

## Ph.D. Scientist in Pharmaceutical Product Development

Passionate about medicinal chemistry, I am looking for new opportunities within the Research and Development department in the pharmaceutical industry. I will be honored to join a dynamic and passionate team in order to bring my pragmatism and creativity to the development of tomorrow's medicines.

### Skills and Highlights

- ✓ Passionate about translational chemistry
- ✓ 5 years of experience in synthetic chemistry
- ✓ Strong background in organic chemistry
- ✓ Extensive experience in formulation, encapsulation
- ✓ In depth knowledge in analytical chemistry
- ✓ Has excellent analytical skills
- ✓ Has excellent relational and communications skills
- ✓ Has experience in project management

**Languages:** English – fluent, French – fluent, Russian – native, Romanian – native, German - intermediate

### Work Experience

#### Research Scientist<sup>8</sup> Boston University / Harvard Medical School

Nov. 2016 - Dec. 2018      Boston, MA, USA

*Managed Oncology projects from concept to launch including formulation, characterization, and data analysis*

- Synthesized and scaled-up drug conjugated polymers
- Designed and formulated GLP drug delivery materials for chemotherapy: films, nanoparticles, and hydrogels
- Developed and run tests to evaluate physical performance and stability, drug release, toxicity, and metabolism
- Managed new chemotherapeutic film project which successfully passed validation for *in vivo* studies on sheep
- Supervised three graduate students
- Wrote projects for fundraising
- Contributed in raising \$250.000 film project funds

#### Research Scientist<sup>1-6</sup> Institute of Physics and Chemistry of Materials of Strasbourg / CMMI Biopark

Oct. 2013 - Oct. 2016      Strasbourg, France / Charleroi, Belgium

*Developed contrast agents for MRI and for photoacoustic imaging from synthesis to in vitro tests*

- Scaled-up nanomaterial's multi-step synthesis
- Developed and run tests to evaluate chemical composition and structure, physical properties and stability, and toxicity
- Processed and analyzed data from *in vivo* performance: administration, distribution, metabolism, and excretion
- Supervised two post-doctoral fellows
- Contributed in raising €130.000 for start-up project *Superbranche*

#### Research Project<sup>7</sup> Saarland University

Mar. 2013 - Sept. 2013      Saarbrücken, Germany

*Part of a five-person synthetic team responsible for total synthesis of Isoplagiochin D*

- Synthesized a fourteen step enantiopure macrocycle by direct asymmetric synthesis
- Implemented sulfoxide controlled atropo-diastereoselective Heck-type cyclization

#### Research Project Solvay

July. 2012 - Nov. 2012      Brussels, Belgium

*Part of the R&D team in charge of the qualitative analysis of oxygen peroxide production pipeline*

- Synthesized red-ox cycle byproducts of 9,10-anthraquinone
- Performed heterogeneous catalysis in a continuous flow

### Education

#### Ph.D. degree in Physics and Chemical-Physics Strasbourg University / Mons University

Oct. 2013 - Oct. 2016      Strasbourg, France / Mons, Belgium

#### Engineering Degree in Organic Chemistry ECPM Engineering school

Sept. 2008 - Nov. 2013      Strasbourg, France

#### Master Degree in Molecular and Supramolecular Chemistry Strasbourg University

Sept. 2012 - Nov. 2013      Strasbourg, France

## Personal Interests/Activities

### Volunteer work Graduate Women in Science, Boston University

Jan. 2017 - Nov. 2018      📍 Boston, MA, USA

*Association to support and promote women in science through professional development seminars, workshops, and social events*

- Participated in organizing a variety of campus-wide seminars and social events
- Actively participated in organizing workshops to foster interactions across disciplines at BU

### Volunteer work Addal

Jan. 2014 - Sept. 2016      📍 Strasbourg, France

*The Alsace association representing Ph.D. candidates and junior researchers aims to support, assist and inform young Alsatian researchers*

- Member of the Ph.D. Law and Policy team
- Counseled young researchers on the legal questions concerning Ph.D. law and amendments
- Reviewed and debated decisions made by the French Ministry of Research regarding young researchers

### Teaching assistant Institute of Technology Louis Pasteur, Strasbourg University

Sept. 2014 - June 2016      📍 Strasbourg, France

*Managed and orchestrated laboratory work for first-year students in college, eight groups of twenty students*

- Developed, prepared and supervised students in the laboratory environment
- Performed one-to-one and group tutoring
- Provided safety training and implemented proper laboratory behavior

## Publications

1. Garofalo, A., Parat, A., [Bordeianu, C.](#) et al., *New Journal of Chemistry*, **2014**, 38, 5226.
2. Parat, A., [Bordeianu, C.](#) et al., *Nanomedicine (Future Medicine)*, **2015**, 10(6), 977–992.
3. Francolon, N., Boyer, D., Leccia, F., Jouberton, E., [Bordeianu, C.](#), et al., *Nanomedicine*, **2016**, 12(7), 2107–2113.
4. [Bordeianu, C.](#), Felder-Flesch, D., Book Chapter, Pan Stanford Publishing, “Dendrimers for Nanomedicine”, **2016**.
5. Blanco-Andujar, C., Walter, A., Cotin, G., [Bordeianu, C.](#), et al., *Nanomedicine*, **2016**, 11(14), 1889-1910.
6. [Bordeianu, C.](#), et al., *J. Mater. Chem. B*, **2017**, 5, 5152-5164.
7. [Bordeianu, C.](#), et al., *Mol. Pharmaceutics*, **2018**, 15, 2, 536-547.
8. Meidlinger, D., Marx, L., [Bordeianu, C.](#), et al., *Int. Ed. Angewandte Chemie*, **2018**, doi: 10.1002/anie.201803677.
9. Cooper, B., [Bordeianu, C.](#), et al., *Biomaterials*, **2018**, 181, 210–226.

## Oral Contributions

1. Dendronized inorganic nanoparticles as contrast agents for Multimodal Imaging. *Nanohybrids*  
May 18 -21, 2015      📍 Bastia, France
2. Synthesis and functionalization of Dendronized-Nanoparticles for Magnetic Resonance Imaging. *Nanotheranostics*  
Oct. 28 - Nov. 1, 2015      📍 Limassol, Cyprus
3. Novel biodegradable drug-loaded films for the prevention of lung tumor recurrence. *ACS National Meeting & Exposition*  
Aug. 19 - 23, 2018      📍 Boston, MA, USA
4. Ultra high molecular weight hyperbranched polyglycerol in articular cartilage lubrication. *ACS National Meeting & Exposition*  
Aug. 19 - 23, 2018      📍 Boston, MA, USA

## References

### Prof. M. W. Grinstaff

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### Prof. R. Muller

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### P. Deschrijver

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