

Curriculum Vitae

Raymond V. Malfavon-Borja

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Current Position

Postdoctoral Fellow
Feschotte Lab
Eccles Institute of Human Genetics
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Salt Lake City, Utah 84112

Education

- 2007 - 2013 Doctor of Philosophy
University of Washington
Advisor: Harmit S. Malik; Co-Advisor: Michael Emerman
Dissertation Title: Learning from the past: Searching for novel
TRIM, *CypA*, and *TRIMCyp* antiviral factors in primates
- 2002 - 2007 Bachelors of Science
California State University of San Marcos
(Credits also earned at Palomar Community College)

Awards, Achievements, and Honors

- 2012 Conference on Retroviruses and Opportunistic Infections (CROI) Young Investigator Award
- 2011 - 2012 NIH Interdisciplinary Training Grant Fellowship
- 2010 Keystone Symposia Underrepresented Minority Scholarship
- 2009 Genomics Outreach for Minorities (GenOM) Travel Scholarship
- 2009 - 2011 Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowship (F31) to Promote Diversity in Health-Related Research
- 2009 National Science Foundation (NSF) Honorable Mention
- 2007 - 2009 Genomics Outreach for Minorities (GenOM) Project Fellowship

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| 2007 - 2008 | Graduate Opportunities and Minority Achievement Program (GO-MAP) Fellowship |
| 2006 | Stanford Summer Research Program (SSRP) |
| 2005 - 2007 | Minority Access to Research Careers (MARC) Program |
| 2005 | CSU San Marcos Summer Research Training Program |
| 2005 - 2007 | Fenstermaker Foundation Scholarship |
| 2004 | Alen E. Ardis Scholarship |
| 2003 - 2004 | Bridges to the Future Program |

Publications

Marques-Bonet T., Kidd J.M., Ventura M., Graves T.A., Cheng Z., Hillier L.W., Jiang Z., Baker C., **Malfavon-Borja R.**, Fulton L.A., Alkan C., Aksay G., Girirajan S., Siswara P., Chen L., Cardone M.F., Navarro A., Mardis E.R., Wilson R.K., Eichler E.E. (2009) A burst of segmental duplications in the genome of the African great ape ancestor. *Nature*. Feb 12;457(7231):877-81.

Malfavon-Borja R., Wu L.I., Emerman M., Malik H.S. (2013) Birth, decay, and reconstruction of an ancient *TRIMCyp* gene fusion in primate genomes. *PNAS* Feb 12; 110(7):E583-92

Conferences/Presentations

- 2012 **Short talk. Poster. Conference on Retroviruses and Opportunistic Infections.** Seattle, Washington, “*Ancient and recurrent evolution of TRIMCyp gene fusions in primates*”, Ray Malfavon-Borja, Lily Wu, Michael Emerman, Harmit S. Malik.
- 2012 **Short talk. 3rd International Conference on Genomic Impact of Eukaryotic Transposable Elements.** Pacific Grove, California, “*Ancient and recurrent evolution of TRIMCyp gene fusions in primates*”, Ray Malfavon-Borja, Lily Wu, Michael Emerman, Harmit S. Malik.
- 2011 **Invited Guest Speaker.** Genes: The Smallest Piece of You (Host: Cyan James). Cornish College of the Arts, Seattle, Washington.
- 2011 **Poster. Fred Hutchinson Cancer Research Center Viral Pathogenesis Symposium,** Seattle, Washington, “*Functional analysis of a third and ancient TRIMCyp gene fusion*”, Ray Malfavon-Borja, Lily Wu, Michael Emerman, Harmit S. Malik.
- 2011 **Poster. Keystone Symposia, HIV Evolution, Genomics and Pathogenesis,** Whistler, British Columbia, “*Functional analysis of a third*

and ancient TRIMCyp gene fusion", Ray Malfavon-Borja, Lily Wu, Michael Emerman, Harmit S. Malik.

- 2010 **Invited Guest Speaker.** Genes: The Smallest Piece of You (Host: Cyan James). Cornish College of the Arts, Seattle, Washington.
- 2010 **Poster. Keystone Symposia, Cell Biology of Virus Entry, Replication and Pathogenesis**, Taos, New Mexico, "*Ancient and Recurrent Evolution of the Antiviral Gene Fusion TRIMCyp*", Ray Malfavon-Borja, Michael Emerman, Harmit S. Malik.
- 2010 **Poster. Fred Hutchinson Cancer Research Center Viral Pathogenesis Symposium**, Seattle, Washington, "*An Analysis of CyclophilinA Retrogenes in Primates*", Ray Malfavon-Borja, Michael Emerman, Harmit S. Malik.
- 2009 **Poster. Society for Molecular Biology and Evolution 17th Annual Meeting**, Iowa City, Iowa, "*An Analysis of CyclophilinA Retrogenes in Primates*", Ray Malfavon-Borja, Michael Emerman, Harmit S. Malik.
- 2009 **Poster. Fred Hutchinson Cancer Research Center Viral Pathogenesis Symposium**, Seattle, Washington, "*Lightning Strikes Thrice: Convergent Evolution of TRIMCyp in Primates*", Ray Malfavon-Borja, Harmit S. Malik.
- 2006 **Poster. Annual Biomedical Research Conference for Minority Students**, Anaheim, Ca, "*Quantifying Gene Copy Number and Expression of a Retrotransposon in *Penaeus stylirostris**", Ray Malfavon-Borja, Suzanne E. Hizer and Denise K. Garcia.
- 2006 **Poster. Stanford Summer Research Program in Biomedical Sciences Research Symposium**, Stanford, California, "*Investigating Differences in Transcription, Evolution, and Expression between Ancestral and Derived *CHKov1* Genes to Infer causes of Pesticide Resistance*", Ray Malfavon-Borja, Yael Aminetzach and Dmitri Petrov.
- 2006 **Poster. Society for Molecular Biology and Evolution 14th Annual Meeting**, Tempe, Arizona, "*Characterization and Quantification of a Retrotransposon and its Implications for the *Penaeus stylirostris* Genome*". Ray Malfavon-Borja, Walter G. Tamulis, Suzanne E. Hizer and Denise K. Garcia.
- 2006 **Poster. CSU San Marcos Office for Biomedical Research and Training Symposium**, San Marcos, California, "*Quantifying Retrotransposon Expression Activity and Gene Copy Number in IHHNV Infected and Specific Pathogen Free *Penaeus stylirostris* Shrimp*", Ray Malfavon-Borja, Suzanne E. Hizer and Denise K. Garcia.

Relevant Experience

- 2012 **Panel Participant.** CSU San Marcos Office for Biomedical Research & Training (OBRT) Graduate Panel. CSU San Marcos, San Marcos, Ca.
- 2011 **Teaching Assistant.** Evolutionary Genetics and Genomics (MCB 533; Instructors: Dr. Katie Peichel and Dr. Harmit Malik). University of Washington, Seattle, Wa.
- 2010 **Teaching Assistant.** CSI: Seattle (GSI 107; Instructors: Dr. Celeste Berg and Dr. Bonny Brewer). University of Washington, Seattle, Wa.
- 2010 **Graduate Student Panel Participant.** Graduate Opportunities & Minority Achievement Program and Ethnic Cultural Center Mentoring & Networking Reception. University of Washington, Seattle, Wa.
- 2010 **Teaching Assistant.** Fundamental Genetics and Genomics (GENOME 371; Instructors: Dr. Joshua Akey and Dr. Stanley Fields). University of Washington, Seattle, Wa.
- 2009 - 2012 **Tutor/Mentor.** Clear Sky Native Youth Council Tutoring. Seattle, Wa.
- 2009 **Scientific Writing Workshop.** Fred Hutchinson Cancer Research Center, Seattle, Wa.
- 2009 **Mentor.** GenOM Alliances for Learning and Vision for Underrepresented Americans CSI Seattle Workshop. University of Washington, Seattle, Wa.
- 2008 **Panel Participant.** CSU San Marcos Office for Biomedical Research & Training (OBRT) Graduate Panel. CSU San Marcos, San Marcos, Ca.
- 2007 **Teaching Assistant.** Genetics (BIOL 352; Instructor: Dr. Denise Garcia). CSU San Marcos, San Marcos, Ca.
- 2004 - 2007
I) **Supplemental Instructor** (Directors: Dr. Richard Bray and Suzanne Hizer). Organic Chemistry and General Chemistry. Palomar College, San Marcos, Ca.
II) Molecular Cell Biology and Genetics. CSU San Marcos, San Marcos, Ca.
- 2004 **Lab Technician.** Dept of Chemistry. Palomar College, San Marcos, Ca.
- 2003 - 2004 **Teaching Assistant.** Organic Chemistry (CHEM 220 & CHEM 221; Instructor: David Boyajian). Palomar College, San Marcos, Ca.

References

Harmit S. Malik, PhD (Graduate Advisor)

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Michael Emerman, PhD (Graduate Co-Advisor)

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