

# **Jorge Filipe Rodrigues Pontes**

Jorge Filipe Rodrigues Pontes completed the Mestrado in Ciências Farmacêuticas in 2016/12 in Universidade do Algarve, Faculdade de Ciências e Tecnologia. At present, Jorge is a PhD Student in Universidade do Algarve - Campus de Gambelas. The scientific area in which Jorge is currently involved is pharmaceutical technology allied with biomedical sciences. The studies that are currently performed in the team of which Jorge is a member are related to the production, characterisation and therapeutic evaluation of polysaccharide-based micro and nanoparticles envisaged for lung drug delivery.

## **Identification**

### **Personal identification**

Full name

Jorge Filipe Rodrigues Pontes

### **Citation names**

Pontes, Jorge F.

### **Author identifiers**

Ciência ID

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### **Email addresses**

jfpontes@ualg.pt (Professional)

### **Knowledge fields**

Medical and Health Sciences - Health Sciences

## Languages

Language	Speaking	Reading	Writing	Listening	Peer-review
English	Advanced (C1)	Advanced (C1)	Advanced (C1)	Advanced (C1)	
Spanish; Castilian	Upper intermediate (B2)	Upper intermediate (B2)	Upper intermediate (B2)	Upper intermediate (B2)	
French	Elementary (A2)	Elementary (A2)	Elementary (A2)	Elementary (A2)	
German	Elementary (A2)	Elementary (A2)	Elementary (A2)	Beginner (A1)	

## Education

	Degree	Classification
2018/03 - 2022/12 Ongoing	Mecanismos de Doença e Medicina Regenerativa (Doutoramento)  Universidade do Algarve, Portugal  "Dry powders: Study of the impact of inhalation over respiratory epithelium" (THESIS/DISSERTATION)	
2010/09 - 2016/12 Concluded	Ciências Farmacêuticas (Mestrado) Major in Sem especialização  Universidade do Algarve Faculdade de Ciências e Tecnologia, Portugal  "Chitosan/dextran sulfate nanoparticles: stability evaluation and assessment of the effect of different acidic media on nanoparticle preparation " (THESIS/DISSERTATION)	16 valores

## Affiliation

### Science

	Category Host institution/organization	Employer
2017/10 - 2018/03	Research Trainee (Research) Université Claude Bernard Lyon 1, France	Université Claude Bernard Lyon 1, France
2017/01 - 2017/10	Research Trainee (Research)	Universidade do Algarve, Portugal

## Projects

## Other

	Designation	Funders
2019 - 2021	NANOSPEED - Nanoencapsulation of drugs using biopolymers with specific abilities for drug delivery 5116/  PhD Student Fellow Centro de Ciências do Mar, Portugal	Fundação para a Ciência e a Tecnologia, Portugal  Ongoing
2015 - 2015	Fighting TB: Development of microparticulate systems to target alveolar macrophages in tuberculosis therapy <a href="info:eu-repo/grantAgreement/FCT/3599-PPCDT/124096/PT">info:eu-repo/grantAgreement/FCT/3599-PPCDT/124096/PT</a>  Master Student Fellow Universidade do Algarve, Portugal	Fundação para a Ciência e a Tecnologia, Portugal  Concluded

## Outputs

### Publications

Book chapter	1	Pontes, Jorge F.; Fonseca, Magda; Macedo, Ana; Grenha, Ana; Fonte, Pedro. "New and Revisited Approaches on the Transdermal Delivery of Polyphenols-Loaded Nanoparticles for Melanoma Prevention and Treatment". In <i>Phytopharmaceuticals and Herbal Drugs: Prospects and Safety Issues in the Delivery of Natural Products</i> . Elsevier, 2023.  Accepted
	2	Moreira, Juliana Botelho; de Moraes, Etiele Greque; de Almeida, Ana Claudia Araujo; Pontes, Jorge F.; Grenha, Ana; Barreira, Luísa; Varela, João; Costa, Jorge Alberto Vieira; de Moraes, Michele Greque. "Microalgal Applications in Nanotechnology: An Outstanding Tool for Nanocompounds Synthesis and Bioproducts Obtention". In <i>Bioprospecting Algae for Nanosized Materials</i> , 95-116. Springer International Publishing, 2021.  Published · 10.1007/978-3-030-81557-8_4
	3	Bebianno, Maria João; Rocha, Thiago Lopes; Pontes, Jorge Filipe; Amaral, André Corrêa; Grenha, Ana. "Potential Ecotoxicological Risk of Nanopharmaceuticals in the Aquatic Environment". In <i>Nanopharmaceuticals: Principles and Applications Vol. 2</i> , 289-317. Springer International Publishing, 2020.  Published · 10.1007/978-3-030-44921-6_8

Conference poster	1	Grenha, Ana; Guerreiro, Filipa; Pontes, Jorge F.; Cruz, Joana; Rico, João; Gaspar, Maria Manuela; Rosa da Costa, Ana M. "Inhalable therapy of tuberculosis: Matching the delivery route with the infection route". Paper presented in 36º Congresso de Pneumologia, 2020.
	2	Pontes, Jorge F.; Braz, Luis; Costa, Ana Rosa da; Almouazen, Eyad; Lollo, Giovanna; Grenha, Ana. "Stability evaluation of sulphated locust bean gum-coated lipid nanocapsules". Paper presented in XIIIIth Spanish-Portuguese Conference on Controlled Drug Delivery, 2020.

- 3 Flórez-Fernández, Noelia; Pontes, Jorge F.; Domínguez, Herminia; Grenha, Ana. "Evaluation of nanosystems based on biopolymers: Fucoidan from the edible brown seaweed *Laminaria japonica* and Chitosan". Paper presented in *XIII Spanish-Portuguese Conference on Controlled Drug Delivery*, 2020.
- 4 Flórez-Fernández, Noelia; Afonso, Inês; Pontes, Jorge F.; Domínguez, Herminia; Grenha, Ana. "Development of polysaccharide-based nanosystem using marine-based polymers". Paper presented in *XXV Encontro Galego-Português de Química*, 2019.
- 5 Pontes, Jorge F.; Braz, Luis; Costa, Ana Rosa da; Almouazen, Eyad; Lollo, Giovanna; Grenha, Ana. "Development of nanocapsules using a locust bean gum sulfate derivative". Paper presented in *22nd International Symposium on Microencapsulation*, 2019.
- 6 Araújo, Nuna; Viegas, Carla; Pontes, Jorge F.; Marreiros, Catarina; Raimundo, Pedro; Macedo, Anjos; Alves de Matos, António; et al. "Nanoencapsulation as a novel delivery approach for therapeutic applications of gla-rich protein (GRP)". Paper presented in *4th International Congress of CiiEM - Health, Well-Being and Ageing in the XXI Century*, 2019.
- 7 Gaspar, Maria Manuela; Rodrigues, Susana; Cunha, Ludmylla; Musacchio, Flávia; Pontes, Jorge F.; Guerreiro, Filipa; Grenha, Ana. "Gum-based microparticles: An inhalable platform for the treatment of lung tuberculosis". Paper presented in *CRS Annual Meeting and Exposition*, 2018.
- 8 Pontes, Jorge F.; Cordeiro, Clara; Grenha, Ana. "Design of experiments to study the stability of chitosan/dextran sulfate (CS/DS) nanoparticles". Paper presented in *CRS Annual Meeting and Exposition*, 2018.
- 9 Pontes, Jorge F.; Cordeiro, Clara; Grenha, Ana. "Chitosan/dextran sulfate (CS/DS) nanoparticles: Stability evaluation using factorial design". Paper presented in *21st International Symposium on Microencapsulation*, 2017.
- 10 Araújo, Nuna; Viegas, Carla; Pontes, Jorge F.; Magalhães, J.; Blanco, F. J.; Macedo, Anjos; Grenha, Ana; Simes, Dina Costa. "Nano-encapsulation of gla-rich protein (GRP) and potential added value as a therapeutic agent for osteoarthritis". Paper presented in *21st International Symposium on Microencapsulation*, 2017.

## Journal article

- 1 Viegas, Carla S. B.; Araújo, Nuna; Carreira, Joana; Pontes, Jorge F.; Macedo, Anjos L.; Vinhas, Maurícia; Moreira, Ana S.; et al. "Nanoencapsulation of Gla-Rich Protein (GRP) as a Novel Approach to Target Inflammation". *International Journal of Molecular Sciences* 23 9 (2022): 4813. <http://dx.doi.org/10.3390/ijms23094813>  
Published · 10.3390/ijms23094813
- 2 Pontes, Jorge F.; Diogo, Hermínio P.; Conceição, Eusebio; Musacchio, Flávia; Borges dos Santos, Rui M.; Grenha, Ana. "Development of a prototype of an aerosolization device for dry powders to improve in vitro cell-based assays in the context of lung delivery". *Journal of Aerosol Medicine and Pulmonary Drug Delivery* 35 2 (2022): A20-A20. [Drug Delivery to the Lungs 2021: https://www.liebertpub.com/doi/abs/10.1089/jamp.2022.ab01.abstracts](https://www.liebertpub.com/doi/abs/10.1089/jamp.2022.ab01.abstracts).

Published

- 3 Pontes, Jorge F.; Duarte, Emanuel; Flórez-Fernández, Noelia; Rico, João; Cruz, Joana; Lollo, Giovanna; Grenha, Ana. "Fucoidan-coated lipid nanocapsules encapsulating a model drug for lung drug delivery". *Journal of Aerosol Medicine and Pulmonary Drug Delivery* 34 3 (2021): A19. *Drug Delivery to the Lungs* 2020: <https://www.liebertpub.com/doi/full/10.1089/jamp.2021.ab01.abstracts>.  
Published
- 4 Araújo, Nuna; Viegas, Carla; Pontes, Jorge F.; Marreiros, Catarina; Raimundo, Pedro; Macedo, Anjos L.; Alves de Matos, António; et al. "Nanoencapsulation as a novel delivery approach for therapeutic applications of gla-rich protein (GRP)". *Annals of Medicine* 53 sup1 (2021): S23-S24. <http://dx.doi.org/10.1080/07853890.2021.1896900>  
Published · 10.1080/07853890.2021.1896900
- 5 Rosso, Annalisa; Almouazen, Eyad; Pontes, Jorge F.; Andretto, Valentina; Leroux, Marine; Romasko, Etienne; Azzouz-Maache, Samira; et al. "Supersaturable self-microemulsifying delivery systems: An approach to enhance oral bioavailability of benzimidazole anticancer drugs". *Drug Delivery and Translational Research* (2021):  
Published
- 6 Pontes, Jorge F.; Braz, Luis; Rosa da Costa, Ana M; Almouazen, Eyad; Lollo, Giovanna; Grenha, Ana. "Sulphated locust bean gum-coated lipid nanocapsules as potential drug delivery carriers". *Journal of Aerosol Medicine and Pulmonary Drug Delivery* 33 2 (2020): A15. *Drug Delivery to the Lungs* 2019: <https://www.liebertpub.com/doi/10.1089/jamp.2020.ab01.abstracts>.  
Published
- 7 Pontes, Jorge F.; Grenha, Ana. "Multifunctional Nanocarriers for Lung Drug Delivery". *Nanomaterials* 10 2 (2020): 183. <http://dx.doi.org/10.3390/nano10020183>  
Published · 10.3390/nano10020183
- 8 Guerreiro, Filipa; Pontes, Jorge F.; Costa, Ana Rosa da; Grenha, Ana. "Spray-drying of konjac glucomannan to produce microparticles for an application as antitubercular drug carriers". *Powder Technology* 342 (2019): 246-252. <http://dx.doi.org/10.1016/j.powtec.2018.09.068>.  
Published · 10.1016/j.powtec.2018.09.068
- 9 Rodrigues, Susana; Alves, Ana D.; Cavaco, Joana S.; Pontes, Jorge F.; Guerreiro, Filipa; Costa, Ana Rosa da; Buttini, Francesca; Grenha, Ana. "Dual antibioticotherapy of tuberculosis mediated by inhalable locust bean gum microparticles". *International Journal of Pharmaceutics* 529 1-2 (2017): 433-441. <http://dx.doi.org/10.1016/j.ijpharm.2017.06.088>  
Published · 10.1016/j.ijpharm.2017.06.088

Magazine article

- 1 Pontes, Jorge F.; Flórez-Fernández, Noelia; Afonso, Carolina; Cruz, Joana; Alsayyed, Rahaf; Grenha, Ana. "Será o mar a próxima grande fonte de biomateriais?", UAlgoritmo, 2021, *Revista de promoção da ciência/investigação feita na Universidade do Algarve*: [https://www.researchgate.net/publication/356361104\\_Volume\\_3\\_Número\\_2\\_-Novembro\\_2021](https://www.researchgate.net/publication/356361104_Volume_3_Número_2_-Novembro_2021).

Thesis /  
Dissertation

- 1 Pontes, Jorge Filipe Rodrigues. "Chitosan/dextran sulfate nanoparticles: Stability evaluation and assessment of the effect of different acidic media on nanoparticle preparation". Master, Universidade do Algarve Faculdade de Ciências e Tecnologia, 2016. <http://hdl.handle.net/10400.1/9913>.

**Intellectual property**Provisional  
application for  
patent

- 1 2022. "Inhalable microparticles of bacterial lysate for prevention of respiratory infections".
- 2 2022. "Prototype of a dry powder aerosolisation device for in vitro assays".

**Activities****Oral presentation**

	Presentation title	Event name Host (Event location)
2021/12	Development of a prototype of an aerosolization device for dry powders to improve in vitro cell-based assays in the context of lung delivery	Drug Delivery to the Lungs The Aerosol Society (Edinburgh, United Kingdom)
2020/12	Fucoidan-coated lipid nanocapsules encapsulating a model drug for lung drug delivery	Drug Delivery to the Lungs The Aerosol Society (Edinburgh, United Kingdom)
2020/11	Inhalable therapy of tuberculosis: Matching the delivery route with the infection route	36º Congresso de Pneumologia Sociedade Portuguesa de Pneumologia (Portugal)

**Event organisation**

	Event name Type of event (Role)	Institution / Organization
2017 - 2017	21st International Symposium on Microencapsulation - Member of the organising committee (2017/09/27 - 2017/09/29)  Conference (Member of the Organising Committee)	Universidade do Algarve, Portugal
2017 - 2017	Open Day at Universidade do Algarve - Responsible for the activities related to Pharmaceutical Technology (2017/02/23)	Universidade do Algarve, Portugal

- 2017/02/23)

Exhibition (Member of the Organising  
Committee)

## Distinctions

### Award

2021	Honourable Mention in "Ideias em Caixa, 7th Edition" Universidade do Algarve, Portugal
2020	Best Oral Communication Award at "36º Congresso de Pneumologia" Sociedade Portuguesa de Pneumologia, Portugal