

## Agalic Rodriguez-Duboc PHD IN DEVELOPMENTAL NEUROBIOLOGY

Trained as a general physician and passionate about research, I am currently finalizing my PhD dissertation in the field of cellular and molecular neurosciences. My project is focused on cerebellar development and apnea of prematurity.

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76000 Rouen, France

Date of birth 10/05/1990

French

## Languages

French

Native language

Spanish

Native language

**English** 

Native proficiency

Norwegian

Expression A2/Comprehension B1

## Assets

Determination

Creativity

Curiosity

Autonomy

Organisation

## **Professional interests**

Molecular biology and signaling pathways

Neurosciences, neurology, psychiatry

Preventive medicine and public health

## Personal interests

Reading and literature

Painting and drawing

**Knitting and crochet** 

Nature and sustainability

## Education

From September 2019 to May 2023 PhD in Molecular and Cellular aspects of Biology Rouen University Mont-Saint-Aignan, France

Specialty in Neurosciences

From October 2019 to November 2019

**Certification in Animal Experimentation** Paris Descartes Paris 05 Panthéon, France

From September 2018 to June 2019 Master's in Research: Neurosciences (MSc) Rouen University Mont-Saint-Aignan, France

Molecular, Cellular, and Integrated Neurosciences - Cum Laude

October 2017

USMLE (United States Medical Licensing Examination) Step 1 National Board of Medical Examiners Philadelphia, PA, USA

From September 2011 to June 2017 Medical Doctor (MD)

PUCMM University Santiago, Dominican Republic

Magna Cum Laude

## Research Experience

From September 2019 to May 2023 **Doctoral Candidate** 

INSERM U1245 Rouen, France

- Topic: "Cellular, molecular and vascular alterations induced by apnea of prematurity in the murine cerebellum."
- Advisor: Dr. Delphine Burel.

From January 2019 to June 2019

Master's Research Internship

Inserm U1239 DC2N Mont-Saint-Aignan, France

- Topic: "Effects of perinatal hypoxia on the expression of genes involved in oxidative stress.".
- Advisor: Dr. Delphine Burel.

From August 2015 to April 2017

**Medical Dissertation** 

Departamento de Investigación, Université PUCMM Santiago de los Caballeros, République Dominicaine

- Topic: "Psychological factors associated with nicotine addiction in college students."
- Advisor: Dr. Zahíra Quiñones de Monegro.

From March 2014 to December 2014

Research Assistant Experience

Laboratoiry of Nanosciences, PUCMM University Santiago de los Caballeros, République Dominicaine

- Topic: "Hypercaloric effect of biofunctionalized carbon nanotubes as a photothermal agent on Staphilococcus aureus."
- Advisor: Dr. Oliver Pfaff.

#### **Publications**

- Leroux, S., Rodriguez-Duboc, A., Arabo, A. et al. Intermittent hypoxia in a mouse model of apnea of prematurity leads to a retardation of cerebellar development and long-term functional deficits. Cell Biosci 12, 148 (2022). https://doi.org/10.1186/s13578-022-
- Marc-Aurèle Rivière, & Agalic Rodriguez-Duboc. (2022). ma-riviere/LT-AoP-22: final release (v2.0). Zenodo. https://doi.org/10.5281/zenodo.6480947

#### **Posters**

**LARC Neurosciences 2019** Effects of perinatal hypoxia on oxidative stress-related gene expression in the murine cerebellum.

**JED EDNBISE 2022** Apnea of Prematurity induces molecular, cellular, and vascular alterations in the murine cerebellum: focusing on angiogenesis.

#### **Talks**

**JED EDNBISE 2021** Therapeutic potential of neurotrophic factors on cellular and molecular alterations induced by Apnea of Prematurity in the murine cerebellum.

#### ISTW Disabilities and Integration 2022

Cellular and molecular alterations induced by Apnea

of Prematurity in the murine cerebellum.

## Computer skills

Photoshop
Cytoscape
IMARIS
R
PRISM
ImageJ/Fiji
SPSS
Python

## **Teaching and Supervision**

From October 2014 to November 2015 **Teaching Assistant** 

PUCMM University Santiago, Dominican Republic

Anatomy, Embryology, and Histology.

From September 2019 to March 2023

**Supervision of Students and Interns** 

Rouen University Mont-Saint-Aignan, France

- Supervision of a MSc intern during 3-month
- Training of several students rotating through the laboratory

## **Medical Experience**

From May 2016 to August 2016 Internal Medicine Internship

Saint Barnabas Hospital New York, NY, États-Unis Neurology; Rhumatology; Pneumology; Nephrology

From August 2016 to March 2017

**OB/GYN** and Psychiatry Internships

Hospital Regional Universitario José María Cabral y Báez Santiago de

los Caballeros, République Dominicaine Peripartum; Partum; Ambulatory / Consults

From October 2016 to February 2017

**Surgery and Pediatrics Internships** 

Hospital Metropolitano de Santiago République Dominicaine Surgery; Pathology; Oncology; Pediatric and Neonatal ICU

From March 2017 to May 2017 Social and Family Medicine Internship

Centro de Salud Integral Bella Vista République Dominicaine

HIV Clinic; Epidemiology; ER

#### **Practical Skills**

### Laboratory and Expérimentation

- Preparation and mounting of anatomo-pathological samples
- Bacterial culture (agars, selective media, antibiogram)
- Preparation and analysis of blood smears
- Molecular biology (RNA extraction, reverse transcription...)
- Laser capture microdissection
- Quantitative PCR (Techniques, Robot, Analysis...)
- Conventional microscopy
- Immunohistochemistry
- Transparisation

# Research and Communication

- Research methodology and statistical analysis
- Scientific presentation and communication
- Theoretical and practical training
- Writing scientific reports
- Grant application writing
- Translation and simultaneous interpretation

## Surgery and clinical skills

- Minor surgery
- Pre and post-operative follow-up
- Complete physical examination
- Differential diagnosis
- Pharmacological prescription