

Karl Ravet
PhD
Crop Genomics Lab
Department of Crop and Soil Sciences,
Colorado State University,
Fort Collins, CO80523-1777, United States.

EDUCATION

2008: PhD in Plant Molecular Physiology.

“Ferritins in plants: Function and Regulation”. Laboratoire de Biochimie et Physiologie Moleculaire des Plantes (BPMP), CNRS/ INRA/ Supagro/ University of Montpellier II, Montpellier, France. PhD supervisors: Drs Jean Francois Briat & Frederic Gaymard.

2005: Master’s Degree-Research in Plant Molecular Physiology.

Rank: 1st out of 12. University of Montpellier II, France.

2003: Licence (Bachelor’s equivalent) in Cellular Biology and Physiology.

University of Montpellier II, France.

PROFESSIONAL EXPERIENCE

2018-present: Research Scientist (level III) position. Principal Investigator. Wheat functional genomics and genome editing. Department of crop and soil sciences, Colorado State University, Fort Collins, Colorado, USA.

2015-present: Research Scientist (level III) position. Principal Investigator. Weed Research Group. Department of Bioagricultural and Pest Management, Colorado State University, Fort Collins, Colorado, USA.

2014-2015: Research Scientist (level II) position. Biology Department, Colorado State University, Fort Collins, Colorado, USA. Prof Marinus Pilon’s group.

2011-2014: European Marie Curie IOF Postdoctoral Fellow. Regulation of iron-sulfur cluster assembly in plastids and coordination with plant physiology. Outgoing Phase (2011-13) at Colorado State University, Fort Collins, Colorado, USA. Supervisor: Prof Marinus Pilon. Return Phase (2013-14) at the Laboratoire de Biochimie et Physiologie Moleculaire des Plantes (BPMP), INRA, Montpellier, France. Supervisors: Dr Jean-Francois Briat and Dr Frederic Gaymard.

2009-11: Post-doctoral position. “Copper homeostasis in *A. thaliana* and *P. trichocarpa*”. Colorado State University, Fort Collins, Colorado, USA. Supervisor: Prof. Marinus Pilon

2009: Post-doctoral position. “Ferritin mRNA-decay in response to iron reveals the major involvement of the DST-dependent mRNA-degradation pathway in the protection against oxidative stress in *A. thaliana*”. Laboratoire de Biochimie et Physiologie Moleculaire des Plantes, CNRS, Montpellier, France. Supervisors: Dr Jean-Francois Briat and Dr Frederic Gaymard.

2005-08: PhD. “Ferritins in plants: Function and Regulation”. Laboratoire de Biochimie et Physiologie Moleculaire des Plantes (BPMP), University of Montpellier II, Montpellier, France. PhD advisors: Dr Jean-Francois Briat and Dr Frederic Gaymard..

2005: Master (2^d year). “Ferritins Function in *A. thaliana*”. Laboratoire de Biochimie et Physiologie Moleculaire des Plantes (BPMP), University of Montpellier II, Montpellier, France. Supervisors: Dr Jean-Francois Briat and Dr Francoise Cellier.

2004: Master (1st year) . “Iron-sulfur cluster biogenesis in plant chloroplast”. Laboratoire de Biochimie et Physiologie Moléculaire des Plantes (BPMP), University of Montpellier II, Montpellier, France. Supervisors: Dr Jean-Francois Briat and Dr Stephane Lobreaux.

2003: Licence (Bachelor). “Analyses and Modelling of the genotype x environment: setting of a high-throughput phenotyping procedure”. Laboratoire d’Ecophysiologie des Plantes sous Stress Environnementaux (LEPSE), INRA/Supagro, Montpellier, France. Supervisor: Dr Francois Tardieu.

PUBLICATIONS

H-index = 12 Sum of times cited = 729

Average Citations per Item: 52.07

(source: ISI-Web Of Knowledge, 12-2017)

H-index = 12 I-index = 12 Sum of times cited = 1097

(source: Google Scholar, 12-2017)

* denotes co-first authorship.

✓ denotes authorship with correspondence.

Hantzis L, Kroh G, Jahn C, Cantrell M, Peers G, Pilon M, **Ravet K.** (2017). A program for iron economy during deficiency in *Arabidopsis* rosettes targets specific Fe proteins. *Plant Physiol.*

Patterson E, Pettinga D, **Ravet K.**, Neve P, Gaines T. (2017). Glyphosate resistance and EPSPS gene duplication: Convergent evolution in multiple plant species. *Journal of Heredity* in press. DOI: 10.1093/jhered/esx087. In themed collection, ‘Genomics of Adaptation to Human Contexts.’

Fernández-Escalada M, Zulet-González A, Gil-Monreal M, Zabalza A, **Ravet K.**, Gaines T, Royuela M. (2017) Effects of EPSPS copy number variation (CNV) and glyphosate application on the aromatic and branched chain amino acid synthesis pathways in *Amaranthus palmeri*”, *Frontiers in Plant Science*. 8: 1970. DOI: 10.3389/fpls.2017.01970.

Tapken W, **Ravet K.**, Shahbaz M, Pilon M. (2015). Regulation of Cu delivery to chloroplast proteins. *Plant Signal. Behav.* 10: e1046666.

Shahbaz M, **Ravet K.**, Peers G, Pilon M. (2015). Prioritization of copper for the use in photosynthetic electron transport in developing leaves of hybrid poplar. *Front. Plant Sci.* 6: 407.

Ravet K✓ and Pilon M (2013). Cu and Fe homeostasis in plant chloroplasts: the challenges of oxidative stress. *Antiox. Redox. Signal.* 19: 919-32.

Tapken W, **Ravet K.**, Pilon M (2012). Plastocyanin controls the stabilization of the thylakoid Cu-transporting P-type ATPase PAA2/HMA8 in response to low copper in *Arabidopsis*. *J. Biol. Chem.* 287: 18544-18550.

Ravet K., Danford F.L, Dihle A, Pittarello M, Pilon M (2011) Spatiotemporal analysis of copper homeostasis in *Populus trichocarpa* reveals an integrated molecular remodeling for a preferential allocation of copper to plastocyanin in the chloroplasts of developing leaves. *Plant Physiol.* 157: 1300-1312.

Ravet K., Reyt G, Arnaud N, Krouk G, Djouanni EB, Boucherez J, Briat JF, Gaymard F. (2011) Iron and ROS control of the DownStream mRNA decay pathway is essential for plant fitness. *EMBO J.* 31: 175-186.

Pilon M, **Ravet K.**, Tapken W (2011). The biogenesis and physiological function of chloroplast superoxide dismutases. *Biochim. Biophys. Acta.* 1807: 989-98.

- Briat JF, Duc C, **Ravet K**, Gaymard F (2010). Ferritins and iron storage in plants. *Biochim. Biophys. Acta.* **1800**: 806-814.
- Briat JF, **Ravet K**, Arnaud N, Duc C, Boucherez J, Touraine B, Cellier F, Gaymard F (2010). New insights into ferritin synthesis and function highlight a link between iron homeostasis and oxidative stress in plants. *Ann Bot.* **105**: 811-22.
- Ravet K**, Touraine B, Kim SA, Cellier F, Thomine S, Guerinot ML, Briat JF, Gaymard F (2009). Post-translational regulation of AtFER2 ferritin in response to intracellular iron trafficking during fruit development in *Arabidopsis*. *Mol Plant.* **2**: 1095-106.
- Pilon M, Cochu CM, **Ravet K**, Abdel-Ghany SE, Gaymard F (2009). Essential transition metal homeostasis in plants. *Curr Opin Plant Biol.* **12**: 347-57.
- Ravet K**, Touraine B, Boucherez J, Briat JF, Gaymard F, Cellier F (2009). Ferritins control interaction between iron homeostasis and oxidative stress in *Arabidopsis*. *Plant J.* **57**: 400-12.
 Cover: *The Plant Journal* issue 57(3).
 Re-edition + cover: Selected as the highest impact paper published in 2009 in *The Plant Journal* for the special virtual issue: “Celebrating 20 years of *The Plant Journal*” (2011).
 As of November/December 2016, this [highly cited paper](#) received enough citations to place it in the top 1% of the academic field of Plant & Animal Science based on a highly cited threshold for the field and publication year. Data from ISI Web of knowledge.
- Murgia I, Vazzola V, Tarantino D, Cellier F, **Ravet K**, Briat JF, Soave C (2007). Knock-out of ferritin *AtFer1* causes earlier onset of age-dependent leaf senescence in *Arabidopsis*. *Plant Physiol Biochem.* **45**: 898-907.
- Arnaud N*, **Ravet K***, Borlotti A, Touraine B, Boucherez J, Fizames C, Briat JF, Cellier F, Gaymard F (2007). The iron-responsive element (IRE)/iron-regulatory protein 1 (IRP1)-cytosolic aconitase iron-regulatory switch does not operate in plants. *Biochem J.* **405**: 523-31.

BOOK CHAPTER

✓ denotes authorship with correspondence.

- Gaines T, Tranel P, Fleming M, Patterson E, Kuepper A, **Ravet K**, Giacomini D, Wolf T, Gonzalez S, Beffa R (2017). “Applications of Genomics in Weed Science”. In *Biology, Physiology and Molecular Biology of Weeds* (Jugulam M., ed). **CRC Press- Taylor and Francis Group**.
- Ravet K**✓, Van Hoewyk D, Pilon M (2012). “Regulation of iron-sulfur cluster formation in plastids”. In *Sulfur Metabolism in Plants: Mechanisms and Application to Food Security, and Responses to Climate Change* (De Kok, L.J., Tausz, M., Hawkesford, M.J., Höfgen, R., McManus, M.T., Norton, R.M., Rennenberg, H, Saito, K., Schnug, E. and Tabe, L., eds). **Springer Verlag**.

ONLINE PUBLISHED MATERIAL

✓ denotes authorship with scientific correspondence.

- K. Ravet**✓ (2014). “Formation of iron-sulphur clusters in plants”- IntegrRegulFeSPlast project results in brief. **European Commission**; Community Research and Development Information Service. (http://cordis.europa.eu/result/rcn/151820_en.html).
- K. Ravet**✓ (2014). “Regulation of iron-sulfur (Fe-S) cluster assembly in plastids and coordination with plant physiology”- IntegrRegulFeSPlast final report summary.

European Commission; Community Research and Development Information Service. (http://cordis.europa.eu/result/rcn/158905_en.html).

K. Ravet^{*} (2014). "Regulation of iron-sulfur (Fe-S) cluster assembly in plastids and coordination with plant physiology"- "IntegrRegulFeSPlast periodic report summary 2. **European Commission;** Community Research and Development Information Service. (http://cordis.europa.eu/result/rcn/158906_en.html).

K. Ravet^{*} (2012). "Regulation of iron-sulfur (Fe-S) cluster assembly in plastids and coordination with plant physiology"- "IntegrRegulFeSPlast periodic report summary 1. **European Commission;** Community Research and Development Information Service. (http://cordis.europa.eu/result/rcn/148535_en.html).

PROCEEDINGS, POSTERS AND CONFERENCE PAPERS

* denotes poster presenter

Soni, N., **Ravet K**, M. Fleming, S. Nissen, P. Westra, T. Gaines (2017). A Novel Mechanism that Confers Reduced Glyphosate Sensitivity in *Kochia scoparia*. Weed Science Society of America Proceedings: 57: 144; Tucson, AZ.

Quicke, A., **Ravet K**, T. Gaines, and P. Westra (2017). Use of SSR Markers to Track the Evolutionary Trajectory of Glyphosate Resistant *Kochia* in North America. Western Society of Weed Science Proceedings: 70: 57; Coeur D'Alene, ID.

Gaines, T., E. Patterson, D. Pettinga, **Ravet K**, D. Sloan, P. Tranel, P. Westra, and C. Saski (2017). A Draft Genome for *Kochia scoparia*. Western Society of Weed Science Proceedings: 70: 56; Coeur D'Alene, ID.

Patterson, E., **Ravet K**, D. Pettinga, P. Westra, D. Sloan, P. Tranel, C. Saski, T. Gaines (2017). The Draft Genome of *Kochia scoparia* : A Foundation for Studying Adaptive Evolution and Its Impacts on Genome Architecture. Plant and Animal Genome XXV: W984; San Diego, CA. Weedy and Invasive Plant Genomics Workshop.

Patterson, E., **Ravet K**, D. Pettinga, P. Westra, D. Sloan, C. Saski, T. Gaines (2016). A draft genome of *Kochia scoparia*. North Central Weed Science Society Proceedings: 71: 223; Des Moines, IA.

Ravet K., E. Patterson, P. Westra, P. Tranel, T. Gaines (2016). Using multiple sequencing platforms to assemble the genome of *Kochia scoparia*. 7th International Weed Science Congress: 7: 717; Prague, Czech Republic.

Westra, P., A. Wiersma, D. Pettinga, E. Patterson, F. Dayan, P. Tranel, **Ravet K**, D. Sloan, T. Gaines (2016). Weed genomes as potential sources of new, adaptive agronomic traits: a summary of *Kochia scoparia* research in North America. 7th International Weed Science Congress: 7: 834; Prague, Czech Republic.

Gaines, T., E. Patterson, **Ravet K**, P. Tranel, and P. Westra (2016). Developing genomics resources for *Kochia scoparia*. Weed Science Society of America Proceedings: 56: 440; San Juan, PR.

Patterson, E., **Ravet K**, C. Saski, and T. Gaines (2016). Human selection on the genome of the invasive agronomic weed, *Kochia scoparia*. Genomics of Adaptation to Human Context; Fort Collins, CO.

Gaines TA, Patterson E, **Ravet K**, Tranel P, Westra P (2016). Using Multiple Sequencing Platforms to Assemble the *Kochia scoparia* Genome. *Proceedings of the Western Society of Weed Science*, 69: 121. Albuquerque, NM.

Quicke A, Patterson E, **Ravet K**, Westra P, Tranel P, Gaines TA (2016). Developing Simple Sequence Repeat (SSR) Markers for *Kochia scoparia*. *Proceedings of the Western Society of Weed Science*, 69:004. Albuquerque, NM.

Bibi S, **Ravet K**, Vanderpool K, Gaines TA, Westra P (2016). Palynology of *Kochia scoparia*. *Proceedings of the Western Society of Weed Science*, 69:052. Albuquerque, NM.

- Ravet K**, Quicke A, Bibi S, Pettinga D, Westra E, Giacomini D, Jugulam M, Dille JA, Stahlman P, Tranel P, Gaines TA, Westra P (2016). Understanding the Genetic Evolution of Glyphosate Resistance in *Kochia scoparia* Populations. *Proceedings of the Western Society of Weed Science*, 69: 153. Albuquerque, NM.
- Mari S, Grillet L, Hoang TTM, Ouerdane L, Fils O, Isaure MP, Chay S, Alcon C, **Ravet K**, Briat JF, Curie C (2014). “The dynamics of iron pools between organelles and within organs”. *Proceedings of working Group Medicago sativa*, Jul 2014, Gatersleben, Germany.
- Briat JF, Arnaud N, Cellier F, Curie C, Gaymard F, **Ravet K**, Seguela M, Vert G (2007) Iron uptake and Storage in plants. *Proceedings of International Bioiron Meeting*. Kyoto, Japan.
- Ravet K***, Shabbaz M., Patterson E, Pilon M. Micro-nutrient effect on biomass quality in Poplar: Effects of Copper status on laccase activity and lignification. May 2013: USDA Project Director Meeting / National Institute of Food and Agriculture Initiative, Washington DC, USA.
- Tapken W, **Ravet K***, Pilon M. Plastocyanin controls the stabilization of the thylakoid Cu-transporting P-type ATPase PAA2/HMA8 in response to low copper in Arabidopsis. June 2012: FASEB Summer Conference, Trace Element Metabolism: From Model Organisms to Humans, Steamboat Springs, Colorado, USA.
- Ravet K***, Rey G, Arnaud N, Krouk G, Djouanni EB, Boucherez J, Briat JF, Gaymard F. Iron and ROS control of the DownStream mRNA decay pathway is essential for plant fitness. June 2012: FASEB Summer Conference, Trace Element Metabolism: From Model Organisms to Humans, Steamboat Springs, Colorado, USA.
- Ravet K***, Touraine B, Boucherez J, Pilon-Smits EAH, Pilon M, Cellier F, Briat JF, Gaymard F. Ferritins control interaction between iron homeostasis and oxidative stress in Arabidopsis. August 2011: 6th International Conference on Biogenesis of iron sulphur proteins and regulatory functions, Girton college, Cambridge, UK.
- Ravet K***, Pitarello M, Pilon M. Micro-nutrient effects on biomass quality in poplar: effects of copper status on laccase activity and lignification. February 2010: C2B2 (Colorado Center for Biorefining and Biofuels) meeting, School of Mines, Golden, Colorado, USA.
- Ravet K***, Touraine B, Boucherez J, Briat JF, Gaymard F, Cellier F. Ferritins control interaction between iron homeostasis and oxidative stress in *Arabidopsis*. June 2008: FASEB Summer Conference, Trace Element Metabolism: From Model Organisms to Humans, Snowmass, Colorado, USA.
- Ravet K***, Touraine B, Boucherez J, Briat JF, Gaymard F, Cellier F. Towards an *in planta* ferritin function. July 2006: 13th International Symposium on Iron Nutrition and Interactions in Plants, Montpellier, France.

RESEARCH SUPPORT

Total budget awarded: > \$967,000.00

- 2017: BASF. “Evaluate Dicamba Formulations for Control of Multiple Kochia Accessions from the Central Great Plains and Canada.” K. Ravet, co-PI. Budget: \$53,847 (1 year).
- 2017: WSJRC- Western Sugar Joint Research Committee. “Assessing the co-occurrence of glyphosate resistant kochia and Palmer amaranth in sugar beet fields.” K. Ravet, co-PI. Budget: \$12,000 (1 year).

- 2017: SRSBR/SA- Snake River Sugar Beet Research and Seed Alliance, Idaho. “Glyphosate resistance in Kochia in Idaho sugar beet: origin and spread.” K. Ravet, co-PI. Budget: \$15,374 (1 year).
- 2017: CWRF- Colorado Wheat Research Foundation. “Identification of Novel Broadleaf Herbicide Resistance Traits in Wheat.” K. Ravet, co-PI. Budget: \$31,000 (1 year).
- 2017: WSJRC- Western Sugar Joint Research Committee. “Exploring the dual utilization of Fe as fertilizer and selective herbicide in sugar beet cropping systems.” K. Ravet, PI. Budget: \$4,000 (1 year).
- 2017: CWRF- Colorado Wheat Research Foundation. “Developing wheat genome editing capacity at CSU.” K. Ravet, co-PI. Budget: \$23,094 (1 year).
- 2016: Bayer CropScience. “Investigating the potential antagonistic effect of the glycine decarboxylase complex on glufosinate efficacy and glyphosate resistance.” K. Ravet, PI. Budget: \$151,182 (3 years)
- 2016: Bayer CropScience. “Improving the efficacy of glufosinate on weeds.” K. Ravet, co-PI. Budget: \$209,574 (3 years)
- 2016: CWRF- Colorado Wheat Research Foundation. 2016, year 1 of 3. “Identification of Novel Broadleaf Herbicide Resistance Traits in Wheat.” K. Ravet, co-PI. Budget: \$35,000 (1 year).
- 2016: CWRF- Colorado Wheat Research Foundation. “Developing New Herbicide Resistance Traits in Wheat using Genome Editing.” K. Ravet, co-PI. Budget: \$10,000 (1 year).
- 2016: WSJRC- Western Sugar Joint Research Committee. “Developing a rapid marker for a novel form of glyphosate resistance in kochia.” K. Ravet, co-PI. Budget: \$12,000 (1 year).
- 2011: Marie Curie International Outgoing Fellowship: Regulation of iron-sulfur cluster assembly in plastids and coordination with plant physiology. Marie Curie IOF program, European Union. K. Ravet, PI. Budget: US\$ 360,000 (3 years).
- 2005: PhD Fellowship from the Ministere de l’Education Nationale de l’Enseignement Supérieur et de la Recherche, France. Merit-based PhD fellowship (3 years). K. Ravet, PI. Budget: US\$ 50,000 (3 years).

TEACHING AND MENTORING EXPERIENCE

Teaching:

- Invited lecturer at Colorado State University (Fall **2017**) – Lecture in BSPM581A2 Plant Biochemistry in Agriculture courses.
- Development of “An introduction to the process of publishing science”. (Spring **2016**) Series of “journal club” format class for undergraduate and graduate students in the Weed Research Program at Colorado State University, by Karl Ravet.
- Development of “Techniques Special Sessions” (Fall **2012**) for undergraduate and graduate students in Plant Molecular Biology Program at Colorado State University. “Things to consider in a Real-Time PCR Experiment”, by Karl Ravet.
- Invited lecturer at Colorado State University (Spring **2012**) – Lecture in BZ310 Cell Biology courses.
- Teaching Assistant position: 192 hours contact time. (**2006-2008**) Teaching classes and practical work in Introduction to Plant Physiology (Undergraduate level). University of Montpellier II, France.
- Training sessions in principle of teaching as well as in pedagogic skills improvement at the French University Institute for Teachers Training (**2006-2008**).

Mentoring/ Co-supervision:

- Post Doctoral researchers (2): Dr Eric Westra; Dr Muhammad Shahbaz.
- PhD students (6): Eric Patterson; Bibi Shaheen; Manuel Fernandez; Neeta Soni; Dr Wiebke Tapken, Hudson Takano.
- Master's students (9): Abigail Barker; Adrian Quicke; Dean Pettinga; Katie McIntyre; Eric Patterson; Laura Hantzis; Moritz Wilch; Rashad Reel; El Batoul Djouani-Tahri.
- Engineering students: Cyril Magno; Guillaume Beaumont.
- Undergraduate students (6): Adrian Quicke; Crystal Sparks; Alyssa Dihle; Armeda Van Dam; Forest Danford; Steven Chow.

OTHER EXPERIENCE

Ad Hoc Peer-reviewer:

- The Plant Cell
- Nature Scientific Reports
- Antioxidant & Redox Signaling
- Plant Physiology
- New Phytologist
- Plant Cell Environment
- Plant Science
- Journal of Experimental Botany
- Environmental and Experimental Botany
- Acta Scientiarum Polonorum Technologia Alimentaria.
- Invited to evaluate proposals by the BSF, US-Israel Binational Science Foundation. (2012)
- Invited to serve as a panelist by the NSF-IOS program. (2014, 2016)

Service Activities/ Project Management:

- Current International Lead Coordinator for the establishment of the International Weed Genomic Consortium IWGC. (2016 to present)
- Representative scientist at the USDA Project Director Meeting / National Institute of Food and Agriculture Initiative, Washington DC, May 2013.
- Scientific Judge at the 2010 Colorado Center for Biorefining Biofuels – Research Experience for Undergraduates program (C2B2-REU), Colorado University, Boulder, CO.

Conference/ Meeting Organization:

- Co-organizer of the 1st International Weed Genomics Consortium Meeting, Rothamsted Research Center, Harpenden, UK, March 2017.
- Main Topic Organizer and session chair - International Weed Science Society Conference, Prague, Czech Republic, June 2016.
- “Grass Genomics” Workshop Lead Organizer - International Weed Science Society Conference, Prague, Czech Republic, June 2016.
- Participant to the “Phytobiome Initiative” (<http://www.phytobiomes.org>) - aiming at “Designing a New Paradigm for Crop Improvement”, Washington DC, USA, July 2015

Memberships:

- IWSC International Weed Science Society – 2016
- WWSWS Western Society of Weed Sciences – 2016
- ASPB American Society of Plant Biology – 2011
- Hemp Research Group, Colorado State University – 2014
- Cannabis Group, Colorado State University – 2014

Professional Development:

- “[Impact of Data Management/ Data Management Plans](#)” (2017) Morgan Library Professional development Class Series, CSU.
- “Data Organization” (2017) Professional Development Class Series, Colorado State University.
- “Data Cleaning using OpenRefine” (2017) Professional Development Class Series, Colorado State University.
- “Basic Data Analysis Using R” (2017) Professional Development Class Series, Colorado State University.
- “Data Visualization using R” (2017) Professional Development Class Series, Colorado State University.
- “Reproducible research tools” (2017) Professional Development Class Series, Colorado State University.

- “Data archiving and sharing” (2017) Professional Development Class Series, Colorado State University.

ORAL PRESENTATIONS

* denotes invited presentations

denotes selected abstracts

Ravet K*, Neve P, Gaines T, Fan L, Reinhardt C, Merotto Jr A, Preston C, Saski C, Burgos N and Beffa R. “International Weed Genomics Consortium: an initiative to coordinate and enable research in weed genomics.” May 2017: Global Herbicide Resistance Challenge Conference, Denver, Colorado, USA.

Ravet K*. Grass and Weed Genomics Workshop: Introduction. June 2016: International Weed Society Congress, Prague, Czech Republic. **Invited**

Ravet K*. Using multiple sequencing platforms to assemble the genome of *Kochia scoparia*. June 2016: International Weed Society Congress, Prague, Czech Republic. **Invited**

Ravet K*. Understanding the Genetic Evolution of Glyphosate Resistance in *Kochia scoparia* Populations. March 2016: Western Society of Weed Science annual meeting, Albuquerque, New Mexico, USA.

Ravet K*. Iron Homeostasis in *Cannabis Sativa*: improving qualitative and quantitative traits of industrial hemp cultivars through iron fertilization. February 2016: Cannabis Research Group- Seminar Series, Colorado State University, Fort Collins, Colorado, USA.

Ravet K*. Iron Homeostasis in Plants. October 2015: Bioagricultural Sciences and Pest Management - Departmental Seminar Series, Colorado State University, Fort Collins, Colorado, USA.

Ravet K#. Iron and ROS control of the DownStream mRNA decay pathway is essential for plant fitness. June 2012: FASEB Summer Conference, Trace Element Metabolism: From Model Organisms to Humans, Steamboat Springs, Colorado, USA.

Ravet K*. Micro-nutrient effect on biomass quality in Poplar: Effects of Copper status on laccase activity and lignification. March 2011: Colorado Center for Biorefining and Biofuels (C2B2) annual meeting, Golden, Colorado, USA.

Ravet K#. *Populus trichocarpa*: a novel model for new insights into Copper Homeostasis. February 2011: Plant Supergroup Meetings- Program in Molecular Plant Biology, Colorado State University, Fort Collins, Colorado, USA.

Ravet K#. Effects of Cu deficiency on photosynthesis in *Populus trichocarpa*: Towards a systemic regulation for PC prioritization. January 2011: 20th Western Photosynthesis Conference, Monterey, California, USA.

Ravet K*. Ferritins control interaction between iron homeostasis and oxidative stress in *Arabidopsis*. October 2010: Plant Supergroup Meetings- Program in Molecular Plant Biology, Colorado State University, Fort Collins, Colorado, US

PAST AND PRESENT COLLABORATIONS

Research: Gaines T, Dayan F, Westra P, Nissen S, Westra E (BSPM Dept. Colorado State University); Pilon M, Peers G, Reddy ASN, Argueso C (Biology Dept. Colorado State University); Vanderpool K (Dept. of Biomedical Sciences); Beffa R (BAYER CropScience, Germany); Preston C (University of Adelaide, Australia); Briat JF, Curie C (CNRS, France); Zabalza A, Royela M (Universidad Publica de Navarra, Pamplona, Spain); Duke S (USDA-ARS); Balk J (John Innes Center, UK); Inoue K (UC Davis).

International Weed Genomics Consortium IWGC: Saski C (Clemson University); Burgos N (University of Arkansas); Merotto Jr. A (Universidade Federal do Rio Grande do Sul, Brasil); Neve P (Rothamsted Research Center, England); Reinhardt C (University of Pretoria, South Africa); Fan L (Zhejiang University, China); Malone J (University of Adelaide, Australia); Tranel P (University of Illinois); Stewart N (University of Tennessee); Nirav Merchant (iPlant-CyVerse).

Workshop organization: Kramer H (BAYER, Germany); Hamouzova K (Czech University of Life Sciences Prague, Czech Republic); Valverde B (Nanjing Agricultural University, China).