Andrew D. Klocko, Ph.D.
Curriculum Vitae

Current Addresses:

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Education:

Doctor of Philosophy (2009) in Genetics, University of Wisconsin-Madison

Bachelor of Science (2002) in Cellular, Molecular Biology and Genetics, University of Maryland, College Park

Professional Experience:

2017-present Assistant Professor: University of Colorado Colorado Springs, Department of Chemistry & Biochemistry.
Research: Characterizing genome organization and epigenetics in *Neurospora crassa.*

2016-2017 Research Associate: University of Oregon, Institute of Molecular Biology.
Principal Investigator: Dr. Eric Selker
Research: Determine and characterize factors controlling DNA methylation, heterochromatin formation, and genome organization in *Neurospora crassa.*

2010-2016 Postdoctoral Scholar: University of Oregon, Institute of Molecular Biology.
Principal Investigator: Dr. Eric Selker
Research: Identify and characterize genes involved in DNA methylation and heterochromatin formation in the fungal model organism *Neurospora crassa.*

2009-2010 Postdoctoral Scholar: University of Michigan-Ann Arbor, Department of Molecular, Cellular, Developmental Biology.
Principal Investigator: Dr. Lyle Simmons
Research: Exploring the role of DNA replication machinery role in mismatch repair in *Bacillus subtilis*, a bacterial model system.

2003-2009 Graduate Student: University of Wisconsin-Madison, Laboratory of Genetics.
Thesis advisor: Dr. Karen Wassarman
Research: Dissecting the interaction between the small RNA "6S RNA" and the RNA Polymerase Eσ^{70} in *Escherichia coli.*

Professional Experience (continued):

2002-2003 Research Assistant, University of Maryland Biotechnology Institute.
Principal Investigator: Dr. David O'Brochta
Research: Characterizing the Transposase *mos1* in the mosquito *Aedes aegypti* and assessing transgenic *Anopheles gambiae* mosquitos

1998-2002 Undergraduate Research: Cellular, Molecular Biology and Genetics, University of Maryland, College Park.
Advisors: Dr. Dale Bottrell, Dr. Adam Richman, Dr. David O'Brochta
Research: Exploring role of capsaicin in predator/prey interactions; Characterizing *Anopholes gambiae* innate immunity proteins and characterizing the *mos1* transposase in *Aedes aegypti*.

Refereed Publications

‡*UCCS Students from the Klocko lab*

1. Ebot-Ojong F, Ferraro AR, Yap RE, Kaddar F‡, Hull-Crew C‡, Scadden AW‡, Deaven AM, **Klocko AD**, Lewis ZA. (2025) "Histone deacetylase-1 is required for epigenomic stability in *Neurospora crassa*." Preprint available at *BioRxiv*, doi: 10.1101/2025.01.17.633486. *In press* at *PNAS*.

2. Reckard AT‡, Pandeya A, Voris J‡, Gonzalez Cruz C‡, Oluwadare O, **Klocko AD***. (2024) "A Constitutive Heterochromatic Region Shapes Genome Organization and Impacts Gene Expression in *Neurospora crassa*". *BMC Genomics* **25**, 1215. Pubmed ID (PMID): 39701998.
*Corresponding Author
Preprint available on *BioRxiv*, doi: 10.1101/2024.06.07.597955.

3. Scadden AW‡, Graybill A‡, Hull-Crew C‡, Lundberg TJ‡, Lande NM‡, **Klocko AD***. (2023) "Histone deacetylation and cytosine methylation compartmentalize heterochromatic regions in the genome organization of *Neurospora crassa*." *Proc Natl Acad Sci.* **120**(47): e2311249120. doi: 10.1073/pnas.2311249120. PMID: 37963248.
*Corresponding Author
Preprint available on *BioRxiv*, doi: 10.1101/2023.07.03.547530.

4. Torres DE, Reckard AT‡, **Klocko AD***#, Seidl M*#. (2023) "Nuclear genome organization in fungi: From gene folding to Rabl chromosomes." *FEMS Microbiol Rev.* **47**(3): fuad021, https://doi.org/10.1093/femsre/fuad021. PMID: 37197899
*Corresponding Authors; #Equal contribution

5. Rodriguez S‡, Ward A‡, Reckard AT‡, Shtanko Y‡, Hull-Crew C‡, **Klocko AD***. (2022) "The genome organization of *Neurospora crassa* at high-resolution reveals principles of chromatin topology." G3 (Genes, Genetics, Genomes). 12(5):jkac053. PMID: 35244156.
*Corresponding author

6. **Klocko AD**, Summers CA, Glover ML, Parrish R, Storck WK, McNaught KJ, Moss ND, Gotting K, Stewart A, Morrison AM, Payne L, Hatakeyama S, Selker EU. (2020) "Selection and Characterization of Mutants Defective in DNA Methylation in *Neurospora crassa*." Genetics. **216**(3): 671-88. PMID: 32873602

Refereed Publications (continued)

7. **Klocko AD***, Uesaka M, Ormsby T, Rountree MR, Wiles ET, Adhvaryu KK, Honda S, Selker EU* (2019) "Nucleosome Positioning by an Evolutionarily Conserved Chromatin Remodeler Prevents Aberrant DNA Methylation in Neurospora." Genetics. **211**(2): 563-78. PMID: 30554169. *Corresponding authors

8. Wilinski D, Buter N, **Klocko AD**, Lapointe CP, Selker EU, Gasch AP, Wickens M. (2017) Reply to Hogan: Direct evidence of RNA-protein interactions and rewiring. Proc Natl Acad Sci **114**(51): E10854-5. PMID: 29208722

9. Wilinski D, Buter N, **Klocko AD**, Lapointe CP, Selker EU, Gasch AP, Wickens M (2017) "Recurrent rewiring and emergence of RNA regulatory networks." *Proc Natl Acad Sci* **114**(14): E2816-25. PMID: 28320951

10. **Klocko AD**, Ormsby T, Galazka J, Leggett N, Uesaka M, Honda S, Freitag M, Selker EU (2016) "Normal chromosome conformation depends on subtelomeric facultative heterochromatin in *Neurospora crassa*." *Proc Natl Acad Sci* **113**(52): 15048–53. PMID: 27856763
    Previewed by "Commentary": Xiong J, Zhang Z, Zhu B. (2016) "Polycomb 'polypacks' the chromatin." PNAS **113**(52): 14878-80.

11. Galazka J*, **Klocko AD***, Uesaka M, Honda S, Selker EU, Freitag M (2016) "Neurospora chromosomes are organized by blocks of importin alpha-dependent heterochromatin that are largely independent of H3K9me3." *Genome Res.* **26**(8):1069-80. PMID: 27260477
    *Equal Contribution

12. **Klocko AD**, Rountree MR, Grisafi PL, Adhvaryu KK, Hays SH, Selker EU (2015) "Neurospora Importin α Is Required for Normal Heterochromatic Formation and DNA Methylation." *PLoS Genet.* **11**(3): e1005083. PMID: 25793375

13. **Klocko AD**, Schroeder JW, Walsh BW, Lenhart JS, Evans ML, Simmons LA (2011) Mismatch repair causes the dynamic release of an essential DNA polymerase from the replication fork. *Mol. Microbiol* **82**: 648-663. PMID: 21958350

14. Pillon MC, Lorenowicz JJ, Uckelmann M, **Klocko AD**, Mitchell RR, Chung YS, Modrich P, Walker GC, Simmons LA, Friedhoff P, Guarné A (2010) Structure of the endonuclease domain of MutL: unlicensed to cut. *Mol Cell* **39**: 145-151. PMID: 20603082

15. Dupes NM, Walsh BW, **Klocko AD**, Lenhart JS, Frodyma HL, Gessert DA, Pavlick CE, Simmons LA (2010) Mutations in *Bacillus subtilis* β clamp that separate its roles in DNA replication from mismatch repair. *J. Bact* **192**: 3452-63. PMID: 20453097

16. **Klocko AD**, Crafton KM, Walsh BW, Lenhart JS, Simmons LA (2010) Imaging of mismatch repair complexes and cellular responses to DNA damage in *Bacillus subtilis*. *J. of Vis. Exp.* (36). PMID: 20142799

17. **Klocko AD** and Wassarman KM (2009) 6S RNA binding to Eσ^{70} requires a positively charged surface of σ^{70} region 4.2. *Mol Microbiol* **73**: 152-64. PMID: 19538447
    Previewed by a "Microcommentary": Decker KB, Hinton DM (2009) The secret to 6S: regulating RNA polymerase by ribo-sequestration. *Mol Microbiol* **73**: 137-40.

Refereed Publications (continued)

18. **Klocko, AD** (2009) Dissecting the interaction between *Escherichia coli* 6S RNA and the RNA Polymerase σ^{70} subunit. Doctor of Philosophy Dissertation (Genetics), University of Wisconsin – Madison.

19. Cavanagh AT, **Klocko AD**, Lui X, Wassarman KM (2008) Promoter specificity for 6S RNA regulation of transcription is determined by core promoter sequences and competition for region 4.2 of σ^{70}. *Mol Microbiol* **67**: 1242-56. PMID: 18208528

20. Kim W, Koo H, Richman AM, Seeley D, Vizioli J, **Klocko AD**, O'Brochta DA (2004) Ectopic expression of a cecropin transgene in the human malaria vector mosquito *Anopheles gambiae* (Diptera: Culicidae): effects on susceptibility to Plasmodium. *J. Med. Entomol.* **41**: 447-55. PMID: 15185949

21. Wilson R, Orsetti J, **Klocko AD**, Aluvihare C, Peckham E, Atkinson PW, Lehane MJ, O'Brochta DA (2003) Post-integration behavior of a Mos1 mariner gene vector in *Aedes aegypti*. *Insect Biochem. Mol. Biol.* **33**: 853-63. PMID: 12915177

Book Chapters

1. Courtney AJ, Ferraro AR, **Klocko AD***, Lewis ZA* "Chromatin Structure and Function in *Neurospora crassa*." The Mycota, A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research, Genetics and Biotechnology, third edition. Benz J.P., Schipper K. (eds). Vol 2. Springer. First online: October 29, 2020.
   DOI: 10.1007/978-3-030-49924-2_1
   *Corresponding authors

Manuscripts "in progress", submitted to, or "in revision" at Peer Reviewed Journals

‡*UCCS Students from the Klocko lab*

1. Villalba de la Pena M, Hull-Crew C‡, Hutter T‡, Vino C‡, Klocko AD, Kronholm I. "Epialleles in *Neurospora crassa*." In preparation

2. Sleiman S, McNaught KJ, **Klocko AD**, Selker EU, Dragon F. "Conditional growth of *Neurospora crassa* and *Saccharomyces cerevisiae* caused by a point mutation in domain Va of a conserved DEAD-box RNA helicase." In revision at *Genetics*, 202X.

Presentations at Scientific Conferences and Seminars at Universities

Invited Conference or University Oral Presentations

1. **Andrew D. Klocko**. "Genome organization and function in the filamentous fungus *Neurospora crassa*." Western University (Colorado), Gunnison, CO; September 19, 2025.

2. **Andrew D. Klocko**. "Assessing the plasticity of the *Neurospora crassa* genome organization" Chromatin and Chromosome Biology Section, Fungal Genetics 2024 International Conference, Asilomar, CA; March 14, 2024.

Invited Conference or University Oral Presentations (continued)

3. **Andrew D. Klocko**. "Histone deacetylation and cytosine methylation compartmentalize heterochromatic regions in the genome organization of *Neurospora crassa*." Genomics and Genome Function Section, Neurospora Meeting, Navasota, TX; October 1-4, 2023.

4. **Andrew D. Klocko**. "The genome organization of *Neurospora crassa* at high-resolution reveals principles of chromatin topology." Rocky Mountain Yeast Meeting, Online; January 7, 2022.

5. **Andrew D. Klocko**. "The genome organization of *Neurospora crassa* at high-resolution reveals principles of chromatin topology." Genomics and Genome Function Section, Neurospora Meeting, Navasota, TX; October 18, 2021.

6. **Andrew D. Klocko**. "Genome organization of the simple filamentous fungus *Neurospora crassa*." Seminar at Colorado State University – Pueblo, Department of Chemistry. Pueblo, CO; October 8, 2019.

7. **Andrew D. Klocko**. "Genome organization of the simple filamentous fungus *Neurospora crassa*." Seminar at Colorado College, Department of Biology. Colorado Springs, CO; September 12, 2019.

8. **Andrew D. Klocko**. "Nucleosome positioning by DIM-1 prevents aberrant DNA methylation in Neurospora." Gene Expression and Epigenetics Section, Neurospora Meeting, Asilomar, CA; October 2018.

9. **Andrew D. Klocko**. "Hi-C of WT and heterochromatin mutant *Neurospora crassa* strains." Epigenetics section, Fungal Genetics Meeting, Asilomar, CA; March 2017.

Conference Oral Presentations

1. **Andrew D. Klocko**, Jonathan M. Galazka, Michael R. Rountree, Shan H. Hays, Keyur K. Adhvaryu, Michael Freitag, and Eric U. Selker. "Neurospora Importin a required for heterochromatin formation and proper nuclear organization." Gordon Research Conference, Bentley University, Boston MA; August 2-7, 2015.

2. **Andrew D. Klocko**, Michael R. Rountree, Shan H. Hays, Keyur K. Adhvaryu, and Eric U. Selker. "Neurospora Importin a localizes chromatin modifying complexes to sub-nuclear chromatin targets." Neurospora Meeting, Asilomar, CA; March 6-9, 2014.

3. **Andrew D. Klocko**, Michael R. Rountree, Shan H. Hays, Keyur K. Adhvaryu, and Eric U. Selker. "NUP-6 (Importin a) is required for DNA methylation by a non-canonical mechanism in *Neurospora crassa*." West Coast Chromatin Meeting, Asilomar, CA; Dec. 2011.

Conference Poster Presentations

‡*UCCS Students from the Klocko lab*

1. Kaddar F‡, Scadden AW‡, Graybill AS‡, Hull-Crew C‡, Lundberg TJ‡, Lande NM‡, **Klocko AD**. Heterochromatic histone deacetylase loss alters genome organization, histone acetylation, and facultative heterochromatin in Neurospora. Fungal Genetics 2024 Conference; March 14, 2024, Asilomar, CA.

2. Martin H‡, Hull-Crew C‡, Ramirez N‡, Weir M‡, Windebank B‡, Haggren W, **Klocko AD**. Determining the Impact of Perfluorinated Compounds on Microbial Species Diversity. Fungal Genetics 2024 Conference; March 14, 2024, Asilomar, CA.
   Winner, best Undergraduate Poster – Fungal Genetics 2024 Conference

3. Lundberg TJ‡, Lande NM‡, Hanson SJ‡, **Klocko AD**. Characterizing the histone post-translational modification enrichment and genome organization in species of the Ogataea clade. Fungal Genetics 2024 Conference; March 14, 2024, Asilomar, CA.

4. Lundberg TJ‡, Turevski D, **Klocko AD**, Hanson SJ. Chromatin Structure in the Ogataea polymorpha Species Complex. The Allied Genetics Conference. March 6-10, 2024. Washington D.C.

5. Hull-Crew C‡, Rodriguez S‡, Shtanko Y‡, Lundberg TJ‡, Dellacroce D‡, **Klocko AD**. Topological Consequences of Large-Scale Genome Rearrangements in *Neurospora crassa.* Neurospora 2023 Conference; October 1-4, 2023 Camp Allen (Navasota), TX.

6. Kaddar F*‡, Lande NM*‡, Hull-Crew C‡, Rodriguez S‡, Toscano V‡, **Klocko AD**. Characterizing the landscape of histone post-translational modifications in strains of *Neurospora crassa* with single translocations. Neurospora 2023 Conference; October 1-4, 2023 Camp Allen (Navasota), TX.
   *co-presenters

7. **AD Klocko**, Scadden AW‡, Graybill AS‡, Hull-Crew C‡, Lundberg TJ‡, Lande NM‡. "Histone deacetylation and cytosine methylation are required for heterochromatin compartmentalization within the genome organization of *Neurospora crassa*". Gordon Research Conference - Epigenetics, Holderness, NH. August 6-11, 2023.

8. Ward A‡, Graybill A‡, **AD Klocko**. "Assessing changes in the genome organization of *Neurospora crassa* upon altering epigenetic marks". Neurospora Meeting, Navasota, TX; October 17-20, 2021.

9. Reckard AT‡, Rodriguez S‡, Ward A‡, **AD Klocko**. "Characterizing the genome organization of *Neurospora crassa* at high resolution". 2018 Neurospora Meeting, Asilomar, CA; October 18-21, 2018.

10. Rodriguez S‡, Reckard AT‡, Ward A‡, **AD Klocko**. "Characterization of the higher order organization of the heterochromatin machinery genes in the nucleus of *Neurospora crassa*". 2018 Neurospora Meeting, Asilomar, CA; October 18-21, 2018.

11. **AD Klocko**, Rountree MR, Hays SH, Adhvaryu KK, Selker EU. "Neurospora Importin a localizes chromatin modifying complexes to sub-nuclear chromatin targets." 2014 Neurospora Meeting, Asilomar, CA; March. 6-9 2014.

Conference Poster Presentations (continued)

12. Summers CA*, **AD Klocko***, Parrish R, McNaught K, Moss N, Gotting K, Borkar R, Lindner C, Stewart A, Morrison A, Payne L, Shiver A, EU. Selker. Saturating the Neurospora genome for mutants defective in methylation (*dim*)." 2014 Neurospora Meeting, Asilomar, CA; March 6-9, 2014.
    *co-presenters

13. **AD Klocko**, Rountree MR, Hays SH, Adhvaryu KK, Selker EU "NUP-6 (Importin a) may act as a Platform for the DNA Methylation Machinery in *Neurospora crassa.*" Fungal Genetics Conference, Asilomar, CA; March, 2013.

14. Cavanagh AT, **AD Klocko**, Liu X, Wassarman KM. "Promoter specificity for 6S RNA regulation of transcription is determined by core promoter sequences and competition for region 4.2 of σ^{70}." Bacteria and Phages Meeting; Madison WI, 2007.

University Oral Presentations

1. Martin H, **AD Klocko**. Determining the Impact of Perfluorinated Compounds on Microbial Species Diversity. Colorado Springs Undergraduate Research Forum; April 27, 2024, Colorado Springs, CO.

2. Lundberg TJ, **AD Klocko**. "Evolution of the Organization of a Fungal Genome." Colorado Springs Undergraduate Research Forum; April 24, 2021, Colorado Springs, CO.

3. Shtanko Y, **AD Klocko**. "Genomic Organization and Translocations." Mountain Lion Research Week; December 2020, Colorado Springs, CO.

4. **AD Klocko**. "Identifying microbes surviving in soil contaminated with Perfluorinated compounds" Seminar at University of Colorado Colorado Springs, Department of Chemistry & Biochemistry. Colorado Springs, CO; Sept. 25, 2020

5. **AD Klocko**. "Genome organization of the simple filamentous fungus *Neurospora crassa*." Seminar at University of Colorado Colorado Springs, Department of Chemistry & Biochemistry. Colorado Springs, CO; Sept. 13, 2019

6. **AD Klocko.** "Neurospora defective in methylation (*dim*) mutants." Institute of Molecular Biology (IMB) Retreat (University of Oregon), Shadow Hills Country Club, Junction City, OR; Sept. 2015.

7. **AD Klocko**. "The *dim-3* mutant provides insights into DNA methylation in *Neurospora crassa*." Summer Program in Undergraduate Research (SPUR), University of Oregon, Eugene OR; July 24, 2012.

8. **AD Klocko.** "Control of DNA Methylation and Heterochromatin formation in Neurospora." Institute of Molecular Biology (IMB) Retreat (University of Oregon), at Oregon Institute of Marine Biology, Charleston, OR; September. 2012.

9. **AD Klocko**. "Mismatch repair causes the dynamic release of an essential DNA polymerase from the replication fork." University of Oregon, Institute of Molecular Biology Seminar. October 14, 2011.

University Poster Presentations

‡*UCCS Students from the Klocko lab*

1. Voris J‡, Reckard AT‡, Pandeya A, Gonzalez Cruz C‡, Oluwadare O, **Klocko AD***. (2025) "A Constitutive Heterochromatic Region Shapes Genome Organization and Impacts Gene Expression in *Neurospora crassa*". Colorado Springs Undergraduate Research Forum; April 26, 2025, Colorado Springs, CO.
2. Gonzalez Cruz C‡, Hull-Crew C‡, Kaddar F‡, Lande N‡, **Klocko AD***. (2025) "Characterizing the landscape of histone post-translational modifications in single translocation strains of *Neurospora crassa*". Colorado Springs Undergraduate Research Forum; April 26, 2025, Colorado Springs, CO.
3. Voris J‡, Reckard AT‡, Pandeya A, Gonzalez Cruz C‡, Oluwadare O, **Klocko AD***. (2024) "A Constitutive Heterochromatic Region Shapes Genome Organization and Impacts Gene Expression in *Neurospora crassa*". Mountain Lion Research Day, UCCS campus; December 6, 2024.
4. Kaddar F‡, Scadden AW‡, Graybill AS‡, Hull-Crew C‡, Lundberg TJ‡, Lande NM‡, **Klocko AD**. Heterochromatic histone deacetylase loss alters genome organization, histone acetylation, and facultative heterochromatin in Neurospora. Mountain Lion Research Day, UCCS campus; December 6, 2024.
5. Lundberg TJ‡, Lande NM‡, Hanson SJ, **Klocko AD**. Characterizing the histone post-translational modification enrichment and genome organization in species of the Ogataea clade. Mountain Lion Research Day, UCCS campus; December 6, 2024.
6. Kaddar F‡, Scadden AW‡, Graybill AS‡, Hull-Crew C‡, Lundberg TJ‡, Lande NM‡, **Klocko AD**. Heterochromatic histone deacetylase loss alters genome organization, histone acetylation, and facultative heterochromatin in Neurospora. Colorado Springs Undergraduate Research Forum; April 27, 2024, Colorado Springs, CO.
7. Lundberg TJ‡, Lande NM‡, Hanson SJ, **Klocko AD**. Characterizing the histone post-translational modification enrichment and genome organization in species of the Ogataea clade. Colorado Springs Undergraduate Research Forum; April 27, 2024, Colorado Springs, CO.
8. Hull-Crew C‡, Rodriguez S‡, Shtanko Y‡, Lundberg TJ‡, Dellacroce D‡, **Klocko AD**. Topological Consequences of Large-Scale Genome Rearrangements in *Neurospora crassa.* Mountain Lion Research Day, UCCS campus; December 8, 2023.
9. Kaddar F*‡, Lande NM*‡, Hull-Crew C‡, Rodriguez S‡, Toscano V‡, **Klocko AD**. Characterizing the landscape of histone post-translational modifications in strains of *Neurospora crassa* with single translocations. Mountain Lion Research Day, UCCS campus; December 8, 2023.

   *co-presenters
10. Martin H‡, Hull-Crew C‡, Ramirez N‡, Weir M‡, Windebank B‡, Haggren W, **Klocko AD**. Determining the Impact of Perfluorinated Compounds on Microbial Species Diversity. Mountain Lion Research Day, UCCS campus; December 8, 2023.

University Poster Presentations (continued)

11. Toscano V‡, **Klocko AD**. "Understanding the Connection Between Gene Expression and Genome Organization Changes That Occur due to Translocations." Colorado Springs Undergraduate Research Forum, April 22, 2023.
12. Lundberg T‡, Schaaf A‡, **Klocko AD**. "Evolution of the Organization of a Fungal Genome" Mountain Lion Research Day; UCCS Campus. December 3, 2021.
13. Ward A‡, Graybill A‡, **Klocko AD**. "Assessing changes in the genome organization of *Neurospora crassa* upon altering epigenetic marks". Mountain Lion Research Day; UCCS Campus. December 3, 2021.
14. Lundberg T‡, **Klocko AD**. "Evolution of the Organization of a Fungal Genome" - Recorded Powerpoint Presentation. Colorado Springs Undergraduate Research Forum, April 24, 2021.
15. Shtanko Y‡, **Klocko AD**. "Influence of Translocations on Genomic Organization and Gene Expression in *Neurospora crassa*" Colorado Springs Undergraduate Research Forum, April 24, 2021.
16. Shtanko Y*‡, **Klocko AD**. "Influence of Translocations on Genomic Organization and Gene Expression in *Neurospora crassa*" UCCS Mountain Lion Research Day, December 2019. ***winner, Best Poster Presentation, MLRD 2019***
11. Ward A‡, **Klocko AD**. "Assessing changes in the genomic organization of *Neurospora crassa* upon altering epigenetic marks" UCCS Mountain Lion Research Day, December 2019.
12. Rodriguez S‡, **Klocko AD**. "Effect of Large Genome Rearrangements on Genomic Organization in *Neurospora crassa*." UCCS Mountain Lion Research Day, December 2019.
13. Ward A‡, **Klocko AD**. "Exploring the changes in the genome organization of Neurospora crassa upon altering epigenetic marks" Colorado Springs Undergraduate Research Forum, UCCS campus, April 2019.
14. Rodriguez S‡, Shtanko Y‡, **Klocko AD**. Influence of Translocations on Genomic Organization and Gene Expression in *Neurospora crassa*. Colorado Springs Undergraduate Research Forum, UCCS campus, April 2019.
15. Reckard AT‡, **Klocko AD**. Genome organization changes in *Neurospora crassa* upon deleting silent DNA regions. Colorado Springs Undergraduate Research Forum, UCCS campus, April 2019.
16. Reckard AT‡, Rodriguez S‡, Ward A‡, **Klocko AD**. "Characterizing the genome organization of *Neurospora crassa* at high resolution". Mountain Lion Research Day, UCCS campus, December 2018.
17. Rodriguez S‡, Reckard AT‡, Ward A‡, **Klocko AD**. "Characterization of the higher order organization of the heterochromatin machinery genes in the nucleus of *Neurospora crassa*". Mountain Lion Research Day, UCCS campus, December 2018.

University Poster Presentations (continued)

18. Rodriguez S‡, Reckard AT‡, Khatri M‡, **Klocko AD**. Characterization of the higher order organization of the heterochromatin machinery genes in the nucleus of *Neurospora crassa*. Colorado Springs Undergraduate Research Forum, Colorado College campus, May 2018.
19. Reckard AT‡, Rodriguez S‡, **Klocko AD**. Characterization of the higher order organization of the heterochromatin machinery genes in the nucleus of *Neurospora crassa*. Mountain Lion Research Day, UCCS campus, December 2017.
20. **AD Klocko**, Rountree MR, Hays SH, Adhvaryu KK, Selker EU. "NUP-6 (Importin α) Chaperones the DNA Methylation Machinery to an Appropriate Sub-Nuclear Localization in *Neurospora crassa*". IMB Retreat, Charleston, OR, 2011.
21. **AD Klocko**, Wassarman KM "Region 4.2 of σ^{70} mediates binding of *E. coli* RNA Polymerase to 6S RNA." Laboratory of Genetics Departmental Retreat, Devil's Head Resort WI, 2008.
22. **AD Klocko**, Wassarman KM. "Region 4.2 of σ^{70} mediates binding of *E. coli* RNA Polymerase to 6S RNA." Kenneth B. Raper Symposium on Microbiology, Madison WI, 2008.
23. **AD Klocko**, Wassarman KM. "Dissecting the interaction between 6S RNA and σ^{70}-RNA Polymerase." Laboratory of Genetics Departmental Retreat, Devil's Head Resort WI, 2007.
24. **AD Klocko**, Wassarman KM. "Dissecting the interaction between 6S RNA and σ^{70}-RNA Polymerase." Kenneth B. Raper Symposium on Microbiology, Madison WI, 2007.
25. **AD Klocko**, Wassarman KM. "What role do the σ^{70} DNA binding domains play in 6S RNA binding to RNA Polymerase?" Laboratory of Genetics Departmental Retreat, Devil's Head Resort WI, 2006.
26. **AD Klocko**, Wassarman KM. "What role do the σ^{70} DNA binding domains play in 6S RNA binding to RNA Polymerase?" Kenneth B. Raper Symposium on Microbiology, Madison WI, 2006.
27. **AD Klocko**, Wassarman KM. "Identifying the regions of σ^{70} that are important for the interaction of 6S RNA with σ^{70}-RNA Polymerase." Kenneth B. Raper Symposium on Microbiology, Madison WI, 2005.
28. **AD Klocko**, Wassarman KM. "Identifying the regions of σ^{70} that are important for the interaction of 6S RNA with σ^{70}-RNA Polymerase." Laboratory of Genetics Departmental Retreat, Devil's Head Resort WI, 2005.

Grants and Scholarship – *External Grants Awarded*

2025: Academic Research Enhancement Award (AREA) – R15 program
Award Number: 2R15GM140396-02 (renewal application)
Organization: National Institute of Health, General Medical Sciences (NIGMS)
Title: Genome topology in the filamentous fungus *Neurospora crassa*: organizing factors and impact on genome function
Role: **Principal Investigator** – Andrew D. Klocko
Location: University of Colorado Colorado Springs
Funds Awarded: $375,000 direct costs, $183,750 indirect costs
Total funds awarded: $558,750

2020: Academic Research Enhancement Award (AREA) – R15 program
Award Number: 1R15GM140396-01
Organization: National Institute of Health, General Medical Sciences (NIGMS)
Title: Genome topology in the filamentous fungus *Neurospora crassa*: organizing factors and impact on genome function
Role: **Principal Investigator** – Andrew D. Klocko
Location: University of Colorado Colorado Springs
Funds Awarded: $300,000 direct costs, $120,483 indirect costs
Total funds awarded: $420,483

2022: Computer and Information Science and Engineering (CISE) Research Initiation Initiative
Award Number: 2153205
Organization: National Science Foundation
Title: CRII:III:Development of deep learning methods for high-resolution 3D genome structure spatial reconstruction
Role: Supporting
Location: University of Colorado Colorado Springs
Funds Awarded: $175,000 (total funds)

2021: NSF Major Research Instrumentation (MRI)
Organization: National Science Foundation
Title: Acquisition of a Confocal Raman Microscope to Advance Research and Undergraduate Teaching in Southern Colorado
Role: Supporting (minor user)
Location: Colorado College
Funds Awarded: $199,196 (total funds)

2021: NSF Major Research Instrumentation (MRI)
Organization: National Science Foundation
Title: MRI: Acquisition of a high-performance computing cluster for next-generation computational science in Southern Colorado
Role: Supporting (minor user)
Location: Colorado College
Funds Awarded: $435,228 (total funds)

Internal (UCCS-specific) Grants Awarded

2023: Undergraduate Research Academy (URA) Grant
Title: Characterizing the effect of Perfluorinated Compounds (PFCs) on microbial communities, the survivability of individual bacteria in the environment, and bacterial viability.
Location: University of Colorado Colorado Springs
Student: Ms. Halie Martin
Funds Awarded: $4,000

2022: Faculty Revitalization Grant – UCCS Provost Office
Title: Characterizing the chromatin landscape and genome organization in distinct species of the Ogataea clade.
Location: University of Colorado Colorado Springs
Role: Principal Investigator – Andrew D. Klocko
Funds Awarded: $19,764.00

2022: Undergraduate Research Academy (URA) Grant
Title: Exploring how changes in epigenetic marks impacts the organization of the fungal genome.
Location: University of Colorado Colorado Springs
Student: Ms. Victoria Toscano
Funds Awarded: $3,500

2021: Undergraduate Research Academy (URA) Grant
Title: Exploring how fungal genome organization evolves.
Location: University of Colorado Colorado Springs
Student: Ms. Tiffany Lundberg
Funds Awarded: $3,500

2021: Undergraduate Research Academy (URA) Grant
Title: Exploring how changes in epigenetic marks impacts the organization of the fungal genome.
Location: University of Colorado Colorado Springs
Student: Ms. Alayne Graybill
Funds Awarded: $3,500

2020: UCCS LAS Student-Faculty Research/Creative Works Grant
Title: The impact of translocations on the fungal genome organization
Student: Ms. Yulia Shtanko
Location: University of Colorado Colorado Springs
Funds Awarded: $3,000

2020: UCCS LAS Student-Faculty Research/Creative Works Grant
Title: Evolution of genome organization of four yeast species in the Ogataea clade
Student: Ms. Tiffany Lundberg
Location: University of Colorado Colorado Springs
Funds: $2,500

Internal (UCCS-specific) Grants Awarded (Continued)

2019: Undergraduate Research Academy (URA) Grant
Title: Characterizing the impact of translocations on genome organization and gene expression.
Location: University of Colorado Colorado Springs
Student: Ms. Yulia Shtanko
Funds Awarded: $3,500

2019: UCCS Letters, Arts, and Sciences (LAS) Dean's Summer Creative Work Stipend
Title: Analyzing changes in the genomic organization of silent DNA across the *Neurospora crassa* genome upon altering epigenetic marks
Student: Ms. Ashley Ward
Location: University of Colorado Colorado Springs
Funds Awarded: $1,600 (graduate student stipend)

2018: UCCS LAS Dean's Interdepartmental Award
Title: Environmental PFC Impact Collaboration (EPIC) in the Fountain Creek Watershed: Determining the Environmental, Ecological, and Societal Impact of PFCs
Faculty Members: Janel Owens, Kevin Tvrdy, Andrew Klocko, Wendy Haggren, Cerian Gibbes, Emily Mooney, James Kovacs, Allen Schoffstall, David Weiss
Location: University of Colorado Colorado Springs
Funds Awarded: $125,000 for three years ($10,500 / three years for my part)

2018: UCCS LAS Student-Faculty Research/Creative Works Grant
Title: Influence of translocations in genomic organization and gene expression in *Neurospora crassa*.
Student: Ms. Sara Rodriguez
Location: University of Colorado Colorado Springs
Funds Awarded: $3,250

2018: UCCS LAS Student-Faculty Research/Creative Works Grant
Title: Characterization of Higher-Order Genome Organization in *N. crassa*.
Student: Mr. Andrew Reckard
Location: University of Colorado Colorado Springs
Funds Awarded: $3,250

2018: UCCS LAS Dean's Summer Creative Work Stipend
Title: Impact of translocations in genomic organization and gene expression in *Neurospora crassa*.
Student: Ms. Sara Rodriguez
Location: University of Colorado Colorado Springs
Funds Awarded: $1,200

Internal (UCCS-specific) Grants Awarded (Continued)

2018: Undergraduate Research Academy (URA) Grant
Title: Deciphering the role of silent DNA regions in genome organization.
Location: University of Colorado Colorado Springs
Student: Mr. Andrew Reckard
Funds Awarded: $3,500

2018: Committee on Research and Creative Works (CRCW) Seed Grant
Title: Characterization of the genome organization of the filamentous fungus *Neurospora crassa*.
Location: University of Colorado Colorado Springs
Funds Awarded: $7,500

External Grants Awarded – at other institutions

2011: Ruth L. Kirschstein Postdoctoral Fellowship
Award number: 1F32GM097821-01A1
Organization: National Institute of General Medical Sciences (National Institutes of Health)
Title: Genetic analysis of DNA methylation in *Neurospora crassa*
Location: University of Oregon
Funds: Year one: $51,326 Year two: $53,942

2003-2005: NIH Predoctoral Training Grant in Genetics
Award Number: 5T32GM07133
Organization: National Institute of General Medical Sciences (National Institutes of Health)
Location: University of Wisconsin - Madison
Funds: ~$22,000 per year for two years

2001: Howard Hughes Medical Institute Undergraduate Research Fellowship
Location: University of Maryland, College Park
Funds: $5,000 for an undergraduate student research project

External and Internal Grant Proposals Submitted

2025: Maximizing Investigators' Research Award (MIRA) – R35 program
Organization: National Institute of Health, General Medical Sciences (NIGMS)
Title: Genome organization and function in fungi
Role: **Principal Investigator** – Andrew D. Klocko
Location: University of Colorado Colorado Springs
Total Funds Requested: $1,862,500
Status: Submitted and under review

External and Internal Grant Proposals Submitted (continued)

2025: Undergraduate Research Academy (URA) Grant
Title: Characterizing the global changes in silent chromatin composition in *Neurospora crassa* strains deficient of a demethylase complex.
Location: University of Colorado Colorado Springs
Student: Mr Nickolas Lande
Funds Requested: $4,000
Status: Denied

2025: Committee on Research and Creative Works (CRCW) Grant
Title: Assessing how the Shelterin complex at chromosome ends (telomeres) impact fungal genome organization.
Location: University of Colorado Colorado Springs
Funds Requested: $7,500
Status: Denied

2024: Academic Research Enhancement Award (AREA) – R15 program, Renewal
Organization: National Institute of Health, General Medical Sciences (NIGMS)
Title: Genome topology in the filamentous fungus *Neurospora crassa*: organizing factors and impact on genome function
Role: **Principal Investigator** – Andrew D. Klocko
Location: University of Colorado Colorado Springs
Total Funds Requested: $558,750
Status: Peer Review completed; Impact Factor Score*: 28
**For impact factor, the scale is 10-90, with the lowest score being the best grant.*

2022: National Science Foundation: Building Research Capacity – Biology (BRC-BIO)
Title: HiCMultiView: A Robust Computational Framework for Hi-C Genome Structure Visualization across Multiple Dimensions
PI: Oluwatosin Oluwadare; Co-PI: Andrew D. Klocko
Location: University of Colorado Colorado Springs
Funds Requested: $498,705
Status: Declined, despite positive reviews

2021: National Institutes of Health – Basic Instrumentation Grant
Title: Track I MRI: Acquisition of a fluorescence microscope to enhance NIH-sponsored research at UCCS
Location: University of Colorado Colorado Springs
Funds Requested: $147,035
Status: Declined, despite positive reviews

2020: National Science Foundation – Major Research Instrumentation
Title: Track I MRI: Acquisition of a fluorescence microscope to enhance research and training at UCCS
Location: University of Colorado Colorado Springs
Funds Requested: $104,737
Status: Declined, despite positive reviews

External and Internal Grant Proposals Submitted (continued)

2019: National Science Foundation – Major Research Instrumentation
Title: Track I MRI: Acquisition of a fluorescence microscope to enhance research and training at UCCS
Location: University of Colorado Colorado Springs
Funds Requested: $111,979
Status: Declined, despite positive reviews

2019: Boettcher Foundation Webb-Waring Early Career Investigator (ECI) Biomedical Research Award
Title: The role of genome organization in human health: from fungal models/pathogens to oncogenic human cells.
Location: University of Colorado Colorado Springs
Funds Requested: $235,000
Status: Denied, despite positive reviews

2018: Letters, Arts, and Sciences (LAS) Dean's Interdepartmental Award
Title: Biomedical Initiative for RNA and Disease
Faculty Members: Eugenia Olesnicky Killian, Meghan Lybecker, Jeremy Bono, Andrew Klocko, James Kovacs
Location: University of Colorado Colorado Springs
Funds Requested: $125,000
Status: Denied

2018: Boettcher Foundation Webb-Waring Early Career Investigator (ECI) Biomedical Research Award
Title: Characterization of the genome organization of the filamentous fungus *Neurospora crassa*.
Location: University of Colorado Colorado Springs
Funds Requested: $235,000
Status: Denied, despite overwhelmingly positive reviews

2018: Undergraduate Research Academy (URA) Grant
Title: Characterizing the genome organization of *Neurospora crassa*.
Location: University of Colorado Colorado Springs
Student: Ms. Sara Rodriguez
Funds Requested: $3,500
Status: Denied

2018: National Science Foundation – Major Research Instrumentation
Title: Acquisition of a fluorescence microscope to enhance research and teaching at UCCS
Location: University of Colorado Colorado Springs
Funds Requested: $74,108
Status: Returned without Review; amount requested needed to be >$100,000

External and Internal Grant Proposals Submitted (continued)

2017: LAS Student-Faculty Research / Creative Works / Community Service Awards
Title: Characterization of the Higher-Order Organization of the Heterochromatin Machinery Genes in the Nucleus of *Neurospora crassa*
Students: Ms. Sara Rodriguez and Mr. Andrew Reckard
Location: University of Colorado Colorado Springs
Funds Requested: $1,000
Status: Denied; student applicants did not have one semester of UCCS experience

Research Projects:

1. Characterizing the genome organization of the filamentous fungal model organism *Neurospora crassa.*
2. Assessing the role of epigenetic marks on Neurospora genome organization.
3. Characterizing the histone lysine specificity of a heterochromatin-specific histone deacetylase in *Neurospora crassa*.
4. Determining if histone post-translational modifications or Zinc-Finger containing proteins impact genome organization.
5. Assessing the role of the Shelterin Complex at chromosome ends (telomeres) for a role in genome organization.
6. Examining the effect of deleting heterochromatic DNA on the Neurospora genome.
7. Effect of large genome rearrangements on Neurospora genome organization.
8. Assessing the genome organization changes across the Neurospora circadian cycle.
9. Towards a complete reference genome, telomere to telomere, for *Neurospora crassa.*
10. Examining how a histone deacetylase alters Neurospora facultative heterochromatin.
11. Assessing species-specific chromatin profiles and genome topology in the Ogataea clade.
12. Examining the diversity in genome organization and constitutive heterochromatic regions in natural isolates of *Neurospora crassa*.
13. Determining the microbial species present in soil contaminated with Perfluorinated Compounds (aka “forever chemicals”) relative to uncontaminated sites.

Other Scholarship Indicators

Refereed Manuscript Citations:

Number of Refereed Manuscripts published by Andrew D. Klocko: 22
Total Citations = 1,033, Average Citations = 46.95
h-index = 14

An author with an index of *h* has published *h* manuscripts, each of which has been cited in other manuscripts at least *h* times.

Other Scholarship Indicators (continued)

Reviewer of Scholarly Works:

Peer Reviewer for the following Journals:
- 2025 – *Nature Commuications*
- 2025 – *Proceedings of the National Academy of Sciences, USA* [*PNAS*]
- 2025 – *Nucleic Acids Research – Genomics and Bioinformatics*
- 2024 – *Nucleic Acids Research*
- 2024 – *Heliyon*
- 2024 – *iScience*
- 2023 – *Current Opinions in Genetics and Development*
- 2023 – *Mycologia*
- 2023 – *Genes, Genomes, and Genetics (G3)*
- 2023 – *Communication Biology*
- 2023 – *PLoS Genetics*
- 2023 – *Genome Research*
- 2023 – *MBio*
- 2022 – *EMBO J.*
- 2022 – *Trends in Genetics*
- 2022 – *Fungal Genetics and Biology*
- 2022 – *Applied and Environmental Microbiology*
- 2021 – *Frontiers in Fungal Biology*
- 2020 – *Frontiers in Microbiology*
- 2018 – *Molecular Microbiology*
- 2017 – *PLoS Genetics*
- 2015 – *PLoS One*
- 2014 – *Nucleic Acids Research*
- 2013 – *Genetics*
- 2011 – *Chromosoma*

Reviewer of Tenure Dossier of a Principal Investigator
- 2023 – Institut Pasteur (France), for Dr. Eugene Gladyshev

Reviewer of Grants submitted to funding agencies:
- 2023 – National Science Foundation
- 2018 – Agence Nationale De La Recherche (France)

Professional Society Membership

Genetics Society of America
American Chemical Society (Member# 33705668)
National Center for Faculty Development and Diversity

Teaching Experience

University of Colorado Colorado Springs *Teaching Experience*

CHEM 4201: Current Perspectives in Science & Medicine
Spring 2023 - present
Sophomore to Senior level undergraduate discussion-based class in which students broadly learn and discuss novel topics at the forefront of scientific and/or medical research. Students also chose and presented their own topic.
Topics: Male bias in science, FDA drug approval process, Fraud in Science, GMOs, antibiotics and antibiotic resistance, the microbiome, among others.
- Average number of students: ~13.67 undergraduate students

CHEM 4231/5231: Biochemistry II
Spring 2018 - 2022
Junior to Senior level undergraduate (4231) and graduate (5231) Cross-listed, lecture-based class employing active learning and problem-solving techniques.
Topics: biochemistry of carbohydrates, glycolysis, citric acid cycle, oxidative phosphorylation photosynthesis
- Average number of students: 30 (26.5 undergraduate, 3.5 graduate)

University of Colorado Colorado Springs *Teaching Experience (continued)*

CHEM 4261/5261: Advanced Biochemistry
Spring 2020 - 2021; 2023 - present
Junior to Senior level undergraduate (4261) and graduate (5261) Cross-listed, lecture-based class employing active learning and problem-solving techniques.
Topics: gene expression, chromatin, epigenetics, etiology of disease
- Average number of students: 20.2(17.4 undergraduate, 2.8 graduate)
- For the years 2021 and 2023, co-taught with Dr. Crystal Vander Zanden

CHEM 4241/5241: Biochemistry of the Gene (*discontinued*)
Spring 2018, Spring 2019 *(This class merged with Biochemistry of Membranes after SP19 to form CHEM 4261/5261 Advanced Biochemistry)*
Junior to Senior level undergraduate (4241) and graduate (5241) Cross-listed, lecture-based class employing active learning and problem-solving techniques.
Topics: gene expression, chromatin, epigenetics, etiology of disease
- Average number of students: 18 (15.5 undergraduate, 2.5 graduate)

CHEM 4221/5221: Biochemistry I
Fall 2017 - present
Junior to Senior level undergraduate (4221) and graduate (5221) cross-listed, lecture-based class employing active learning and problem solving techniques.
Topics: DNA and RNA structure/function, amino acids, protein synthesis and structure, enzyme kinetics, lipid and membrane structure and function
- Average number of students: 41.43 (39.86 undergraduate, 2.71 graduate)
- Fall 2024, Instructor Klocko did not teach class (Klocko Family emergency)

University of Colorado Colorado Springs *Teaching Experience (continued)*

CHEM 4731/5731: Bioinformatics (taught in FA18 as CHEM 4901/5901)
Fall 2018 - present
Junior to Senior level undergraduate (4901) and graduate (5901) cross-listed, 100% project-based online class employing active learning and problem-solving techniques to process, analyze, and interpret genomics data.
Topics: Chromatin Immunoprecipitation-sequencing and RNA-sequencing data processing and analysis (bioinformatics)

- Average number of students: 14.67 (11.33 undergraduate, 3.50 graduate)
- Fall 2024, was not offered (Instructor Klocko Family emergency)

Educational Training for Enhancing Teaching – outside organizations

National Academies Educational Fellow for 2015
The National Academies Summer Teaching Institute
University of Oregon, June 22-25, 2015
This workshop educated future higher education teachers about the importance of student-centered, active learning principles. Acceptance into this workshop was competitive.

Educational Training for Enhancing Teaching – UCCS based

2025: Attended the UCCS Teaching and Learning Conference
2023: Attended the UCCS GIFT Exchange – Teaching and AI in the classroom
2023: Attended the UCCS Teaching and Learning Conference
2022: Participated in the UCCS Teaching Circle – Bad ideas about writing
2022: Attended the UCCS GIFT Exchange – Mentoring the Student Research Experience
2022: Attended the UCCS Teaching and Learning Conference
2021: Attended the UCCS GIFT Exchange – Powerful Teaching Tools
2021: Attended the UCCS Teaching and Learning Conference
2018: Teaching Online Certification Program

Mentor of Students on Independent Research Projects in the Klocko Laboratory:

Student name	Project	Degree(s) earned
Sara Rodriguez	Neurospora translocations	BSc, MSc
Andrew Reckard	deletion of heterochromatic regions	BSc, MSc
Ashley Ward	epigenetic marks on genome topology	BSc, MSc
Yulia Shtanko	Neurospora translocations	Bachelor's
Ganesh Natrajan	EPIC -PFC microbe identity	Bachelor's
Clayton Hull-Crew	Neurospora translocations	BSc, MSc
Tiffany Lundberg	chromatin of Ogataea species	Bachelor's

Debbie Dellacroce	Neurospora translocations	Bachelor's
Alayne Graybill	epigenetic marks on genome topology	Bachelor's
Alekzandyr Schaaf	chromatin of Ogataea species	current student
Molly Weir	EPIC – PFC microbe identity	Bachelor's
Nathan Ramirez	EPIC – PFC microbe identity	Bachelor's
Victoria Toscano	Translocations (RNA-seq)	Bachelor's
Andrew Huang	plasmid DNA extractions	US Army Intern
Nick Lande	epigenetic marks on genome topology	current student
Halie Martin	EPIC – PFC microbe identity	current student
Farh Kaddar	Neurospora translocations	current student
Jacob Voris	deletion of heterochromatic regions	current student
Carlos Gonzalez Cruz	not decided yet	current student
Cynthia Vino	not decided yet	current student
Taylor Hutter	H2AZ genome org. and epigenetics	current student

UCCS Teaching Peer Reviewer – observed classes of:

Dr. Amanda Morgenstern
Dr. Allen Schoffstall
Dr. Crystal Vander Zanden
Dr. Kevin Tvrdy
Dr. David Weiss

Recognitions

2025: UCCS LAS Outstanding Teaching Award (*Tenure Track Category*)
2023: Elected to the Neurospora Policy Committee by Neurospora researchers
2021: Nominated for the Neurospora Policy Committee by Neurospora researchers
2019: Nominated for the UCCS Outstanding Research Mentor Award
2014: Perkins Award, Neurospora 2014 Meeting
The Perkins Award recognizes outstanding research in the Neurospora community by a graduate student or postdoctoral researcher.
2014: Donald E. Wimber Fund Award – University of Oregon Departmental Travel Award
Paid for travel to the 2015 Neurospora research conference.

Service

International Service to the Neurospora Scientific Field:

- Organizer: Neurospora 2025 International Conference
    - As a member of the Neurospora Policy Committee, it is my duty to organize the next Neurospora conference, to be held in Schroon Lake, New York
    - Collaborated with other Neurospora Policy Committee members:
        - Jen Hurley, Rensselaer Polytechnic Institute (RPI)
        - Luis Corrochano, University of Seville (Spain)
        - Scott Baker, Pacific Northwest National Laboratories

University of Colorado Colorado Springs (UCCS) Service

- UCCS College of Letters, Arts, and Sciences Polices & Procedures committee
  Fall 2022 – present
  Advisory committee to the LAS Dean about current policies.
  Met ~monthly to discuss and vet language in proposed policies.
    - Sabbatical replacement for Dr. Minette Church - Fall 2022 to Spring 2024
    - Spring 2024: Elected by the faculty to serve on the LAS P&P committee for an additional three years.
    - Elected co-chair Fall 2025 (with Kirsten Ortega)

- Colorado Springs Undergraduate Research Forum (CSURF) organizational committee
  Fall 2019 – Spring 2022
  Met ~monthly to discuss the upcoming CSURF meeting
  CSURF 2020 was cancelled (COVID-19); Planned CSURF 2021-2022.

- UCCS Master of Science Thesis Committee Member
  - Students Graduated with Master of Science degrees, unless indicated.
    - Department of Chemistry & Biochemistry students:
      - Clayton Hull-Crew - current MSc. student
      - Tiffany Lundberg - current MSc. Student
      - Farh Kaddar - current MSc. student
      - Julia Baroth
      - Kyle Talley
      - Ian Wisniewski
      - Bailee Troutman
      - Andrew Reckard
      - Ashley Ward
      - Sara Rodriguez
    - Department of Biology students:
      - Julia Hilliard
      - Amy Garces - left program after first year seminar

- Chemistry & Biochemistry Department Search Committees
  Spring/Summer 2025 – Searched for a new chemist IRC faculty member
  **committee chair*
  Summer 2024** - Searched for a new biochemist IRC faculty member
  ***committee co-chair with Dr. Crystal Vander Zanden*
  Spring 2022 – Searched for a new biochemist IRC faculty member
  Fall 2018 – Searched for a new biochemist tenure track faculty member
  Fall 2017 – Searched for a new analytical chemist tenure track faculty member

- Presenter: "Science on Tap"
  March 2018
  Jack Quinn's Pub, Colorado Springs, CO
  "Science on Tap" is a monthly community outreach program in which scholars discuss active research subjects with the Colorado Springs public.

University of Colorado Colorado Springs (UCCS) Service (continued)

- Presenter/Organizer: UCCS Department meeting of the Pike Area Leadership in Science (PALS) meeting of Colorado Springs area Science Teachers

- Chemistry & Biochemistry Tenured and Tenure-Track Faculty Meetings
  - Monthly meetings of (T)TF faculty to discuss departmental business
  - Topics include:
    - Revising "Annual Review" and "Review for Promotion & Tenure" criteria

- Chemistry & Biochemistry Departmental Meetings
  Monthly meetings of (T)TF/IRC faculty to discuss departmental business

- Commencement Faculty Attendee
  Fall and/or Spring Ceremonies from 2017 to 2023
  Excluding the year 2020 ceremonies due to the COVID-19 pandemic

- Chemistry & Biochemistry Departmental Award Ceremony Faculty Attendee
  Spring 2018-2023 Ceremonies
  Did not attend 2020-2021, due to the COVID-19 pandemic

- Recommendation letters written for National Awards
  Dr. Eric Selker – Metzenberg Award, given by the Neurospora Community

- Letter writer for Dr. Justin Shaffer - California State University – Fresno
  - Scientific Community Service
  My letter was in support of the first year review dossier of Dr. Shaffer

- Letter writer for Dr. Natalia Bernardes - U. Texas SW Medical Center
  - Scientific Community Service
  My letter was in support of Dr. Bernardes USA immigration petition

- Recommendation letters written for UCCS students (***Research students I mentored)***:
  Ms. Sara Rodriguez – Six Graduate Schools, UCCS Graduate School, UCCS Chemistry/Biochemistry Accelerated Masters Program, Graduate Research Fellowship, LAS Research Awards, and Summer Research Opportunities in Stem Cell Research
  Mr. Andrew Reckard – UCCS Graduate School, LAS Research Awards, Undergraduate Research Academy
  Ms. Ashley Ward – UCCS Graduate School, Graduate Research Fellowship, LAS Research Awards
  Ms. Yulia Shtanko – American Medical College Application Service, Undergraduate Research Academy, LAS Research Award
  Ms. Molly Weir – CASPA (Physician's Assistant school)
  Ms. Tiffany Lundberg – LAS Research Award, UCCS Chemistry/Biochemistry Accelerated Masters Program, NSF Graduate Research Fellowship Program, UCCS Graduate School
  Ms. Alayne Graybill – UCCS Biochemistry Accelerated Masters Program, American Medical College Application Service, CASPA (Physician Assistant's School)
  Ms. Victoria Toscano – UCCS Undergraduate Research Academy

- Student Letter of Recommendation writer (continued)

  Mr. Andrew Huang - American Medical College Application Service
  Ms. Farh Kaddar - UCCS Chemistry/Biochemistry Accelerated Masters Program; UCCS Graduate School; UCCS Graduate Research Fellowship application
  Ms. Cynthia Vino – UCCS Chemistry/Biochemistry Accelerated Masters Program; UCCS Graduate School
  Ms. Taylor Hutter - UCCS Chemistry/Biochemistry Accelerated Masters Program, UCCS Graduate School; UCCS Graduate Research Fellowship application
  Mr. Ethan Wright – NASA internship
  Ms. Carolyn Blaker – Children's Hospital of Colorado Internship, Nursing School
  Mr. John Cronin – American Medical College Application Service
  Mr. Philip Batterson – Oregon State University Graduate School
  Ms. Marissa Trujillo – Graduate schools (multiple) in Pharmacology
  Ms. Bailee Troutman – UCCS Graduate School, Graduate Research Fellowship
  Mr. Jeffrey Delano – American Medical College Application Service, Navy Scholarship Reference
  Mr. Ganesh Natrajan – UCCS Graduate School, UCCS Chemistry/Biochemistry Accelerated Masters Program
  Ms. Hailey Arroyo – University of Northern Colorado Biomedical Masters Program
  Mr. Isaiah Mechelse – American Medical College Application Service (three letters for three application cycles)
  Mr. Jeffery Callan – Undergraduate Research Academy, graduate school
  Ms. Kimberly Hilton – Pharmacy College Application Service (PharmCAS)
  Mr. Michael Wheeler – UCCS Graduate School, UCCS Chemistry/Biochemistry Accelerated Masters Program
  Ms. Nicole Young – AMCAS, UCCS Curiosity Scholarship, other Scholarship opportunities
  Ms. Allie Hall – Undergraduate Research Academy
  Mr. Chandler Webb – Doctor Shadowing program at UC-Memorial North
  Ms. Carly Kuehl – CO School of Public Health
  Ms. Danielle Browne – Graduate Schools
  Mr. Robert Altrich – CASPA (Physician's Assistant school)
  Ms. Stephanie Thompkins – AACOMAS - Osteopathic Medical Colleges
  Ms. Danielle Morin – American Medical College Application Service
  Ms. Amaryssa Parker – NursingCAS (Nursing School)
  Mr. Christo Clements – American Medical College Application Service
  Ms. Catalina Bui – American Medical College Application Service
  Ms. Jessica Battin – American Medical College Application Service and AACOMAS
  Mr. Jose Guzman – American Medical College Application Service
  Ms. Hannah Myers – UCCS Chemistry/Biochemistry Accelerated Masters program
  Ms. Olivia Evans – CSU MSc Program, five Ph.D. programs (multiple letters over two application cycles)
  Ms. Jennifer Burros – UCCS Chemistry/Biochemistry Accelerated Masters Program
  Ms. Aryana Rodgers – Two graduate programs
  Mr. Brent Windebank – UCCS Undergraduate Research Academy

- Student Letter of Recommendation writer (continued)

  Ms. Zoey Stealey – CASPA (Physician's Assistant school)
  Mr. Luke Arsenault – American Medical College Application Service
  Ms. Naomi Bolarinwa – MSc. and PhD. graduate programs
  Mr. Soren Saffarian – American Medical College Application Service
  Ms. Paola Carrasco – Medical Laboratory Assistant Training Program
  Ms. Julia Baroth – UCCS Graduate School, PhD. Graduate Schools
  Ms. Kyrie Milliron – UCCS Undergraduate Research Academy, UCCS Chemistry/Biochemistry Accelerated Masters Program, UCCS Graduate School, UCCS Graduate Research Fellowship
  Ms. Abigail Senne – UCCS Dept. of Chemistry Masters Program
  Ms. Tayler Baize – PostBac College Application Service
  Mr. Jamil Nemri – UCCS Curiosity Unlimited Scholarship Application
  Mr. John McCoy – Multiple Ph.D. Programs
  Mr. Skyler Colwell – American Medical College Application Service, three MSc programs in Biomedical Science
  Mr. Camden Trent – UCCS Chemistry/Biochemistry Accelerated Masters Program, NIH post-baccalaureate research program, PhD Graduate Schools
  Mr. Chandler Webb – American Medical College Application Service
  Ms. Anjali Salve – CASPA (Physician's Assistant school)
  Ms. Lyda Quach – Metropolitian State University Medical Technician training program.
  Ms. Sara Anderson – Pharmacy College Application Service (PharmCAS)
  Ms. Avishi Singh – UCCS Center for Student Research - URA application; MSc in Biomedical Sciences Graduate Schools
  Mrs. Ciara Gavin – UCCS Center for Student Research - URA application
  Mr. Joey Hamilton – UCCS Accelerated Masters Program
  Ms. Shannon Campbell – American Medical College Application Service
  Ms. Alexa Unger – American Medical College Application Service
  Mr. Kirk Scott – Veterinary Medical School Application Service
  Mr. Isaac Savoy – Orthotics and Prosthetics Graduate School
  Mr. James Beham – MSc Graduate Schools
  Mrs. Ciara Gavin – PhD Graduate Schools, CSU Fellowship
  Mr. Danny Bazan – UCCS Graduate School
  Mr. Alexander Ruiz – UCCS Graduate School
  Mr. Porter Lewis – AACOMAS - Osteopathic Medical Colleges
  Ms. Alexa Unger – Medical Schools (Interfolio)
  Ms. Julia Baroth – CU Boulder, Research Assistant Position
  Mr. Logan Jones – UCCS Graduate School