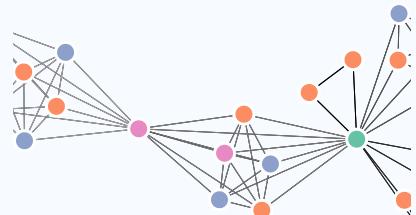


MARIELA CORTÉS LÓPEZ

I am interested in RNA biology, particularly RNA processing. I have experience analyzing bioinformatic data for diverse projects, mainly using R. I enjoy to use public available data to complement my own research and explore other biological questions.



EDUCATION

current
I
2017

- **PhD, Biology**
Julian König's Lab Institute of Molecular Biology, Mainz, Germany
 - Working on dissecting alternative splicing networks using high throughput mutagenesis approaches.

2016
I
2012

- **B.S., Genomics**
Licenciatura en Ciencias Genómicas Universidad Nacional Autónoma de México, Cuernavaca, Mexico
 - Thesis: "CircRNA accumulation in the aging mouse brain"

View this CV online with links at
nickstrayer.me/datadrivencv/

RESEARCH EXPERIENCE

2017
I
2017

- **Research Assistant**
Pedro Miura's Lab University of Nevada, Reno
 - Scientific technician position, collaborating in RNA related bioinformatics projects.

2017
I
2016

- **Undergraduate Researcher**
Pedro Miura's Lab University of Nevada, Reno
 - Internship and bachelor thesis project.
 - Developing a computational pipeline to analyze RNA-Seq data in order to identify circRNA transcripts.
 - Collaboration in several projects inside the group but also with other groups from UNR (Dr. Alexander van der Linden group) and external (Dr. Brian Johnson from UC Davis and Dr. Joe Chakkalakal from Rochester University).

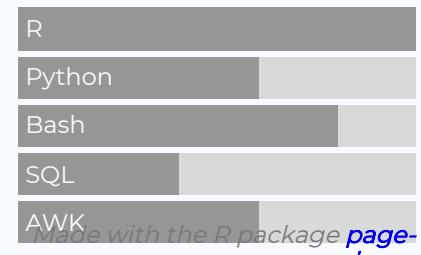
2015
I
2013

- **Undergraduate Researcher**
Otto Geiger's Lab Centro de Ciencias Genómicas, Cuernavaca, Mexico
 - Project: "Bacteria with a phospholipid methyltransferase activity can synthesize their own choline and glycine betaine"
 - Training in basic molecular biology and lipidomics skills.

CONTACT

- m.corteslopez@imb-mainz.de
 [alt_spliced](#)
 github.com/mcortes-lopez
 <https://mcortes-lopez.netlify.app/>
 <https://www.linkedin.com/in/mcorteslopez/>
 <https://scholar.google.es/citations?user=XStCpI4AAAAJ>

LANGUAGE SKILLS



The source code is available on
github.com/nickstrayer/cv

Last updated on 2020-12-27.

2014
|
2014

- **Summer Undergraduate Researcher**

Roger Summon's Lab (as part of MISTI-Mexico)
📍 MIT EAPS, Cambridge, MA, USA

- Participation in MISTI-Mexico Workshop (June 26th, 2014).
- Training in basic analysis of MS data.

2016
|
2016

TEACHING EXPERIENCE

- **Presentation on CRISPR-Cas9 technology to high school students**

Youth Science Institute at UC Davis's Tahoe Environmental Research Center
📍 Incline Village, NV

- Together with colleague Maebh Lynch

2015
|
2015

- **Human Genomics Course (GEN_2015)**

Undergraduate Program in Genomic Sciences
📍 UNAM, Cuernavaca, Mexico

- Teacher Assistant under direction of Dr. Enrique Morett and Dr. Xavier Soberón

2014
|
2014

- **Co-organizer of Seminar on Paleogenomics¹**

Licenciatura en Ciencias Genómicas
📍 Cuernavaca, Mexico | Virtual

- Together with Javier Blanco and Arturo Anaya

SELECTED PUBLICATIONS, POSTERS, AND TALKS

2018
|
2018

- **Decoding a cancer-relevant splicing decision in the RON proto-oncogene using high-throughput mutagenesis²**

Nature Communications

- Braun, Simon, Mihaela Enculescu, Samarth T. Setty, **Mariela Cortés-López**, Bernardo P. de Almeida, FX Reymond Sutandy, Laura Schulz, Anke Busch, Markus Seiler, Stefanie Ebersberger, Nuno L Barbosa-Morais, Stefan Legewie, Julian König, Kathi Zarnack

2018
|
2018

- **Global accumulation of circRNAs during aging in *Caenorhabditis elegans*³**

BMC Genomics

- **Cortés-López, Mariela**, Matthew R. Gruner, Daphne A. Cooper, Hannah N. Gruner, Alexandru-Ioan Voda, Alexander M. van der Linden, and Pedro Miura.

- 2017 | 2017
- **Loss of adult skeletal muscle stem cells drives age-related neuromuscular junction degeneration⁴**
eLife
 - Liu, Wenxuan, Alanna Klose, Sophie Forman, Nicole D. Paris, Lan Wei-Lapierre, **Mariela Cortés-López**, Aidi Tan, Morgan Flaherty, Pedro Miura, Robert T. Dirksen, and Joe V. Chakkalakal.
- 2017 | 2017
- **Genome-wide circRNA profiling from RNA-seq data⁵**
Humana Press
 - Cooper, Daphne A., **Mariela Cortés-López**, and Pedro Miura.
- 2016 | 2016
- **CircRNA accumulation in the aging mouse brain⁶**
Scientific Reports
 - Gruner, Hannah, **Mariela Cortés-López**, Daphne A. Cooper, Matthew Bauer, and Pedro Miura
- 2016 | 2016
- **Focus: epigenetics: emerging functions of circular RNAs⁷**
Yale Journal of Biology and Medicine
 - Cortés-López, Mariela, and Pedro Miura.

COURSES, MEETINGS, TALKS, AND POSTERS

- 2020 | 2020
- **RNA 2020**
RNA Society  Virtual
 - Poster Presentation: "The patterns of Alu exonisation in human cancer"
- 2020 | 2020
- **EMBL-EMBO Symposium The Complex Life of RNA**
EMBL Heidelberg  Virtual
 - Poster presentation: "Decoding alternative splicing in CD19 exon 2 using a high-throughput mutagenesis screen"
- 2019 | 2019
- **RMU-RNA Salon**  Frankfurt, Germany
 - Short Talk: "The patterns of Alu exonisation in human cancers"
- 2019 | 2019
- **PacBio SMRT Leiden**
Leiden University  Leiden, Netherlands
 - Poster Presentation and flashlightning talk "Decoding the splicing regulatory decisions using high-throughput mutagenesis coupled with long-read sequencing"
- 2019 | 2019
- **RNA 2019**
RNA Society  Krakow, Poland
 - Poster presentation: "The patterns of Alu exonisation in human cancers"

2019 2019	<ul style="list-style-type: none">RNA Informatics Meeting Wellcome Trust Conferences<ul style="list-style-type: none">• Poster Presentation and flashlightning talk - "The patterns of Alu exonisation in human cancers"	Hinxton, UK
2018 2018	<ul style="list-style-type: none">LCG European Symposium UNAM Campus Paris<ul style="list-style-type: none">• Short Talk: "Analysis of the cis-regulatory landscape controlling RON splicing"	Paris, France
2018 2018	<ul style="list-style-type: none">EMBL-EMBO Symposium The Complex Life of RNA EMBL Heilderberg<ul style="list-style-type: none">• Poster presentation: "The patterns of Alu exonisation in human cancers"	Heidelberg, Germany
2017 2017	<ul style="list-style-type: none">Gene Regulation by the Numbers Institute of Molecular Biology, Mainz<ul style="list-style-type: none">• Poster presentation: "Analysis of the cis-regulatory landscape controlling RON splicing"	Mainz, Germany
2017 2017	<ul style="list-style-type: none">Otto Warburg International Summer School and Research Symposium on RNA regulation and non-coding RNA function CAS-MPG Partner Institute for Computational Biology<ul style="list-style-type: none">• Poster presentation: "Analysis of the cis-regulatory landscape controlling RON splicing". Best poster award.	Shanghai, China
2016 2016	<ul style="list-style-type: none">Keystone Symposium in Non Coding RNA and Enhancers Santa Fe, NM, USA<ul style="list-style-type: none">• Poster presentation: "CircRNA accumulation in the aging mouse brain" with colleague Hannah Gruner.	
2016 2016	<ul style="list-style-type: none">Undergraduate Research Symposium University of Nevada, Reno<ul style="list-style-type: none">• Short Talk and Poster Presentation: "Accumulation of CircRNAs in the aging mouse brain"	Reno, NV, USA