Oral Presentation, Stanford University ChemAIMS 4th annual seminar speaker, Stanford, CA  
2021 Invited Oral Presentation, University of Oregon Alliance for Diversity in Science and Engineering (virtual)

#### *“Overview of Microbiome Sciences”*

- 2021 Invited Oral Presentation, Indigidata Workshop ([virtual](#))

#### *“Designing a culturally inclusive STEM and health research training program for Native American students”*

- 2022 Invited Oral Presentation, Microbiome Center Consortium, Chicago, IL  
2020 Oral Presentation, ACS Rocky Mountain Regional Meeting Fall ([virtual](#))

#### *“Microbiome data science and reproducibility with QIIME 2”*

- 2019 Oral Presentation, AACR Annual Meeting 2019, Atlanta, GA

#### *“Training and Engaging URM Undergraduate Students in Genomics Research Through a Place-based Microbiome Research Project”*

- 2018 Invited Keynote Speaker, Rocky Mountain Bioinformatics Conference, Snowmass, CO

#### *“Data Science Challenges and Solutions for Student Microbiome Research”*

- 2019 Poster Presentation, Environmental Data Science Inclusion Network, Boulder, CO  
2017 Oral Presentation, Plant and Animal Genome Conference, San Diego, CA  
2017 Oral Presentation, AISES National Conference, Denver, CO

#### *“Resources and Techniques for Training Students in Computational Skills”*

- 2017 Oral Presentation, SACNAS National Conference, Salt Lake City, UT

#### *“The Power of Data to Change Climates: The Future of Food”*

- 2016 Oral Presentation, Tribal Leader/Scholar Forum, Spokane, WA

#### *“A global view of the genes controlling epithelial tube morphogenesis in Drosophila”*

- 2015 Oral Presentation, Aufderheide Memorial Lecture and Research Symposium

#### *“Using the Structurally Aligned Local Sites of Activity (SALSA) computational method to determine biochemical function of structural genomics proteins”*

- 2013 Poster Presentation, Protein Society Meeting, Boston, MA  
2013 Poster Presentation (Sci-Mix), ACS National Meeting, New Orleans, LA  
2013 Poster Presentation, Pacific Symposium on Biocomputing, Big Island, HI  
2012 Oral Presentation, Computational Biology and Innovation Symposium, Dublin, Ireland.  
2012 Poster Presentation, Trends in Enzymology Conference, Gottingen, Germany  
2012 Poster Presentation, ACS National Meeting, Philadelphia, PA  
2011 Oral Presentation, AISES National Conference, Minneapolis, MN  
2011 Poster Presentation, ISMB/ECCB Meeting, Vienna, Austria  
2010 Poster Presentation, ISMB Meeting, Boston, MA



## **PRESENTATIONS (continued)**

*"Molecular modeling and small molecular design of xanthine based adenosine receptor antagonists"*

- 2013 Poster Presentation, RICT International Conference on Medicinal Chemistry, Nice, France
- 2012 Poster Presentation, Protein Society Meeting, San Diego, CA
- 2012 Oral Presentation, St. Jude's Hospital National Graduate Student Symposium (NGSS), Memphis, TN
- 2010 Oral Presentation, AISES National Conference, Albuquerque, NM

*"Glucose Metabolism and Enzymology in Acidobacterium capsulatum"*

- 2006 Poster Presentation, ACS National Meeting, San Diego, CA

*"Investigation Surface Structures of Lymphocytes"*

- 2006 Poster Presentation, ASCB National Conference, San Francisco, CA

## **Cultural and Mentoring Lectures/Talks/Presentations**

*"How does one become a scientist?"*

- 2022 Fort Lewis College Undergraduate Speaker Series, Durango, CO

*"The CARE Principles for Indigenous Data Governance"*

- 2022 Keynote Speaker, CarpentryCon: Expanding Data Frontiers, ([virtual](#))

*"Time for collective healing: Recognizing & Reconciling FLC's Federal Indian Boarding School History"*

- 2021 Invited Speaker, SACNAS National Conference R.E.D. Round Table - Live Panel with Q&A ([virtual](#))

*"Teaching Indigenous Pedagogies"*

- 2022 Presenter, Bureau of Indian Education, Navajo Nation ([virtual](#))
- 2021 Panelist, Fort Lewis College Day of Dialogue, Durango, CO ([virtual](#))

*"Balancing Diné and Keres Cultural Heritage in Academic Science"*

- 2021 Invited Speaker, University of Oregon Alliance for Diversity in Science & Engineering ([virtual](#))
- 2021 Keynote speaker, AISES Region 1 Regional Conference, ([virtual](#))
- 2021 Keynote speaker, Alliance for Diversity in Science & Engineering Researchers Conference ([virtual](#))
- 2019 Invited speaker, United Tribes Technical College, Bismarck, ND ([virtual](#))
- 2019 Invited speaker, Utah State University-Eastern, Blanding, UT
- 2019 Invited speaker, Whitehorse High School, Montezuma Creek, UT
- 2017 Invited speaker, Native American Center Speaker Series, Northern Arizona University, Flagstaff, AZ
- 2016 Keynote speaker, Maximizing Access to Research Careers at Fort Lewis College, Durango, CO
- 2016 Invited speaker, University of the Fraser Valley, Abbotsford, BC, Canada

*"More Than Just a Researcher"*

- 2015 National Postdoctoral Association National Meeting, Baltimore, MD

*"Native American Women Chemists of Color"*

- 2018 ACS National Conference, Washington, DC
- 2015 ACS National Conference, Denver, CO

*"How to Overcome Challenges in Graduate School Programs"*

- 2014 AISES National Conference, November 2014, Orlando, FL
  - 2012 AISES National Conference, November 2012. Anchorage, AK
- "Make the Best of Graduate School to Land that Next Opportunity: A Postdoctoral Position"*
- 2013 AISES National Conference, November 2013. Denver, CO

*"Discovering the Scientist Within: My perspective of interdisciplinary research"*

- 2011 Invited speaker, Maximizing Access to Research Careers MARC U\*STAR Symposium at Fort Lewis College, Durango, CO

## **FORT LEWIS COLLEGE DEPARTMENT AND INSTITUTION SERVICE**

VP of Diversity Affairs Search Committee	2022
Faculty Senate Salary Committee	2022
Howard Hughes Medical Institute (HHMI) Inclusive Excellence 3 Committee	2021 – current
Co-Advisor Registered Student Organization Pueblo Alliance	2021 – current
Advisor Registered Student Organization SACNAS Chapter	2021 – current
Faculty Senate	2021 – current
MARC/U-RISE Scholar Selection Committee	2021 – current
Land Acknowledgement Task Force	2021
Indigenous Working Group	2020 – current
Diversity, Equity and Inclusion (DEI) Advisory Council	2019 – 2020
Fort Lewis College History Committee	2019 – 2021
Chemistry Department Open Resources for Gen Chem Subcommittee	2019 – 2020
Faculty and Staff People of Color	2019 – current

## **EXTRAMURAL PROFESSIONAL ACTIVITIES AND MEMBERSHIPS**

2022	Microbiome Centers Consortium (MCC) Education Committee
2021 – current	Equity Council, The Carpentries
2021	Reviewer, NSF Targeted Infusion Program (TIP) HBCU Undergraduate Program
2021 – current	Genomic Data Science Community Network
2020 – 2021	EDSIN-QUBES Open Education Fellows: An Open Education Community
2019	Reviewer, Human Biology Journal
2019	Judge, Front Range Microbiome Symposium Meeting (FRMS)
2018 - 2020	Executive Council, The Carpentries
2017	Reviewer, NSF Tribal Colleges and Universities Program (TCUP)
2016 - 2017	Education Committee, NIH Genomic Literacy Education & Engagement Initiative (GLEE)
2016 - 2018	Advisor, NIH Tribal Colleges Consortium on Genomics Training
2016 - 2017	Community Instructor, The Carpentries
2015 - 2016	Technical Advisor Navajo Nation, NIH Tribal Advisory Committee
2015 - 2016	Member, NSF Northeast Big Data Innovation Hub
2014 - 2015	Member, National Postdoctoral Association
2014	Reviewer, American Indian Graduate Center
2013 - current	Member, Society Advancing Chicanos & Native Americans in Science (SACNAS)
2010 - current	Member, American Indian Science and Engineering Society (AISES)
2009 - 2015	Member, International Society for Computation Biology
2009 - 2012	Member, Protein Society
2004 - current	Member, American Chemical Society

## **EXTRAMURAL PROFESSIONAL DEVELOPMENT**

2021	American Chemical Society Rocky Mountain Regional Meeting, Session Chair: Comp Chemistry
2021	American Chemical Society Postdoc to Faculty (P2F) Facilitator
2018	QIIME 2 Workshop Teaching Assistant
2018	HHMI-NIH Center for Scientific Review Mock Review Workshop
2017	ACS National Conference: Chemistry and Culture Symposium Organizer
2016	QIIME 2 Workshop
2015	ASCB MAC Postdoctoral Fellows Career Development Program
2014	SACNAS Postdoc Writing Retreat Fellowship
2014	Cold Spring Harbor Lab Computational and Comparative Genomics Course
2012	Academy of Future Science Faculty

## FEATURED ARTICLES/INTERVIEW/BIOGRAPHIES

- [“Engaging Native American Students in Open Source Software Development”](#) From Chan Zuckerberg Initiative Science (January 2023)
- [“Once a boarding school, a college now aims to reclaim education for Native people”](#) From National Public Radio (January 2023)
- [“As the U.S. confronts its past harm to Indigenous people, a new movement is helping Native students take back their education”](#) From Colorado Public Radio (December 2022)
- [“FLC pursues inclusive undergraduate science education with support of major funder”](#) From FLC News (December 2022)
- [“Colorado college reckons with a troubling legacy of erasing Indigenous culture”](#) From PBS News Hour (May 2022)
- [“Reconciliation and Resilience”](#) From Telluride Magazine (January 2022)
- [“Colorado Voices: An Indian Boarding School”](#) From Rocky Mountain PBS (November 2021)
- [“New collaborative program aims to prepare Native American students for careers in scientific computing”](#) From The NAU Review (September 2021)
- [“Indigenous college faculty and students lead the removal of racist panels in Colorado”](#) From High Country News (September 2021)
- [“A reckoning with Fort Lewis College's dark past”](#) From Rocky Mountain PBS (September 2021)
- [“Training the Next Generation of Indigenous Data Scientists”](#) From New York Times (July 2021)
- [“Beyond Chemistry: FLC professor, Joslynn Lee, works to increase Native American representation in the sciences”](#) From The Independent (November 2020)
- [“Come meet our STEM Stars! The STEM Trading Cards Series Two”](#) From Science Delivered (October 2020)
- [“This Native American chemist's path through industry and education eventually led her back to academia and home”](#) From ACS Career Ladder (February 2020)
- [“NIH Summer Interns Bond Through HHMI Hands-on Phage-Hunting Workshop”](#) From HHMI SEA (August 2017)
- [“Lybrook Students Visit San Juan College”](#) From NIH SEPA Science Around Us (Feb 2017)
- [“Native chemist draws on life experiences to mentor Native students in higher education”](#) From Fort Lewis College Magazine (January 2017)
- [“Indigenizing Academia in the Sciences”](#) From SACNAS (June 2016)
- [“Chemistry grad's spirit carries her far”](#) From Fort Lewis College Magazine (September 2012)
- [“Chemistry, Community and Change”](#) From News@Northeastern (August 2012)
- [“Setting the Pace”](#) From Winds of Change Magazine (July 2012)