

# Kirsten Gotting

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http://kirstengotting.com

I am a Bioinformaticist in the lab of Dr. Alejandro Sánchez Alvarado. I have worked on various projects for the lab, including RNA-seq analysis on various organisms, proteomics analysis and genome annotation.

Genomes ability to be plastic in the face of evolutionary pressure, with the circumstances and conditions determining why certain genes are maintained, duplicated, or removed drives me to continue researching and learning in the field of Biology.

## SKILLS

Unix • Bioconductor • MAKER  
Tuxedo Suite • Trinity  
Parallel Computing • tidyverse  
BUSCO • Rmarkdown/knitr  
Data Visualization • Git

## Programming

R • Python • Bash • MySQL

## Analysis

- RNA-seq
- Genome Annotation
- Isoform
- Gene Ontology
- Motif
- MudPIT Proteomics

## EDUCATION

### MS in Biology 2014

Emphasis: Bioinformatics/Genomics  
University of Oregon, Eugene, OR

### BA in Biology 2013

Minors: Chemistry, Spanish  
University of Oregon, Eugene, OR

## PUBLICATIONS

Shawn Luttrell, **Kirsten Gotting**, Eric Ross, Alejandro Sánchez Alvarado, and Billie J. Swalla. "Head Regeneration in Hemichordates is Not a Strict Recapitulation of Embryonic Development." Developmental Dynamics [Accepted].

Lei, Kai, Hanh Thi-Kim Vu, Ryan D. Mohan, Sean A. McKinney, Chris W. Seidel, Richard Alexander, **Kirsten Gotting**, Jerry L. Workman, and Alejandro Sánchez Alvarado. "Egf Signaling Directs Neoblast Repopulation by Regulating Asymmetric Cell Division in Planarians." Developmental Cell 38, no. 4 (2016): 413-429.

Robb, Sofia, **Kirsten Gotting**, Eric Ross, and Alejandro Sánchez Alvarado. "SmedGD 2.0: The Schmidtea mediterranea genome database." genesis 53, no. 8 (2015): 535-546.

## EXPERIENCE

### Bioinformaticist

October 2014 – Current

Stowers Institute for Medical Research - Kansas City, MO  
Sánchez Lab - HHMI

- Set up and maintained a genome browser, and created pipelines for gene annotation and RNA-seq data analysis for *Nothobranchius furzeri*.
- Contributed to creation of SmedGD 2.0, a genome database for *Schmidtea mediterranea*.

### Bioinformatics Intern

January 2014 – September 2014

Stowers Institute for Medical Research - Kansas City, MO  
Sánchez Lab - HHMI

- Developed a self-documenting RNA-seq analysis pipeline for analysis of data from non-model organisms, compatible with parallel computing environments. Created interactive web apps for accessible data viewing.

### Graduate Teaching Fellow

September 2013 – December 2013

University of Oregon - Eugene, OR

- Instructed students in initial course of first year introductory biology course.

### Undergraduate Teaching Assistant

April 2013 - June 2013

University of Oregon - Eugene, OR

- Part of instructional team that implemented new bioinformatics component to the Honors Biology sequence.
- Taught students how to use BLAST, the UCSD genome browser, and ClustalW, for gene annotation.

### Line/Lab Assitant

October 2010 - June 2013

Zebrafish International Resource Center - Eugene, OR

- Worked to maintain and propagate zebrafish lines for shipping to domestic and international research labs.

### Undergraduate Research Assistant

April 2012 - September 2012

University of Oregon - Eugene, OR  
Selker Lab

- Creation and characterization of mutant strains of *Neurospora crassa* defective in methylation capabilities. Knowledge of UV mutagenesis, selective mutant screens, DNA isolation, southern blots.