

Matias L. Rugnone, Ph.D.

Research Associate

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Education

2013 Ph.D. Molecular Biology, National University of San Martin, Buenos Aires, Argentina

2007 B.Sc. Biotechnology, National University of San Martin, Buenos Aires, Argentina

Professional Experience

2017-present **Research Associate**, University of Southern California (USC). Keck School of Medicine, Los Angeles, CA USA. PI: Professor Steve Kay

2016-2017 **Research Assistant II**, The Scripps Research Institute (TSRI). Molecular Medicine, La Jolla, CA USA. PI: Professor Steve Kay

2014-2016 **Staff Research Associate** David Geffen School of Medicine, Biological Chemistry Department, University of California, Los Angeles (UCLA); USA. Laboratory of Gene expression and chromosome biology in Bacteria and Yeast. PI: Professor Reid Johnson.

2007-2013 **Genome Array Facility Manager**. Coordinator of the Affymetrix microarray facility service. Agricultural Plant Physiology and Ecology Research Institute (IFEVA), University of Buenos Aires, Argentina. Supervisor: Dr. Pablo Cerdán.

PhD. Training

2008 – 2013 Leloir Institute Foundation (FIL), Buenos Aires, Argentina. PI: Dr. Marcelo J. Yanovsky

Awards and Honors

Fellowships

2011-2013 National Scientific and Technical Research Council of Argentina (CONICET), Postgraduate Type II Fellowship. Buenos Aires, Argentina.

2008-2011 National Agency of the Promotion of Science and Technology. PhD Fellowship. Buenos Aires, Argentina.

2002-2008 University of San Martin (UNSAM), Undergraduate Student Fellowship. Buenos Aires, Argentina.

2004 Recipient of: “Undergraduate Student Research Recognition Award, XXV Conference of the Argentinean Society of Plant Physiology.

Publications

- Storani, L., Hernando, C.E., Staneloni, R., Ploschuk, E., **Rugnone, M.L.**, Striker, G., Casal, J.J., Chernomoretz, A., and Yanovsky, M.J. (2015). AtCBF1 Overexpression Confers Tolerance to High Light Conditions at Warm Temperatures in Potato Plants. *Am J Potato Res* 92, 619-635.
- Schlaen, R.G., Mancini, E., Sanchez, S.E., Perez-Santángelo, S., **Rugnone, M.L.**, Simpson, C.G., Brown, J.W.S., Zhang, X., Chernomoretz, A., and Yanovsky, M.J. (2015). The spliceosome assembly factor GEMIN2 attenuates the effects of temperature on alternative splicing and circadian rhythms. *Proc Natl Acad Sci USA* 112, 9382–9387.
- Denninghoff, V., Ossani, G., Uceda, A., **Rugnone, M.L.**, Fernández, E., Fresno, C., González, G., Díaz, M., Avagnina, A., Elsner, B., and Monserrat, A. (2014). Molecular pathology of acute kidney injury in acholine-deficient model and fish oil protective effect. *Eur J Nutr* 53, 897-906.
- **Rugnone, M.L.**, Faigón Soberna, A., Sanchez, S.E., Schlaen, R.G., Hernando, C.E., Seymour, D.K., Mancini, E., Chernomoretz, A., Weigel, D., Más, P., and Yanovsky, M.J. (2013). LNK genes integrate light and clock signaling networks at the core of the Arabidopsis oscillator. *Proc Natl Acad Sci USA* 110, 12120-12125.
- Moriconi, V., Sellaro, R., Ayub, N., Soto, G., **Rugnone, M.L.**, Shah, R., P. Pathak, G., Gärtner, W., and Casal, J.J. (2013). LOV-domain photoreceptor, encoded in a genomic island, attenuates the virulence of *Pseudomonas syringae* in light-exposed Arabidopsis leaves. *Plant J* 76, 322-331.
- Auge, G.A., **Rugnone, M.L.**, Cortés, L.E., González, C.V., Zarlavsky, G., Boccalandro, H.E., and Sánchez, R.A. (2012). Phytochrome A increases tolerance to high evaporative demand. *Physiologia Plantarum* 146, 228-235.
- Sanchez, S.E., Petrillo, E., Beckwith, E.J., Zhang, X., **Rugnone, M.L.**, Hernando, C.E., Cuevas, J.C., Godoy Herz, M.A., Depetris-Chauvin, A., Simpson, C.G., Brown, J.W.S., Cerdan, P.D., Borevitz, J.O., Mas, P., Ceriani, M.F., Kornblihtt, A.R., and Yanovsky, M.J. (2010). A methyl transferase links the circadian clock to the regulation of alternative splicing. *Nature* 468, 112-116.
- Boccalandro, H.E.*, **Rugnone, M.L.***, Moreno, J.E., Ploschuk, E.L., Serna, L., Yanovsky, M.J., and Casal, J.J. (2009). Phytochrome B Enhances Photosynthesis at the Expense of Water-Use Efficiency in Arabidopsis. *Plant Physiol* 150, 1083-1092.*:**Equally Contributed.**

Technological Production

LINK Transgenic Plants, provisional application for patent in the United States of America was filled on February 6th, 2013 (also known as United States Application No. WO2014122607A2).

International Research Collaborations

2009-2010 Research experience at Dr. Ferenc Nagy's laboratory in the Biological Research Center Institute, Szeged, Hungary. Research topic: Characterization of bacterial growth of *Pseudomonas* sp. in light signaling mutants of *Arabidopsis thaliana*.

Related Courses

- 2008 **Molecular Bases of Plant-Pathogen Interaction.** National University of Cordoba, Postgraduate School, Argentina.
- 2009 **Physiological Bases of Crop Improvement.** University of Buenos Aires, School of Agriculture (FAUBA), Buenos Aires, Argentina.
- 2010 **Estress, a link between Ecology, Genetics and Evolution.** University of Buenos Aires, School of Exact and Natural Sciences, Argentina.
- 2010 **Conservation of the Vegetable Germplasm.** University of Buenos Aires, School of Exact and Natural Sciences, Argentina.
- 2011 **Molecular Genetics of Yeast.** University of Buenos Aires, School of Exact and Natural Sciences, Argentina.
- 2012 **Production of Third Generation Biofuels from Microalgae and Cyanobacteria.** Argentine/Brazilian Center of Biotechnology (CABBIO), Andre Tosello Foundation, Campiñas, Brasil

Supervisory Experience

- 2014-2016 Training and supervision of the laboratory helper by organizing and delegating tasks for common support of all the team members of Reid Johnson laboratory.
- 2010-2011 Bachelor thesis co-advisor of Lic. Victoria Moriconi. Degree Attained: Master in Biology at the University of Belgrano, School of Natural and Exact Sciences, Buenos Aires, Argentina.

Meeting Presentations

- 2011 14th Congress of the European Society for Photobiology. "Function of photoreceptors in the plant pathogen *Pseudomonas syringae*". Geneva, Switzerland.
- 2010 American Society of Plant Biologists. "A role for AtPRMT5 in the Arabidopsis circadian network". Montreal, Canada.
- 2010 XXVIII Meeting of the Argentinean Society of Plant Physiology (SAFV). "Phytochrome A increases tolerance to high evaporative demand". La Plata, Buenos Aires, Argentina.
- 2008 Society for Research on Biological Rhythms, 11th Biennial Meeting. "A role for PRMT5 in the regulation of light signalling and clock function in Arabidopsis". Sandestin, Florida, USA.
- 2006 XXVI Meeting of the Argentinean Society of Plant Physiology (SAFV). "Phytochrome B modulates morphology and density of epidermic cells in hypocotyls of *Arabidopsis thaliana*." Chascomús, Buenos Aires, Argentina.

2004 XXV Meeting of the Argentinean Society of Plant Physiology (SAFV).
“Phytochrome B regulates density and differentiation of stomatal cells in
Arabidopsis thaliana.” Santa Rosa, La Pampa, Argentina.

References

Dr. Reid C. Johnson

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Dr. Marcelo J. Yanovsky

Independent Investigator at the Argentine Research Council (CONICET). Principal Investigator of Comparative Genomics of Plant Development laboratory at Leloir Institute Foundation (FIL), Buenos Aires, Argentina. Phone: +54-11-5238-7500, ext. 3103.

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