

# ALEJANDRA HERNÁNDEZ SEGURA

Results-oriented bioinformatician with an interest in applied topics that have a social impact. I have strong experience in data analysis (especially but not limited to genomics data), pipeline development and data visualization. I am also an organized project manager that likes working in a very efficient manner and communicating results with different types of audiences.

## WORK EXPERIENCE DATA-RELATED

Current  
|  
2020

### Bioinformatician

National Institute for Public Health and Environment (RIVM) 📍 Bilthoven, NL

- Monitoring the quality of the data produced by the sequencing facility.
- Automating the analysis of bacterial sequencing data.
- Data analysis and visualizations as part of reports, research articles or presentations.

Current  
|  
2020

### Project Manager

National Institute for Public Health and Environment (RIVM) 📍 Bilthoven, NL

- Keeping track of the progress of the bioinformatics projects.
- Communicating results to the management team, other staff and researchers.
- Performing management tasks such as participating in hiring committees, write budgets and proposals, etc.

2020  
|  
2018

### Data Scientist

Grace Systems 📍 Utrecht, NL

- Analyzing, building models and visualizing epigenomics data of 4 different types of cancer to search for potential biomarkers.
- Communicating results to supervisors and clients both orally and in written reports.

2020  
|  
2019

### Team Lead

Grace Systems 📍 Utrecht, NL

- Together with the management team, decide on the strategies to take for the projects.
- Communicating strategies and results to different stakeholders.
- Major contributor in the hiring process of 3 colleagues.

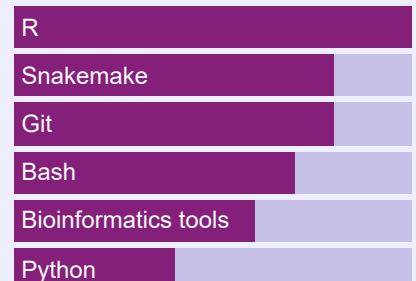


For a more detailed description you can view my personal website at: <https://alejandrahsegura.netlify.app>

## CONTACT

✉ [ale.hdz.segura@gmail.com](mailto:ale.hdz.segura@gmail.com)  
🐦 [alehsegura13](https://twitter.com/alehsegura13)  
📄 [github.com/AleSR13](https://github.com/AleSR13)  
🌐 [linkedin.com/in/a-hernandez-segura](https://www.linkedin.com/in/a-hernandez-segura)  
☎ 0031(0)645013058

## HARD SKILLS



2019  
|  
2015

### Data analyst and researcher

European Research Institute for the Biology of Ageing (ERIBA)

Groningen, NL

- Fully performed both the experimental and data analysis part of 3 different transcriptomics projects and contributed to 3 collaboration projects.
- Presented results in 3 different international conferences and in multiple national or local meetings.
- Wrote and published 4 scientific articles as main author and collaborated in at least 3 other research projects that await publication.



## WORK EXPERIENCE IN TEACHING

2015  
|  
2014

### Invited Lecturer

Universidad de las Américas Puebla

Puebla, MX

- Teaching 3 practical courses (Pharmacology, Biorganics and Microbiology and Parasitology) to groups of 5-15 students.
- Teaching one theoretical course (Pharmaceutical Biotechnology) to ~10 students.

2012  
|  
2010

### Biology Teacher

Colegio Woodcock

Puebla, MX

- Teaching 2-3 courses per semester with 10-20 students.

2011  
|  
2011

### Teacher's Assistant

Center for Talented Youth (Johns Hopkins University)

Pennsylvania, USA

- Preparing Anatomy and Physiology lessons to 12 talented students.
- Organizing and directing some technical sessions with the students.



## EDUCATION

2019  
|  
2015

### PhD. Biology of Ageing

European Research Institute for the Biology of Ageing (ERIBA)

Groningen, NL

- Thesis: Heterogeneity of Cellular Senescence and its Implications for the Development of Markers

2014  
|  
2012

### MSc. Medical and Pharmaceutical Drug Innovation

University of Groningen

Groningen, NL

- Project 1: Development of a method to isolate single-cells from *C. elegans*.
- Project 2: Analysis of the transcriptome of activated T-cells in celiac disease.



## LANGUAGES



## SOFT SKILLS

Oral and written communication  
Organization and project management  
Team working in international environments and multidisciplinary teams  
Fast learner



## AWARDS

PhD grant for project proposal  
CONACYT scholarship for master  
Excelence Jenkins full scholarship for Bachelor  
*Cum laude* master  
*Magna cum laude* bachelor

2011  
|  
2006

## BSc. Clinical Biochemistry

Universidad de las Américas Puebla

📍 Puebla, MX

- Thesis: In silico characterization of two putative cellulases from *Pseudomonas aeruginosa* and *Cellvibrio japonicus*.



## PUBLICATIONS

2020  
|  
2020

### Pharmacological CDK4/6 inhibition unravels a p53-induced secretory phenotype in senescent cells<sup>1</sup>

BioRxiv

- Wang, B., Brandenburg, S., **Hernandez-Segura, A.**, van Vliet, T., Jongbloed, E.M., Wilting, S.M., Ohtani, N., Jager, A. and Demaria, M.

2019  
|  
2019

### Identification of stable senescence-associated reference genes<sup>2</sup>

Aging Cell

- **Hernández Segura, A.**, Rubingh, R. and Demaria, M.

2018  
|  
2018

### Hallmarks of Cellular Senescence<sup>3</sup>

Trends in Cell Biology

- **Hernández Segura, A.**, Nehme, J. and Demaria, M.

2018  
|  
2018

### Induction and Validation of Cellular Senescence in Primary Human Cells<sup>4</sup>

JoVE

- **Hernández Segura, A.**, Brandenburg, S. and Demaria, M.

2017  
|  
2017

### Unmasking Transcriptional Heterogeneity in Senescent Cells<sup>5</sup>

Current Biology

- **Hernandez Segura, A.**, de Jong, T.V., Melov, S., Guryev, V., Campisi, J., Demaria M.



## LINKS

1• <https://doi.org/10.1101/2020.06.05.135715>

2• <https://doi.org/10.1111/accel.12911>

3• <https://doi.org/10.1016/j.tcb.2018.02.001>

4• <https://dx.doi.org/10.3791/57782>

5• <https://doi.org/10.1016/j.cub.2017.07.033>

## HOBBIES

R-Ladies Utrecht Coding Club  
(organizer)

Sports

Literature

Listening to podcasts

Cooking Mexican food