

Alejandro R. Burga

JCC POSTDOCTORAL FELLOW

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Education

Ph.D. in Systems Biology, Advisor: Dr. Ben Lehner

Barcelona, Spain

CENTRE FOR GENOMIC REGULATION, CRG/EMBL SYSTEMS BIOLOGY UNIT

2008–2012

- Graduated with honors, *summa cum laude*

Master in Biomedical Research, Advisor: Dr. Ben Lehner

Barcelona, Spain

CENTRE FOR GENOMIC REGULATION, CRG/EMBL SYSTEMS BIOLOGY UNIT

2007–2008

B.S. in Biochemistry

Santiago, Chile

PONTIFICAL CATHOLIC UNIVERSITY OF CHILE

2003–2007

- Graduated with honors, *summa cum laude*

High School Degree

Lima, Peru

SAINT AUGUSTINE HIGH SCHOOL

1997–2002

- Graduated with honors, Second place out of 165 students during five years of High School

Research experience

Jane Coffin Childs Postdoctoral Fellow

Los Angeles, California

HUMAN GENETICS DEPARTMENT, UCLA

Jul 2013 - Present

- Advisor: Dr. Leonid Kruglyak. Quantitative genetics in yeast and *C. elegans* and Genomics of vertebrate evolution

Postdoctoral Fellow

Princeton, New Jersey

LEWIS-SIGLER INSTITUTE, PRINCETON UNIVERSITY

Nov. 2012 - Jul. 2013

- Advisor: Dr. Leonid Kruglyak. Quantitative genetics in yeast and *C. elegans* and Genomics of vertebrate evolution

Ph.D. student

Barcelona, Spain

EMBL SYSTEMS BIOLOGY UNIT, CENTER FOR GENOMIC REGULATION (CRG)

July 2008 - July 2012

- Advisor: Dr. Ben Lehner Systems Biology. Stochastic gene expression during the development of *C. elegans*.

Masters Student

Barcelona, Spain

EMBL SYSTEMS BIOLOGY UNIT, CENTER FOR GENOMIC REGULATION (CRG)

August 2007 - July 2008

- Advisor: Dr. Ben Lehner Systems Biology. Stochastic gene expression during the development of *C. elegans*.

Undergraduate researcher

Santiago, Chile

PONTIFICAL CATHOLIC UNIVERSITY OF CHILE

March 2003 - July. 2007

- Advisor: Dr. Juan Larrain. Developmental biology. Gene expression analysis of Syndecan-4 during mouse embryonic development.
- Advisor: Dr. Rodrigo Gutierrez. Systems Biology. Construction of a literature-based interaction network for *A. thaliana*

Publications

Articles

1. **Burga, A.**, Casanueva, O., Lehner, B. “Predicting mutation outcome from early stochastic variation in genetic interaction partners”. *Nature*, 480, 250–253 (2011)
2. Casanueva, O., **Burga, A.**, Lehner, B. “Fitness trade-offs and variable mutation buffering in isogenic *C. elegans*”. *Science*, 335, 82–85 (2012)
3. **Burga, A.**, Wang W., Wolf P., Ramey A., Verdugo c., Lyons K., Parker P., Kruglyak L. “Loss of flight in the Galapagos Cormorant mirrors human skeletal ciliopathies” bioRxiv 061432; doi: <http://dx.doi.org/10.1101/061432> (2016)

Reviews

1. **Burga, A.**, Lehner, B. “Beyond genotype to phenotype: why the phenotype of an individual cannot always be predicted from their genome sequence and the environment that they experience” *FEBS Journal*, 279, 3765-3775 (2012)
2. **Burga, A.**, Lehner, B. “Predicting phenotypes from genotypes, phenotypes and a combination of the two” *Current Opinion in Biotechnology* (2013)

Book Chapters

1. Coruzzi G., **Burga, A.**, Katari M., Gutierrez, R. “Systems Biology: Principles and applications in plant research” in *Plant Systems Biology* - Blackwell Publishing (2009)

Honors & Awards

2013	Jane Coffin Childs Foundation Postdoctoral fellowship , Three year research fellowship awarded by the Jane Coffin Childs Memorial Fund for Medical Research.	<i>U.S.A</i>
2012	“La Vanguardia” Research prize , Ph.D. publication (Burga et al., 2011) selected Top 8 of all scientific studies conducted in Spain during 2011	<i>Spain</i>
2011	Extraordinary Thesis Prize - Universitat Pompeu Fabra , Prize given by the Pompeu Fabra University to the best thesis submitted during the year 2011	<i>Spain</i>
2012	Travel fellowship to the Weizmann Institute for Science, Rehovot, Israel , Travel expenses to present and interview at the Weizmann Institute for Science for a postdoctoral position.	<i>Israel</i>
2009	Best Talk Prize – Institute for Research in Biomedicine (IRB) , Prize given to the best talk at the IRB PhD Student Symposium.	<i>Spain</i>
2009	Best Talk Prize – Center for Genomic Regulation (CRG) , Prize given to the best talk at the CRG PhD Student Symposium.	<i>Spain</i>
2008	FPI Doctoral Studies Fellowship , Fellowship sponsored by the Spanish Government to carry doctoral studies.	<i>Spain</i>
2007	Deutscher Akademischer Austausch Dienst (DAAD) travel fellowship , Fellowship awarded by DAAD to travel to Berlin and study German for 1 month.	<i>Germany</i>
2007	Biochemistry Honor Scholarship – Pontificia Universidad Católica de Chile , Scholarship given to the student with the highest GPA during the academic year.	<i>Chile</i>
2006	Biochemistry Honor Scholarship – Pontificia Universidad Católica de Chile , Scholarship given to the student with the highest GPA during the academic year.	<i>Chile</i>
2005	Biochemistry Honor Scholarship – Pontificia Universidad Católica de Chile , Scholarship given to the student with the highest GPA during the academic year.	<i>Chile</i>
2002	Graduated with Honors from Saint Augustine High School , Second place out of 165 students during five years of High School.	<i>Peru</i>