



# Agalic Rodriguez-Duboc

## MD, 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 neuroscience. My research is focused on cerebellar development and apnea of prematurity.*

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🏠 76000 Rouen, France  
📅 Date of birth 10/05/1990  
🔗 <https://agalic-rd.com/>  
🇫🇷 French

### Languages

#### French

Native language

#### Spanish

Native language

#### English

Native proficiency

#### Norwegian

Intermediate (CEFR: B1)

#### Italian

Beginner (CEFR: A2)

#### German

Beginner (CEFR: A2)

### Assets

#### Determination

#### Creativity

#### Curiosity

#### Autonomy

### 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, 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 CBG](#) 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, PUCMM University](#) Santiago de los Caballeros, Dominican Republic

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

From March 2014 to  
December 2014

#### Research Assistant Experience

[Laboratory of Nanosciences, PUCMM University](#) Santiago de los Caballeros, Dominican Republic

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

### Publications

- Leroux S, **Rodriguez-Duboc A**, Arabo A, Basille-Dugay M, Vaudry D, Burel D. 2022. 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(1):148.
- **Rodriguez-Duboc A**, Rivière M-A, Basille-Dugay M, Debonne A, Burel D. Apnea of prematurity induces oxidative stress-mediated transcriptional changes in the murine cerebellum (in preparation).

Posters

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

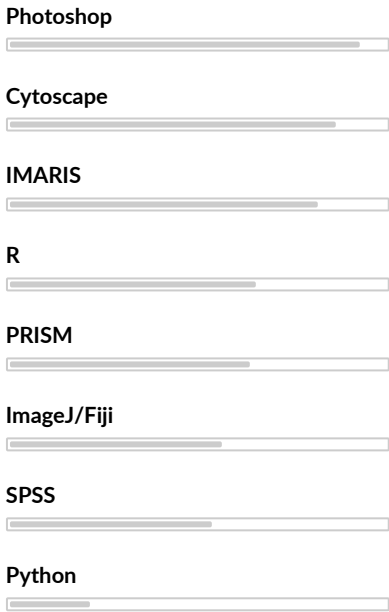
**JED EDNBISE 2022** Apnea of Prematurity induces molecular, cellular, and vascular alterations in the murine cerebellum: focusing on angiogenesis.

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



Teaching and Supervision

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

From October 2014 to November 2015

- Teaching Assistant**  
[PUCMM University](#) Santiago, Dominican Republic
- Topics: Anatomy, Embryology, and Histology.
  - Lab and practical sessions

Medical Experience

From March 2017 to May 2017

- Social and Family Medicine Internship**  
[Centro de Salud Integral Bella Vista](#) Dominican Republic
- HIV Clinic; Epidemiology; ER

From October 2016 to February 2017

- Surgery and Pediatrics Internships**  
[Hospital Metropolitano de Santiago](#) Dominican Republic
- Surgery; Pathology; Oncology; Pediatric and Neonatal ICU

From August 2016 to March 2017

- OB/GYN and Psychiatry Internships**  
[Hospital Regional Universitario José María Cabral y Báez](#) Santiago de los Caballeros, Dominican Republic
- Peripartum; Partum; Ambulatory / Consults

From May 2016 to August 2016

- Internal Medicine Internship**  
[Saint Barnabas Hospital](#) New York, NY, United States
- Neurology; Rheumatology; Pneumology; Nephrology

Practical Skills

- Laboratory and Experimentation**
- 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 RT-PCR
  - Pipetting system robot programming
  - Confocal microscopy
  - Immunohistochemistry
  - Transparisation and tissue clearing
- Research and Communication**
- Experimental design
  - Statistical modeling (GLM, GLMM...)
  - Scientific communication
  - Theoretical and practical classes
  - Writing scientific reports
  - Scientific illustration
  - Grant application writing
  - Translation and simultaneous interpretation
- Surgery and clinical skills**
- Minor surgery
  - Pre and post-operative follow-up
  - Complete physical examination
  - Differential diagnosis
  - Pharmacology