

CURRICULUM VITAE

NAME

Cris Argueso

ADDRESS

Bioagricultural Sciences and Pest Management College of Agricultural Sciences

PHONE

(970) 491-3054

C210 Plant Sciences

EDUCATION

- 2004 Ph D, Cornell University
- 1997 MS, Campinas State University
- 1993 BS, Campinas State University

ACADEMIC POSITIONS

April 2014 - Present Assistant Professor, Colorado State University, Fort Collins, United States.

- February 13, 2011 March 31, 2014 Special Assistant Professor, Biology, Colorado State University, Fort Collins, CO, United States.
- October 5, 2007 December 31, 2010 Research Associate, plant molecular biology, University of North Carolina, chapel Hill, nc, United States.
- January 7, 2008 May 1, 2008 Visiting Scientist, Plant Molecular Biology, Max Planck Institute for Molecular Plant Physiology, Golm, Germany.
- May 20, 2004 January 31, 2007 Postdoctoral Fellow, Plant Molecular Biology, University of North Carolina, Chapel Hill, NC, United States.
- 2017-2018 Assistant Professor (College of Agricultural Sciences)
- 2016-2017 Assistant Professor (College of Agricultural Sciences)
- 2015-2016 Assistant Professor (College of Agricultural Sciences)
- 2014-2015 (College of Agricultural Sciences)

PUBLISHED WORKS

Refereed Journal Articles

Raines, T., Shanks, C., Cheng, C.-Y., McPherson, D., Argueso, C., Kim, H. J., Franco-Zorrilla, J. M., López-Vidriero, I., Solano, R., Vanková, R., others (2016). The cytokinin response factors modulate root and

shoot growth and promote leaf senescence in Arabidopsis. The Plant Journal, 85(1), 134-147., Peer Reviewed/Refereed

Liu, X., Kørner, C. J., Hajdu, D., Guo, T., Ramonell, K. M., Argueso, C., Pajerowska-Mukhtar, K. M. (2015). Arabidopsis thaliana atGCN2 kinase is involved in disease resistance against pathogens with diverse life styles. *International Journal of Phytopathology*, 4(2), 93-104., Peer Reviewed/Refereed

Non-Refereed Journal Articles

- Watson, R. A., Argueso, C. (2017). Assessment of Cytokinin-Induced Immunity Through Quantification of Hyaloperonospora arabidopsidis Infection in Arabidopsis thaliana. AUXINS AND CYTOKININS IN PLANT BIOLOGY: METHODS AND PROTOCOLS, 1569, 113-126., Not Peer Reviewed/Refereed
- Cohen, S. P., Liu, H., Argues, C. T., Pereira, A., Cruz, C. V., Verdier, V., Leach, J. E. (2017). RNA-Seq analysis reveals insight into enhanced rice Xa7-mediated bacterial blight resistance at high temperature. *PLOS ONE*, *12*(11)., Not Peer Reviewed/Refereed
- Mukhtar, M. S., McCormack, M. E., Argueso, C., Pajerowska-Mukhtar, K. M. (2016). Pathogen Tactics to Manipulate Plant Cell Death. *Current Biology*, 26(13), R608–R619., Not Peer Reviewed/Refereed
- Albrecht, T. A., Argueso, C. (2016). Should I fight or should I grow now? The role of cytokinins in plant growth and immunity and in the growth-defence trade-off. *Annals of Botany*, mcw211., Not Peer Reviewed/Refereed
- Argueso, C., Huot, B., Kim, P., Lundberg, D., Halane, M., Serrano, I., Innes, R., Mudget, M. B. (2014). Plant Immunity: XVI Congress on Molecular Plant-Microbe Interactions Meeting Report. *Molecular Plant-Microbe Interactions*, 27(11), S1-S5. http://apsjournals.apsnet.org/doi/pdf/10.1094/MPMI-27-11-S1, Not Peer Reviewed/Refereed
- Argueso, C., Ferreira, F. J., Epple, P., To, J. P., Hutchison, C. E., Schaller, G. E., Dangl, J. L., Kieber, J. J. (2012). Two-component elements mediate interactions between cytokinin and salicylic acid in plant immunity. *PLoS Genet*, 8(1), e1002448., Not Peer Reviewed/Refereed
- Argueso, C., Raines, T., Kieber, J. J. (2010). Cytokinin signaling and transcriptional networks. *Current opinion in plant biology*, 13(5), 533–539., Not Peer Reviewed/Refereed
- Argueso, C., Ferreira, F. J., Kieber, J. J. (2009). Environmental perception avenues: the interaction of cytokinin and environmental response pathways. *Plant, cell & environment, 32*(9), 1147–1160., Not Peer Reviewed/Refereed
- Argueso, C., Hansen, M., Kieber, J. J. (2007). Regulation of ethylene biosynthesis. *Journal of Plant Growth Regulation*, 26(2), 92–105., Not Peer Reviewed/Refereed
- Muday, G. K., Brady, S. R., Argueso, C., Deruère, J., Kieber, J. J., DeLong, A. (2006). RCN1-regulated phosphatase activity and EIN2 modulate hypocotyl gravitropism by a mechanism that does not require ethylene signaling. *Plant physiology*, 141(4), 1617–1629., Not Peer Reviewed/Refereed
- Hutchison, C. E., Li, J., Argueso, C., Gonzalez, M., Lee, E., Lewis, M. W., Maxwell, B. B., Perdue, T. D., Schaller, G. E., Alonso, J. M., others (2006). The Arabidopsis histidine phosphotransfer proteins are redundant positive regulators of cytokinin signaling. *The Plant Cell*, 18(11), 3073–3087., Not Peer Reviewed/Refereed
- Delaney, T. (2004). 47. Identification of disease resistance in Arabidopsis independent of systemic acquired resistance Delaney TP 12, Argueso C. 1, Kim HS 3 and Ko J.-H. 1 1Cornell University, Ithaca, NY USA;

2The Department of Botany and Agricultural Biochemis-try, The University of Vermont, Burlington, VT USA; department of Biology, The University. *Biology of Plant-microbe Interactions, Volume 4: Molecular Plant-microbe Interactions: New Bridges Between Past and Future, 4*, 196., Not Peer Reviewed/Refereed

- Teixeira, C. M., Gaziola, S. A., Lugli, J., Azevedo, R. A. (1998). Isolation, partial purification and characterization of isoenzymes of aspartate kinase from rice seeds. *Journal of plant physiology*, 153(3-4), 281–289., Not Peer Reviewed/Refereed
- Gaziola, S. A., Teixeira, C. M., Luoli, J., Sodek, L., Azevedo, R. A. (1997). The Enzymology of Lysine Catabolism in Rice SeedsÑIsolation, Characterization, and Regulatory Properties of a Lysine 2-Oxoglutarate Reductase/Saccharopine Dehydrogenase Bifunctional Polypeptide. *European journal of biochemistry*, 247(1), 364–371., Not Peer Reviewed/Refereed
- Gaziola, S., Teixeira, C., Ando, A., Sodek, L., Azevedo, R. (1996). Enzyme isolation and regulation with lysine biosynthesis and degradation in developing seeds of rice. *International Rice Research Notes (Philippines)*., Not Peer Reviewed/Refereed

Non-Refereed Proceedings or Transactions

- Shigenaga, A. M., Argueso, C. (2016). No hormone to rule them all: Interactions of plant hormones during the responses of plants to pathogens. *Seminars in Cell & Developmental Biology* (vol. 56, pp. 174–189).: Not Peer Reviewed/Refereed
- Delaney, T. P., Argueso, C., Donofrio, N., Kim, H. S., Ko, J.-H., Malamy, J., Rairdan, G. (2002). Analysis of SAR and Identification of Other Pathogen'Induced Defense Responses in Arabidopsis. *Biology of plant-microbe interactions: Proceedings of the 10th International Congress on Molecular Plant-Microbe Interactions, Madison, Wisconsin, USA, July 10-14, 2001* (vol. 3, pp. 99).: Not Peer Reviewed/Refereed

Review

- Leach, J. E., Triplett, L. R., Argueso, C., Trivedi, P. (2017). *Communication in the Phytobiome* (4th ed., vol. 169, pp. 587-596).: CELL., Not Peer Reviewed/Refereed
- Berens, M. L., Berry, H. M., Mine, A., Argueso, C., Tsuda, K. (2017). Evolution of Hormone Signaling Networks in Plant Defense. *Annual Review of Phytopathology* (vol. 55, pp. 401-425).: ANNUAL REVIEW OF PHYTOPATHOLOGY, VOL 55., Not Peer Reviewed/Refereed
- Shigenaga, A. M., Berens, M. L., Tsuda, K., Argueso, C. (2017). Towards engineering of hormonal crosstalk in plant immunity (vol. 38, pp. 164-172).: CURRENT OPINION IN PLANT BIOLOGY., Not Peer Reviewed/Refereed

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS

- January 2018, "Cytokinin-Induced Priming Against Biotic and Abiotic Stress", Keystone Symposium, Plant Signaling: Molecular Pathways and Network Integration, Keystone Symposia, Lake Tahoe.
- October 2017, "Molecular Priming of the Plant Immune System", Academia Sinica, Taiwan, Academia Sinica, Taiwan, Taipei.
- February 2017, "Hormonal Regulation of Plant Growth and Defense", Northern New Mexico College, Northern New Mexico College.

May 2016, "Hormonal Regulation of Plant Growth and Defense: More than Just SA and JA", Western Meeting of

the American Society of Plant Biologists, American Society of Plant Biologists.

- April 2016, "Hormonal Regulation of Plant Growth and Defense: More than Just SA and JA", Cell and Molecular Biology Program CSU, Cell and Molecular Biology Program.
- January 2016, "Hormonal Regulation od Plant Growth and Defense: More than SA and JA", University of Northern Colorado, University of Northern Colorado.
- October 28, 2015, "Hormonal Regulation od Plant Growth and Defense: More than SA and JA", International Plant Molecular Biology Congress, (Presenter) Argueso, C.
- July 28, 2014, "High-Throughput Quantification of Plant Hormones During Inefction with Pseudomonas syringe pv. tomato Dc3000", 25th International Conference on Arabidopsis Research, (Presenter) Thran, A., Vancourver.
- July 28, 2014, "Molecular Priming of the Plant Immune System", 25th International Conference on Arabidopsis Research, (Presenter) Hajdu, D., vancouver.
- July 28, 2014, "To Grow or not to Grow: Hormonal Regulation of Fitness Trade-offs in Arabidopsis", 25th International Conference on Arabidopsis Research, Vancouver, peer-reviewed/refereed.

OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATIONS/SCHOLARLY RECORD

- (February 2017 May 2017). Short Course, ""Course in Effective Teaching Practices"," The Association of College and University Educators and the American Council on Education, United States. Number of Credit Hours: 30. Approximate Number of Hours Spent Per Year: 40.
- (May 10, 2012). Workshop, "Problem-Based Learning Workshop," The Institute for Learning and Teaching, Colorado State University, United States. Number of Credit Hours: 8.
- (May 9, 2012). Workshop, "Summer Conference on Learning, Teaching and Critical Thinking," he Institute for Learning and Teaching, Colorado State University., United States. Number of Credit Hours: 4.
- (January 11, 2012). Seminar, "Can Curriculum Proposals be Fun? How to Propose Courses and Curriculum with Minimal Distress," rofessional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (January 11, 2012). Seminar, "What Makes a Good Test Question?," Professional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (January 11, 2012). Workshop, "Using Backwards Design to Improve Student Performance in your Courses," rofessional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (January 10, 2012). Seminar, "Exploring Acts of Incivility in the Classroom," Professional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (January 10, 2012). Seminar, "Taking Students to the PEAK: Successful Academic Probation Programs," Professional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (January 10, 2012). Seminar, "Teaching Large Classes with Clickers," Professional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.

(January 10, 2012). Seminar, "Understanding Students on the Autism Spectrum," Professional Development

Institute, Colorado State University., United States. Number of Credit Hours: 1.

- (January 9, 2012). Seminar, "Learning Communities: High Impact Practices for Retention and Student Success," Professional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (January 9, 2012). Seminar, "What is Lecture Capture and Why Should I Care?," Professional Development Institute, Colorado State University., United States. Number of Credit Hours: 1.
- (April 4, 2011 April 25, 2011). Short Course, "Inclusive Classroom Management," The Institute for Learning and Teaching, Colorado State University., United States. Number of Credit Hours: 6.
- (December 12, 2010). Workshop, "Effective College Teaching," Training Initiative in Biomedical and Biological Sciences, Certificate Series for Teaching Science to Undergraduates, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States. Number of Credit Hours: 4.
- (February 9, 2010). Workshop, "Speaking About Science," Training Initiative in Biomedical and Biological Sciences, Certificate Series for Teaching Science to Undergraduates, University of North Carolina at Chapel Hill., United States. Number of Credit Hours: 3.
- (January 12, 2010). Workshop, "Effective Classroom Management," Training Initiative in Biomedical and Biological Sciences, Certificate Series for Teaching Science to Undergraduates, University of North Carolina at Chapel Hill., United States. Number of Credit Hours: 4.

(March 1, 1993 - Present). Licensure in Biology College Teaching, Campinas State University.

TEACHING:

Year	<u>Semester</u>	<u>Course No./Title</u>	<u>Cr. Hrs.</u>	<u>Enrollment</u>
2017	Fall	CM795 - Independent Study	160	26
2017	Fall	BSPM740 - Plant Molecular Genetics	3	8
2017	Fall	SOCR740 - Plant Molecular Genetics	3	3
2017	Fall	BSPM798 - Research	67	14
2017	Fall	BSPM792 - Seminar	2	9
2017	Spring	BSPM798 - Research	86	16
2017	Spring	BSPM792 - Seminar	11	10
2016	Fall	CM795 - Independent Study	18	30
2016	Fall	BSPM798 - Research	18	18
2016	Fall	BSPM792 - Seminar	2	7
2016	Spring	MIP298 - Introductory Research	3	16
2016	Spring	BSPM450 - Molecular Plant-Microbe Interaction	3	4
2016	Spring	BSPM550 - Molecular Plant-Microbe Interactions	3	12
2016	Spring	BSPM798 - Research	18	14
2016	Spring	BSPM792 - Seminar	2	8
2015	Fall	BC475 - Mentored Research	3	7
2015	Fall	BC475 - Mentored Research-Recitation	0	7
2015	Fall	BSPM740 - Plant Molecular Genetics	3	10
2015	Fall	SOCR740 - Plant Molecular Genetics	3	10
2015	Fall	BSPM792 - Seminar	2	7
2015	Fall	BSPM502B - Topics in Plant Pathology-Plant Bacteriology	1	8
2015	Spring	CM700 - Critical Analysis of Scientific Literature	1	8
2015	Spring	BSPM361 - Elements of Plant Pathology	3	56
2015	Spring	BSPM361 - Elements of Plant Pathology - Lab	3	57
2015	Spring	BSPM699 - Thesis	18	6

2014	Fall	BSPM698 - Research	18	10
2014	Spring	BSPM450 - Molecular Plant-Microbe Interaction	3	0
2014	Spring	BSPM550 - Molecular Plant-Microbe Interactions	3	10
2012	Fall	BZ692D - Seminar-Genetics	3	9

Guest Lectures:

			<u># of</u> <u>Guest</u>	<u>Delivery</u>
<u>Year</u>	<u>Semester</u>	<u>Course No./Title</u>	Lectures	<u>Mode</u>
2017	Fall	Bioag'l Sci & Pest Mgmt-BSPM500 - Fundamentals of BSPM	1	Face to Face
2017	Spring	Bioag'l Sci & Pest Mgmt-BSPM451 - Integrated Pest Management	1	Face to Face
2017	Spring	Bioag ['] l Sci & Pest Mgmt-BSPM551 - Integrated Pest Management	1	Face to Face
2016	Fall	Bioag'l Sci & Pest Mgmt-BSPM500 - Fundamentals of BSPM	1	Face to Face
2015	Spring	Cell & Molecular Biology-CM700 - Critical Analysis of Scientific Literature	4	Face to Face
2015	Spring	Bioag'l Sci & Pest Mgmt-BSPM451 - Integrated Pest Management	1	Face to Face
2015	Spring	Bioag'l Sci & Pest Mgmt-BSPM551 - Integrated Pest Management	1	Face to Face
2014	Fall	Soil & Crop Sciences-SOCR430 - Applications of Plant Biotechnology	2	Face to Face
2014	Fall	Bioag'l Sci & Pest Mgmt-BSPM592 - Fundamentals of BSPM	1	Face to Face
2014	Fall	Soil & Crop Sciences-SOCR730 - Topics in Plant Breeding and Genetics	1	Face to Face
2014	Spring	Bioag'l Sci & Pest Mgmt-BSPM570 - Chemical Ecology	1	Face to Face

Evidence of Teaching Effectiveness (Annual Input)

Student Course Surveys

Spring 2016, BSPM 450–Molecular Plant-Microbe Interaction BSPM 450 550 Spring 2016 surveys-1.pdf

Spring 2016, BSPM 550–Molecular Plant-Microbe Interactions BSPM 450 550 Spring 2016 surveys-2.pdf

Fall 2015, BSPM 740–Plant Molecular Genetics BSPMSOCR 740 Fall 2015 Course Report-1.pdf

Spring 2014, BSPM 550–Molecular Plant-Microbe Interactions <u>MPMI450-550 2014-1.pdf</u>

Fall 2012, BZ 692D–Seminar-Genetics

Development and teaching of a new class for graduate students in the Plant Molecular Biology program at Colorado State University, using Problem-Based Learning and CREATE (Consider, Read,

Elucidate the hypotheses, Analyze the data, Think of the next Experiment) teaching approaches. Argueso course surveys-1.pdf

Development of New Courses

Spring 2014, BSPM 450-Molecular Plant-Microbe Interaction

Written Comments from Students

Fall 2015, BSPM 740–Plant Molecular Genetics emily luna letter004-1.pdf

Other Evidence

Spring 2016, BSPM 450-Molecular Plant-Microbe Interaction

Spring 2015, BSPM 361-Elements of Plant Pathology - Lab

Fall 2012, BZ 692D-Seminar-Genetics

Tenure and Promotion Evidence of Teaching Effectiveness (Tenure and Promotion Input)

Development of New Courses

Developed a new version of Plant Molecular Genetics (BSPM700/SOCR700) with new updated content and recitation sessions

Development of New Teaching Techniques

Developed, together with Dr. Jan Leach (CSU) and Dr. Jeanmarie Verchot (Oklahoma State University), an online forum for discussion of lecture material for the students in BSPM550/450 Molecular Plant-Microbe Interactions

Integration of Service Learning

Conference/Workshop Assessments

Participation in Professional Development Activities Related to Teaching

Course in Effective Teaching Practices offered by ACUE (The Association of College and University Educators and the American Council on Education) to select faculty at CSU.

Professional Consultation Related to Teaching

Other Evidence

New version of BSPM450/550, with updated material including molecular interactions of plants with other plants, insects and beneficial microbes

EXTENSION/ENGAGEMENT ACTIVITIES/ACCOMPLISHMENTS

Presentation

Plants and Microbes. Youth, Fort Collins, Colorado. Number of times program was made: 1. Total number of participants: 30. Percent Responsible: 5%. 4th Quarter 2016.

COMMITTEES

Computational Biology Steering Committee, (January 29, 2015 - Present). Cell and Molecular Biology Seminar Committee, (August 2017 - May 2018). Plant Molecular Biology Program Executive Committee, (May 2014 - 2016). Plant Growth Facility Manager Search Committee, (August 3, 2015 - November 1, 2015). Celebrating Undergraduate Research and Creativity, (April 2014). Cell and Molecular Biology Symposium, (January 2014). Cell and Molecular Biology Symposium 2014, (January 2013). Celebrating Undergraduate Research and Creativity, (April 2012). Cell and Molecular Biology Symposium 2014, (January 2012). Cell and Molecular Biology Symposium 2014, (January 2012). Development of an Undergraduate Major Committee, (September 2017 - Present). Education Committee, (September 2017 - September 2019). BSPM Strategic Vision Committee, (November 13, 2015 - 2017). Ad Hoc Curriculum Committee, (June 1, 2014 - 2016). Faculty Search Committee, (September 1, 2014 - November 20, 2014).

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

American Phytopathological Society. (January 1, 2013 - Present).

American Society of Plant Biologists. (January 1, 2009 - Present).

International Society of Molecular Plant-Microbe Interactions. (July 1, 2001 - Present).

Youtube.

Reviewer, Ad Hoc Reviewer, Czech Science Foundation. (August 2017 - Present).

Workshop Organizer, North American Arabidopsis Steering Committee, St. Louis, MI. (June 2017 - Present).

Reviewer, Grant Panel, NSF- National Science Foundation - IOS, Washington, DC, DC. (April 2017 - Present).

Editor, Journal Editor, Physiological and Molecular Plant Pathology. (March 2016 - Present).

Editor, Journal Editor, Frontiers in Plant Sciences. (March 2014 - Present).

Reviewer, Ad Hoc Reviewer, Biotechnology and Biological Sciences Research Council - United Kingdom. (December 2016).

Reviewer, Grant Panel, NSF-NIFA Plant Biotic Interaction Grant Panel, Washington, dc. (September 2016).

Reviewer, Ad Hoc Reviewer, BARD Bi-National Agriculture and Research Development Fund Israel USA. (August 2016).

Reviewer, Ad Hoc Reviewer, BARD Bi-National Agriculture and Research Development Fund Israel USA. (December 26, 2015).

Reviewer, Grant Panel, NIFA National Institute of Food and Agriculture- Plant Composition, Development and Stress Tolerance Panel, Washington, DC. (September 28, 2015 - September 30, 2015).

Reviewer, Ad Hoc Reviewer, NSF Plant Genome Research Program. (August 5, 2015).

Reviewer, Ad Hoc Reviewer, Biotechnology and Biological Sciences Research Council - United Kingdom. (July 1, 2015).

Reviewer, Grant Proposal, NIFA National Institute of Food and Agriculture- Plant Composition, Development and Stress Tolerance Panel. (September 8, 2014 - September 12, 2014).

Workshop Organizer, North American Arabidopsis Steering Committee, Vancouver, British Columbia. (July 28, 2014).

Reviewer, Grant Proposal, NIFA National Institute of Food and Agriculture-Understanding Plant-Associated Microorganisms and Plant-Microbe Interactions Panel, Washington DC, DC. (July 22, 2013 - July 26, 2013).

OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH

Workshop Organizer, International Conference on Arabidopsis Research (ICAR), St Louis, Missouri. (August 1, 2016 - June 1, 2017).

Session Chair, International Conference on Arabidopsis Research (ICAR), Vancouver, British Columbia. (August 1, 2014).