EDUCATION

PhD *cum laude* in Plant Biotechnology
University of Barcelona, Spain

Master of Arts in Plant Biology
University of Texas, Austin

Bachelor of Science in Computer Science
University of Texas, Austin

International Baccalaureate with honors
Lycee Jeanne d'Albret, St Germain-en-Laye,
   France

COMPUTATIONAL SKILLS

Python, bash, Processing | *nix cluster and
workstation | NGS analysis (BWA, samtools,
bedtools, IGV), sequence search, alignment
and clustering (BLAST, vmatch, MUSCLE,
UCLUST, SILIX) | transposon annotation
(LTR_finder, MITE_hunter, RepeatMasker) |
data visualization (Circos, UGENE, matplotlib,
Processing)

DIGITAL FABRICATION

CAD design (Blender, OpenSCAD) | 3D printing

AWARDS

2015 MipTec Travel Grant
2009-2013 Fully Funded PhD Scholarship
2013 Best Student Presentation, CNET
2008 ASPB Travel Grant
2005 Excellence in Biology Research,
UT Undergraduate Poster Session
2002 Honor List, UT Austin
2001 Dean's List, UT Austin

LANGUAGES

English and French (native), Spanish (fluent),
   Catalan (basic)

OTHER INTERESTS

Rock climbing, interactive installations and
   creative coding, photography

ELIZABETH HÉNAFF

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Brooklyn, NY 11206

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EXPERIENCE

How to Grow (Almost) Anything   Sep 2015 - Jan 2016
bio.academany.org | MIT
Instructor training

Postdoctoral Research Associate   Sep 2014 - Present
Weill Cornell Medical College, New York | PI: Chris Mason
Environmental metagenomics.

Postdoctoral Research Associate   Sep 2014 - Sep 2015
Memorial Sloan Kettering Cancer Center, New York | PI: Alex
  Kentsis
Impact of transposition in pediatric cancers.

PhD Fellow   Sep 2009 - Aug2013
Center for Research in Agricultural Genomics (CRAG), Barcelona,
  Spain
*Genome-wide transposon analyses: annotation, movement and
  impact on genome structure and evolution*

Internship   March - May 2012
Computational Biology Research Center (CBRC), Tokyo, Japan
*Detection of transposon-related polymorphisms using whole-genome
  alignments.*

EMBO Doctoral Course   June - July 2011
Institut Pasteur, Paris, France
*Practical Course: Bioinformatics and Comparative Genomics
  Analyses*

Research / Teaching Assistant   Sep 2006 - Dec 2008
University of Texas at Austin | PI: Stanley Roux
*Master's thesis: The role of extracellular ATP in regulating growth by
  cell elongation.*

Undergraduate Research Assistant   2002 - 2005
University of Texas at Austin | PIs: Robin Gutell, Stanley Roux, David
  Hillis.
*Prediction of two-dimensional RNA structure, genetic algorithms for
  phylogeny reconstruction*

PUBLICATIONS

1. Hénaff E, Zapata L, Casacuberta JM, Ossowski S. Jitterbug: somatic and germline transposon insertion detection at single-nucleotide resolution. BMC Genomics. 2015;16(1):768. doi:10.1186/s12864-015-1975-5.

2. Henssen AG, Henaff E, Jiang E, et al. Genomic DNA transposition induced by human PGBD5. Elife. 2015;4:e10565. doi:10.7554/eLife.10565.

3. Sanseverino W, Hénaff E, Vives C, et al. Transposon Insertions, Structural Variations, and SNPs Contribute to the Evolution of the Melon Genome. Mol Biol Evol. 2015;32(10):2760-2774. doi:10.1093/molbev/msv152.

4. Afshinnekoo E, Meydan C, Chowdhury S, et al. Geospatial Resolution of Human and Bacterial Diversity with City-Scale Metagenomics. Cell Syst. 2015. doi:10.1016/j.cels.2015.01.001.

5. Hénaff E, Vives C, Desvoyes B, et al. Extensive amplification of the E2F transcription factor binding sites by transposons during evolution of Brassica species. Plant J. 2014;77(6):852-862.

6. Yang L, Koo DH, Li D, et al. Next-generation sequencing, FISH mapping and synteny-based modeling reveal mechanisms of decreasing dysploidy in Cucumis. Plant J. 2014;77(1):16-30.

7. Hernández-Pinzón I, Cifuentes M, Hénaff E, Santiago N, Espinás ML, Casacuberta JM. The Tnt1 retrotransposon escapes silencing in tobacco, its natural host. PLoS One. 2012;7(3).

8. Garcia-Mas J, Benjak A, Sanseverino W, et al. The genome of melon (Cucumis melo L.). Proc Natl Acad Sci. 2012;109(29):11872-11877. doi:10.1073/pnas.1205415109.

9. González VM, Benjak A, Hénaff EM, et al. Sequencing of 6.7 Mb of the melon genome using a BAC pooling strategy. BMC Plant Biol. 2010;10:246. doi:10.1186/1471-2229-10-246.

10. Jeter CR, Tang W, Henaff E, Butterfield T, Roux SJ. Evidence of a novel cell signaling role for extracellular adenosine triphosphates and diphosphates in Arabidopsis. Plant Cell. 2004;16(10):2652-2664.

SELECTED TALKS

2015-11-05 *Hacking the Genetic Heritage of a Superfund Site,* Hacking the Human Body, Digital Garage, San Francisco, USA

2015-09-20 *Benchmarking and Standardization of Structural Variation Detection Methods,* MipTec, Basel Life Science Week, Basel, Switzerland

2015-08-27 *Developing a Benchmark Dataset for Transposon Insertion Detection,* Genome in a Bottle Consortium Meeting, National Institute of Standards and Technology, Washington DC, USA

2015-06-18 *The Gowanus Canal Microbiome: Exploring the Microbial Ecosystem of a Superfund Site,* Microbes in the City, New York Academy of Sciences, New York, USA

2015-06-19 *A Feeling for the Organism: DNA Sequencing as Digital Insight into Biological Beings*, Genspace, New York, USA

2012-04-21 *High transposition activity in recent evolution the of the melon genome*, International Conference on Transposable Elements, St. Malo, France

2008-06-22 *Visualization of extracellular ATP in transgenic lines of Arabidopsis expressing a wall localized luminescent reporter*, American Society of Plant Biologists Meeting, Merida, Mexico