Curriculum Vitae

Dylan K. Kosma

Department of Biochemistry and Molecular Biology
University of Nevada, Reno, NV 89557
E-mail: dkosma@unr.edu, 775-682-7319

Education

Molecular Techniques in Plant Science 2010
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

Ph.D. Horticulture, Purdue University, West Lafayette, IN 2009

M.S. Plant Biology, Southern Illinois University, Carbondale, IL 2005

B.A. Plant Biology, Southern Illinois University, Carbondale, IL 2002

Certificat de Formation Initiale - French 2002
Catholic University of Lyon, Lyon, France

Professional Appointments

Assistant Professor 2015-Present
Department of Biochemistry and Molecular Biology
University of Nevada, Reno

Postdoctoral Research Associate, Michigan State University, East Lansing, MI 2009-2014
Supervisors: John Ohlrogge & Mike Pollard

Peer-Reviewed Publications

Current H-index: **19**

1. Busta L, Yim W, LaBrant EW, Wang P, Grimes L, Malyszka K, Cushman JC, Santos P, **Kosma DK**, Cahoon EB (2018) Identification of genes encoding enzymes catalyzing the early steps of carrot polyacetylene biosynthesis. Plant Physiology 178:1507-1521

2. Domergue, Frédéric, and **Dylan K. Kosma***. (2017) "Occurrence and Biosynthesis of Alkyl Hydroxycinnamates in Plant Lipid Barriers." Plants 6:25. *Corresponding Author

3. Mamrutha, H.M., Nataraja, K.N., Rama, N., **Kosma, DK,** Mogili, T., Lakshmi, K.J., Kumar, M.D. and Jenks, M.A., (2017). Leaf surface wax composition of genetically diverse mulberry (Morus sp.) genotypes and its close association with expression of genes involved in wax metabolism. Current Science 112:759-766.

4. Yang X, Zhao H, **Kosma DK**, Tomasi P, Dyer JM, Liu X, Wang Z, Parsons EP, Jenks MA, Lü S (2017) The acyl desaturase CER17 is involved in producing wax unsaturated primary alcohols and cutin monomers. Plant Physiology 173:1109-1124

5. Delude C, Fouillen L, Bhar P, Cardinal M-J, Pascal S, Santos P, **Kosma DK**, Joubès J, Rowland O, Domergue F (2016) Primary Fatty Alcohols Are Major Components of Suberized Root Tissues of Arabidopsis in the Form of Alkyl Hydroxycinnamates. Plant Physiology 171:1934–1950

6. **Kosma DK**, Rowland O (2016) Answering a four decade-old question on epicuticular wax biosynthesis. Journal of Experimental Botany 67:2538–2540

7. **Kosma DK***, Rice A, Ohlrogge JB, Pollard M. (2015) Analysis of aliphatic waxes associated with root periderm or exodermis from eleven plant species. Phytochemistry 117: 351-362.*Corresponding Author

8. **Kosma DK**, Molina I, Rowland O (2015) GC-MS-Based Analysis of Chloroform Extracted Suberin-Associated Root Waxes from Arabidopsis and Other Plant Species. Bio-protocol. doi: 10.21769/BioProtoc.1679

9. Liu J, Tjellström H, McGlew K, Shaw V, Rice A, Simpson J, **Kosma DK**, Ma W, Yang W, Strawsine M, et al (2015) Field production, purification and analysis of high-oleic acetyl-triacylglycerols from transgenic Camelina sativa. Ind Crop Prod **65**:259–268

10. Molina I, **Kosma DK** (2015) Role of HXXXD-motif/BAHD acyltransferases in the biosynthesis of extracellular lipids. Plant Cell Reports 34: 587–601

11. Razeq FM, **Kosma DK,** Rowland O, Molina I (2014) Extracellular lipids of Camelina sativa: Characterization of chloroform-extractable waxes from aerial and subterranean surfaces. Phytochemistry 106:188–196

12. Delude C, Fouillen L, Bhar P, Cardinal M-J, Pascal S, Santos P, **Kosma DK**, Joubès J, Rowland O, Domergue F (2016) Primary fatty alcohols are major components of suberized root tissues of Arabidopsis in the form of alkyl hydroxycinnamates. Plant Physiology 171:1934–1950

13. **Kosma DK*,** Murmu J, Razeq FM, Santos P, Bourgault R, Molina I, Rowland O* (2014) AtMYB41 Activates ectopic suberin synthesis and assembly in multiple plant species and cell types. The Plant Journal 80:216-229. *Co-corresponding Author

14. Vishwanath SJ, **Kosma DK**, Pulsifer IP, Scandola S, Pascal S, Joubès J, Dittrich-Domergue F, Lessire R, Rowland O, Domergue F (2013) Suberin-associated fatty alcohols in Arabidopsis thaliana: Distributions in roots and contributions to seed coat barrier properties. Plant Physiology 163:1118-1132.

15. Sanjaya, Miller R, Durrett TP, **Kosma DK**, Lydic TA, Muthan B, Koo AJ, Bukhman YV, Reid GE, Howe GA, Ohlrogge J, Benning C. (2013). Altered lipid composition and enhanced nutritional value of Arabidopsis leaves following introduction of an algal Diacylglycerol Acyltransferase 2. The Plant Cell 25:677-93

16. **Kosma DK***, Molina I, Ohlrogge JB, and Pollard M (2012). Identification of an Arabidopsis fatty alcohol: caffeoyl-coenzyme A acyltransferase required for the synthesis of alkyl hydroxycinnamates in root waxes. Plant Physiology 160:237-248. *Corresponding Author

17. Nadakuduti SS, Pollard M, **Kosma DK**, Allen C, Ohlrogge JB, and Barry CS (2012). Pleiotropic phenotypes of the sticky peel mutant provide new insight into the role of CUTIN DEFICIENT2 in epidermal cell function in tomato. Plant Physiology 159:945-960.

18. Lü S, Zhao H, Parsons EP, Xu C, **Kosma DK**, Xu X, Chao D, Lohrey GT, Bangarusamy DK, Wang G, Bressan RA, Jenks MA (2011). The glossyhead1 (gsd1) allele of ACC1 reveals a principal role for multi-domain Acetyl-CoA Carboxylase in the biosynthesis of cuticular waxes by Arabidopsis thaliana. Plant Physiology 157:1079-1092.

19. Mamrutha HM, Mogili T, Jhansi Lakshmi K, Rama N, **Kosma DK**, Udaya Kumar M, and Nataraja KN (2010). Leaf cuticular wax amount and crystal morphology regulate post-harvest water loss in mulberry (Morus species). Plant Physiology and Biochemistry 48:690-696.

20. **Kosma DK,** Nemacheck JA, Jenks MA, Williams CE (2010). Changes in properties of wheat leaf cuticle during interactions with Hessian fly. The Plant Journal 63:31-43.

21. Ebbs SD, **Kosma DK**, Nielson EH, Machingura M, Baker AJ, Woodrow IE. (2010) Nitrogen supply and cyanide concentration influence the enrichment of nitrogen from cyanide in wheat (Triticum aestivum L.) and sorghum (Sorghum bicolor L.). Plant Cell & Environment 33:1152-1160.

22. **Kosma DK**, Parsons EP, Isaacson T, Lü S, Rose JK, Jenks MA. (2010) Fruit cuticle lipid composition during development in tomato ripening mutants. Physiologia Plantarum 139:107-117.

23. **Kosma DK**, Bourdenx B, Bernard A, Parsons EP, Lü S, Joubès J, Jenks MA. (2009). The impact of water deficiency on leaf cuticle lipids of Arabidopsis. Plant Physiology 151:1918-1929.

24. Isaacson T, **Kosma DK**, Matas AJ, Buda GJ, He Y, Yu B, Pravitasari A, Batteas JD, Stark RE, Jenks MA, Rose JK. (2009) Cutin deficiency in the tomato fruit cuticle consistently affects resistance to microbial infection and biomechanical properties, but not transpirational water loss. The Plant Journal 60:363-77.

25. Mang HG, Laluk KA, Parsons EP, **Kosma DK**, Cooper BR, Park HC, AbuQamar S, Boccongelli C, Miyazaki S, Consiglio F, Chilosi G, Bohnert HJ, Bressan RA, Mengiste T, Jenks MA. (2009) The Arabidopsis RESURRECTION1 gene regulates a novel antagonistic interaction in plant defense to biotrophs and necrotrophs. Plant Physiology 151:290-305.

26. Lü S, Song T, **Kosma DK**, Parsons EP, Rowland O, Jenks MA. (2009) Arabidopsis CER8 encodes LONG-CHAIN ACYL-COA SYNTHETASE 1 (LACS1) that has overlapping functions with LACS2 in plant wax and cutin synthesis. The Plant Journal 59:553-64.

27. **Kosma DK**, Long A, Ebbs SD (2004) Cadmium bioaccumulation in yellow foxtail (Setaria gluaca L. P. Beauv): Impact on seed head development. American Journal of Undergraduate Research 3:9-14.

28. Ebbs S, Bushey J, Poston S, **Kosma D**, Samiotakis M, and Dzombak D (2003) Transport and metabolism of free cyanide and iron cyanide complexes by willow. Plant, Cell, & Environment 26:1467-1478.

Book Chapters

1. **Kosma DK** and Jenks, MA (2007) Eco-physiological and molecular genetic determinants of plant cuticle function in drought and salt stress tolerance.
   In: Advances in Molecular-Breeding toward Drought and Salt Tolerant Crops. Jenks, M.A., Hasegawa, P.M., and S.M. Jain (eds). Springer Publishing, Inc. Dordrecht, Germany

Presentations

Invited Speaker

1. **Kosma, DK.** Academic, Seminar, "Identification of Transcriptional Regulators of Wound Suberin Deposition", Invited, Dekan bei Georg-August-Universität Göttingen, Germany. (January 18, 2018).
2. **Kosma, DK.** Santos, P. Wahrenburg, Z. Joint Bioenergy Institute seminar series, Academic, Seminar, "Identification of Transcriptional Regulators of Wound Suberin Deposition", Invited, Joint Bioenergy Institute (UC Berkeley). (December 13, 2017).
3. **Kosma, DK.** Santos, P. Wahrenburg, Z. UMN Department of Plant and Microbial Biology Seminar Series, Academic, Seminar, "A Corky Predicament: Transcriptional Regulation of Suberin Deposition during Plant Wounding", Invited, University of Minnesota. (November 14, 2017).
4. **Kosma, DK.** Santos, P. Wahrenburg, Z. UNL Center for Plant Science Innovation, Academic, Seminar, "A Corky Predicament: Investigating the Regulated Deposition of the Lipid-Phenolic Plant Heteropolymer Suberin", Invited, University of Nebraska Lincoln. (October 31, 2017).
5. **Kosma, DK.** Santos, P. Wahrenburg, Z. Carnegie Institution for Science - Department of Plant Biology, Academic, Seminar, "Identification of Transcriptional Regulators of Wound Suberin Deposition", Invited, Carnegie Institution for Science. (August 9, 2017).
6. **Kosma, DK.** Santos, P. Wahrenburg, Z. WVU Department of Plant and Soil Sciences Seminar Series, Academic, Seminar, "Identification of Transcriptional Regulators of Wound Suberin Deposition", Invited, West Virginia University. (February 2, 2017).

7. **Kosma DK,** Santos P, Wahrenburg Z. "Investigating the Regulated Deposition of the Lipid-Phenolic Heteropolymer Suberin", Instituto de Tecnologia Química e Biológica, Portugal. (September 15, 2015).

Accepted Speaker

1. **Kosma DK,** Santos P, Wahrenburg Z. Plant Apoplastic Diffiusion Barriers Conference, "Investigating the Regulated Deposition of the Lipid-Phenolic Heteropolymer Suberin", Instituto de Tecnologia Química e Biológica, Portugal. (2017).
2. **Kosma, DK,** Jimenez, J, Benesch, E, Rowland, O, Molina, I, Santos, P. International Symposium on Plant Lipids, "Identification of Transcriptional Regulators of Wound Suberin Deposition", Dekan bei Georg-August-Universität Göttingen. (2016).
3. **Kosma, DK.** Plant Apoplastic Diffiusion Barriers Conference, “Analysis of Aliphatic Waxes Associated with Root Periderm or Exodermis from Eleven Plant Species”, L’Institut National de la Recherche Agronomique (INRA). (2015).
4. **Kosma DK**, Rice A, Molina I, Rowland O, Domergue F, Ohlrogge J, Pollard M. The lipid underground: Dissecting that alkyl hydroxycinnamate pathway. 20th International Symposium on Plant Lipids. Sevilla, Spain. (2012).
5. **Kosma D**, Lü S, Parsons E, Isaacson T, Rose J, Jenks M. The cuticle and abiotic stress, the discovery of new genes affecting cuticle accumulation and Identification of “old” genes affecting wax and cutin synthesis. 18th International Symposium on Plant Lipids. Bordeaux, France. (2008).
6. Ebbs S, **Kosma D**, Piccinin R, Woodrow IE. Cyanide at sub-toxic levels is perceived as a source of nitrogen by plants. Plant Biology & Botany Joint Congress. Chicago, IL. (2007).

Posters

1. Wahrenburg, Z. D., Busta, L., Grimes, L., Yim, W. C., Cahoon, E., Santos, P., **Kosma, D.K.**. "Bioactivity, structure, and biosynthesis of polyacetylenes from Carrot." Keystone Symposia on Molecular and Cellular Biology. Squaw Valley, CA. (2018).
2. Busta, L., LaBrant, E., Grimes, L., Santos, P., **Kosma, D.K.**, Cahoon, E. "Bioactivity, structure, and biosynthesis of polyacetylenes." 56th Annual Meeting of the Phytochemical Society of North America, UM, Colombia, MO. (2017).
3. Wahrenburg, Z.D., Benesch, E., Hammerschmidt, R., Douches, D., Santos, P., **Kosma, D.K.**. "Identification and Characterization of Transcriptional Factors that Regulate Wound Periderm Formation in Potato Tubers", Bierkamper Symposium, UNR, Reno, NV. (2017).
4. Wahrenburg, Z.D., Benesch, E., Hammerschmidt, R., Douches, D., Santos, P., **Kosma, D.K.**, "Identification and Characterization of Transcriptional Factors that Regulate Wound Periderm Formation in Potato Tubers." American Society of Plant Biologists Annual Meeting, Hawaii, HI. (2017).
5. Busta, L., LaBrant, E., Grimes, L., Santos, P., **Kosma, D.K.**, Cahoon, E., "Structure and biosynthesis of bioactive polyacetylenes." NEBRASKA RESEARCH & INNOVATION CONFERENCE: PREDICTIVE CROP DESIGN: GENOME TO PHENOME. UNL, Lincoln, NE. (2017).
6. Busta, L., LaBrant, E., Grimes, L., Santos, P., **Kosma, D.K.**, Cahoon, E., "Structure and biosynthesis of bioactive polyacetylenes." NEBRASKA SYMPOSIUM ON PLANT BREEDING, UNL, Lincoln, NE. (2017).

7. Church, BF, Doyen, M, Santos, P, **Kosma, DK**., “Probing Intermolecular Linkages of a Plant Heteropolymer, Suberin, with a Molecular-Genetic Approach.” Sierra Systems and Synbio Symposium. UNR, Reno, NV. (2015).

8. Santos, P., Rice, A., Church, B.F., **Kosma, D.K.**, International Symposium on Plant Apoplastic Diffusion Barriers: PADIBA, Academic, Conference, "Probing the Intermolecular Linkages of Suberin with a Molecular-Genetic Approach." Nante, France. (2015).

9. **Kosma DK**, Rice A, Ohlrogge J, Pollard M. Biodiversity of alkyl hydroxycinammates in root waxes. Plant Apoplastic Diffusion Barriers Conference. Lausanne, Switzerland. (2013).

10. **Kosma DK**, Molina I, Ohlrogge J, Pollard M. A novel BAHD Acyltrasferase required for the synthesis of alkyl hydroxycinnamates in Arabidopis root waxes and seed coat suberin. Canadian Society of Plant Biologists. Eastern Regional Meeting, Wilfred Laurier University, Waterloo, Ontario, Canada. (2012).

11. **Kosma DK**, Molina I, Ohlrogge J, Pollard M. The Lipid Underground: Identification and characterization of an acyltransferase involved in the biosynthesis of alkyl hydroxycinnamates in Arabidopsis root waxes. Gordon Research Conference on Plant Lipids: Structure, Metabolism, and Function. Galveston, TX. (2011).

12. Klein JD, Korol L, Shklar G, **Kosma DK**, Phavaphutanon L, Hebbe Y, Cohen S, Izikovitz M, Jenks MA. Trinexapac-ethyl promotes drought resistance by changing epicuticular wax synthesis, structure and composition. 20th International Conference on Plant Growth Substances, Tarragona, Spain. Pages 11-32. (2010).

13. Lü S, Song T, **Kosma DK**, Parsons E, Rowland O, Jenks MA. Arabidopsis *CER8* encodes *LONG-CHAIN ACYL-COA SYNTHETASE 1 (LACS1)* and has overlapping functions with *LACS2* in plant cutin and wax biosynthesis. Gordon Research Conference on Plant Lipids: Structure, Metabolism and Function. Galveston, TX. (2009).

14. Isaacson T, **Kosma D**, Matas A, Buda GJ, He Y, Jagdish C, Tewari JC, Yu B, Pravitasari A, Batteas JD, Stark RE, Jenks MA, Rose JKC. Thin-skinned tomatoes: Cutin deficient mutants shed light on cuticle functions. The 5th Solanaceae Genome Workshop. Cologne, Germany. (2008).

15. Gee CT, **Kosma D**, Thannhauser TW, Jenks MA, Gadoury DM, Cadle-Davidson LE. The call of the wild: using wild germplasm to uncover the basis for ontogenic resistance in grapevine (*Vitis*). American Phytopathological Society Annual Meeting. San Diego, CA. Poster 97:S39. (2007).

16. Gee CT, **Kosma D**, Thannhauser TW, Jenks MA, Cadle-Davidson LE. Proteomic and metabolic analyses of early berry development in *Vitis* spp. including the period of ontogenic gain of resistance. American Phytopathological Society Annual Meeting. San Diego, CA. Poster 97:S40. (2007).

17. **Kosma D**, Jenks M. Induction of leaf cuticular waxes on Arabidopsis by water-deficiency stress. 17th International Symposium on Plant Lipids. East Lansing, MI. (2006).

18. **Kosma D**, Ebbs S. Contribution of β-cyanoalanine synthase to nitrogen metabolism in wheat. Third International Conference on Phytotechnologies. Atlanta, GA. (2005).

19. **Kosma DK**, Burrmeister M, Crandall-Stotler, BJ. Response of tuber producing and non-tuber producing species of *Fossombronia* to water stress. Transactions of the Illinois State Academy of Science supplement to Vol. 96 posters 2003:49. IL. (2003).

Grants and Other Awards

Grants

PI: University of Nevada/USDA Formula Funds $176,285
Multi-State: Understanding the functional role of the
polyacetylenic lipids falcarinol and falcarindiol in plant
resistance to necrotrophic pathogens
2018-2021

Co-PI: University of Nevada/USDA Formula Funds $179,622
Multi-State: Sera045 - Crop Diversification Opportunities
to Enhance the Viability of Small Farms.
Enhancing Tomato Production in Arid and Semi-Arid Regions:
Identification of Rootstocks and Mechanisms for Salinity and High Boron Tolerance
2018-2021

PI: NSF Plant Genome Research Grant $1.37 million
ECA-PGR: DISSECTING THE TRANSCRIPTIONAL
NETWORKS UNDERLYING PLANT WOUND SUBERIN BIOSYNTHESIS
University of Nevada, Reno, NV.
2016 - 2020

PI: University of Nevada/USDA Formula Funds $213,467
Barriers to water loss: the molecular & biochemical bases of
potato suberin synthesis & cuticle synthesis in model xerophyte/CAM-species
Opuntia ficus-indica
University of Nevada, Reno, NV
2015-2018

Co-PI: University of Nevada/USDA Formula Funds $470,090
Multi-State Evaluation of Winegrapes and Clones:
Selection of Grapevine Genotypes for Drought
and Salt Tolerance in Nevada
University of Nevada, Reno, NV
2015-2019

Co-PI: Nevada Agriculture Foundation $3,000
Exploring Natural Sources of Disease Resistance in Carrots/The role of
Polyacetylenic Lipids in Plant Resistance to Necrotrophic Pathogens
Duration: 2018-2020

Private Sector Funding

PepsiCo $104,000
PI: Identifying genetic components associated with suberin production,
which is a biopolymer that protects potato tubers during wounding
and should result in a reduction of potato loss during storage
Duration: 2018 - 2019

Other Awards

Travel Award, UNR VPRI Office ($1,000)	2016
Travel Award, (merit based) Michigan State University MSU Postdoctoral Association ($500)	2013
Best Reviewer Award, Plant Physiology and Biochemistry, Elsevier Editor-in-Chief: Mario De Tullo	2011
Outstanding Undergraduate Poster, 1st place, Sigma Xi Annual Research Day Southern Illinois University, Carbondale, IL	2004
Outstanding Student Poster, 2nd place, Botany Division, Illinois State Academy of Science Symposium Illinois State University & Heartland Community College, Normal, IL	2003
Elected president of Plant Biology Undergraduate Student Organization Southern Illinois University, Department of Plant Biology	2000-2001

Student Advisee Honors and Awards

Nevada Undergraduate Research Award (NURA) – John Kilonzo	2018
Nevada Undergraduate Research Award (NURA) - Catherine Lowe	2018
NSF EPSCoR UROP award - Matthew Palmer	2017
NSF EPSCoR UROP award - Lindsey Grimes	2016
Nevada INBRE - Lindsey Grimes National Institute of General Medical Sciences (P20GM103440) from the National Institutes of Health	2016
Nevada Undergraduate Research Award (NURA) - Jazmin Jimenez	2015

Teaching Experience

Biochemistry 417/617: Metabolic Regulation	Fall 2016, 2017, 2018
Biotechnology 777: Biotechnology Symposium	Spring 2018
Biochemistry 794: Colloquium	Spring 2016
Biochemistry 718: Plant Molecular Biology and Biotechnology Guest Lecture, Plant Cuticle and Suberin Biosynthesis	Fall 2016
Biochemistry 407/408: Senior Thesis I & II	every semester 2015-2018
Biochemistry 480: Independent Study	every semester 2015-2018
Biotechnology 447/647: Research	every semester 2015-2018
Biochemistry 793: Independent Study	every semester 2015-2018
Biochemistry 121: Current Issues in Biochemistry and Molecular Biology Guest Lecture, Plant Surface Lipids and Lipid Polymers	Spring 2015
Biochemistry and Molecular Biology 961: Plant Biochemistry Guest Lecture, Plant Surface Lipids and Lipid Polymers	Spring 2013

Teaching Assistantships

Horticulture 101: Introduction to Horticulture (HORT 101) — Fall 2006, 2008
Purdue University

Horticulture 201: Introduction to Plant Propagation — Spring 2007
Purdue University

Plant Biology 200: General Plant Biology — Spring 2004
Southern Illinois University

Plant Biology 300: Plant Diversity — Fall 2003
Southern Illinois University

Teaching (Other)

West African Percussion — Winter 2012
Tree of Life Cultural Arts Studio

Student, Technicians, and Postdoctoral Researchers Supervised

Undergraduate Students

1. Danielle Sasada (BCH, 1/2015 – 3/2015)
2. Jazmin Jimenez – (BIOT, 3/2015 - 7/2015)
3. Catherine Lowe (CHEM, 4/2015 – present)
4. Lindsey Grimes (MMI, 8/2015 – present)
5. Jasmine Trinh (BCH, 7/2015 – 5/2016)
6. Josh Lee (BCH, 4/2016 – 5/2017)
7. Barbara Church (BCH, 7/2015 – 5/2016)
8. Matthew Palmer (BCH, 1/2017 – 9/2017)
9. Logan Smith (BCH, 6/2017 – 12/2017)
10. Jayme Angelo (BCH, 4/2016 – 10/2016)
11. Molly Doyen (BCH, 6/2015 – 11/2015)
12. Austin Esparza (MMI, 1/2017 – 10/2017)
13. Matthew Paulsen (BIOL, 1/2018 – 7/2018)
14. Kiah Malyszka (BIOT, 9/2017 – present)
15. John Kilonzo (BCH, 8/2017 – present)
16. Harold Antonio Murga (BCH, 1/2019 – present)

Graduate Students

1. Zach Wahrenburg (BCH, 7/2015 – present)
2. Alexander Selvey (CMB, 1/2017 – present)
3. Jazmin Jimenez (BIOT, 8/2015 – 05/2016)
4. Gabriel Golez (BIOT, 6/2017 – present)

Post-Doctoral Research Associates Supervised

1. Sebastien Hayoz (11/2016 - 12/2016)

Technicians

1. Elizabeth Benesch (07/2016 - 07/2017)
2. Jazmin Jimenez (06/2016 – present)

High School Students

1. Karan Mehtaji (6/2015 – 8/2016)

Graduate Student Committees

1. Keveen Flieth - Ph.D. candidate, Department of Chemistry
2. Dylan Jones - Ph.D. candidate, Department of Chemistry
3. Jose Villalobos - Ph.D. candidate, Department of Biochemistry and Molecular Biology
4. Devin Smith - Ph.D. pre-candidate, Department of Biochemistry and Molecular Biology
5. Jesse Mayer - Ph.D. completed, Department of Biochemistry and Molecular Biology
6. John Baggett - Ph.D. pre-candidate, Department of Biochemistry and Molecular Biology
7. Haley Toups - Ph.D. candidate, Department of Biochemistry and Molecular Biology
8. Marina McLean - Ph.D. pre-candidate, Department of Biochemistry and Molecular Biology
9. Mitiku Mengistu - Ph.D. pre-candidate, Department of Biochemistry and Molecular Biology
10. Colin Fox – Ph.D. pre-candidate, Department of Biochemistry and Molecular Biology
11. Anthony Moschetti – Ph.D. pre-candidate, Department of Biochemistry and Molecular Biology

Professional Service and Outreach

Department Service

1. Search committee member for BMB faculty position in Abiotic Stress Signaling 2016
2. Search committee member for BMB Bioinformatics position 2017
3. BMB faculty annual evaluation committee member 2015 – present

College Service

1. Member of CABNR/NAES Greenhouse Committee 2015 – present
2. Member of ANVS faculty search committee for Plant Breeder 2016
3. Member of NAES Field Research Coordinator search committee 2018
4. Member of NAES Property Working Group 2018 - present
5. Member, NAES Valley Road Research Aid II Hiring Committee 2017

University Service

1. Member of UNR Lab Safety Committee 2015 - present

Professional Organizations

American Chemical Society 2017 - present

Ad hoc Manuscript Reviewer

Reviewer for mid to high-tier plant science journals including Plant Cell and Physiology, Plant Cell, Plant Physiology, Plant Physiology and Biochemistry, The Plant Journal, and New Phytologist among others.

Ad hoc Grant Reviewer

Reviewer for grant proposals from US agencies such as USDA-NIFA and NSF; international and multinational funding agencies like ERA-CAPS, Deutsche Forschungsgemeinschaft

(DWG), Israeli Ministry of Agriculture, Israeli Science Foundation, and Natural Sciences and Engineering Research Council of Canada (NSERC).

Outreach and Engagement

Presentation of Kosma Lab research on post-harvest storage disorders at Nevada Small Farm Conference

Hosted and conducted workshop on “Understanding GMOs” with the Nevada Agriculture Teacher’s Association (July 2017)

CABNR annual field day presentations on Kosma lab research (September 2018)

CABNR annual field day presentations on Kosma lab research (September 2017)

CABNR annual field day presentations on Kosma lab research (September 2015)