



IRHS  
42, rue Georges Morel  
49070 Beaucouzé  
02.41.22.57.81  
[muriel.marchi@inrae.fr](mailto:muriel.marchi@inrae.fr)

## Muriel Marchi

### University degrees

- 2009 Master of Microbial Ecology, University Lyon 1 (France)
- 2013 PhD Thesis in Biology and Agronomy, Agrocampus Ouest (France)

### Position and professional training

- 2014 -2016 Lecturer (ATER), Faculty of Sciences, University of Angers (France)
- 2017 **Research engineer (INRAe)**

### Skills

- Microbiology (bacteriology and mycology)
- Molecular biology, functional genomics, Taxonomy
- Methodological development
- Plants/microorganisms interaction, Biocontrol and Phytopathology

### List of publications

- N'guyen, G. Q., Raulo, R., Porquier, A., Iacomini, B., Pelletier, S., Renou, J. P., ... & Guillemette, T. (2021). Responses of the necrotrophic fungus *Alternaria brassicicola* to the indolic phytoalexin brassinin. **Frontiers in Plant Science**, 11, 2216.
- van Bohemen A.I., Nicolas Ruiz, Aurore Zalouk-Vergnoux, Aurore Michaud, Thibaut Robiou du Pont, Irina Druzhinina, Lea Atanasova, Soizic Prado, Bernard Bodo, Laurence Meslet-Cladiere, Bastien Cochereau, Franck Bastide, Corentin Maslard, Muriel Marchi, Thomas Guillemette, and Yves François Pouchus. 2021. Pentadecaibins I–V: 15-Residue Peptaibols Produced by a Marine-Derived Trichoderma sp. of the Harzianum Clade. **Journal of Natural Products**. 84, 4, 1271–1282
- Bailly, C., Bousquet, A., Braun, V., Buitink, J., Desbois-Vimont, C., Tardif, M. D., ... & Szambien, M. (2020). Towards seed protection using biocontrol strategies. Consortium Biocontrôle et GIS Biotechnologies Vertes, 12p.
- N'Guyen G, R Raulo, M Marchi, C Agusti Brisach, B Iacomini, S Pelletier, JP Renou, N Bataillé-Simoneau, C Campion, F Bastide, B Hamon, C Mouchès, B Porcheron, R Lemoine, A Kwasiborski, P Simoneau, T Guillemette 2019 Responses to hydric stress in the seed-borne necrotrophic fungus *Alternaria brassicicola* **Frontiers in Microbiology-Plant Microbe Interactions** 10:1-16 (article 1969)
- Pigné S, Zykwińska A, Janod E, Cuenot S, Kerkoud M, Raulo R, Bataillé-Simoneau N, Marchi M, Kwasiborski A, N'Guyen G, Mabileau G, Simoneau P, Guillemette T . 2017 . A flavoprotein supports cell wall properties in the necrotrophic fungus *Alternaria brassicicola*. *Fungal Biology and Biotechnology* 4:1-13
- Marchi, M., Boutin, M., Gazengel, K., Rispe, C., Gauthier, J.-P., Guillerme-Eckelboudt, A.-Y., Lebreton, L., Barret, M., Daval, S. and Sarniguet A. (2013). Genomic analysis of the biocontrol strain *Pseudomonas fluorescens* Pf29Arp with evidence of T3SS and T6SS gene expression on plant roots. **Environmental Microbiology Reports**, 5 : 393-403
- Daval, S., Lebreton, L., Gracianne, C., Boutin, M., Marchi, M., Gazengel, K. and Sarniguet, A. (2013) Strain-specific variation in a soilborne phytopathogenic fungus for the expression of genes involved in pH signal transduction pathway, pathogenesis and saprophytic survival in response to environmental pH changes. **Fungal Genetics and Biology**, 61 : 80-89
- Gazengel, K., Lebreton, L., Guillerme-Eckelboudt, A.-Y., Marchi, M., Sarniguet, A. and Daval, S. (2012). Simultaneous monitoring of two fungal genotypes on plant roots by single nucleotide polymorphism quantification with an innovative KASPar quantitative PCR. **Mycological Progress**, 12 : 657-666.

### Book chapters

- Buitink J., Douzals J.P., Duliège, E., Lebeau F., Marchi M. 2020. Biocontrôle : Éléments pour une protection agroécologique des cultures, Chapitre 21 - Quelles technologies pour le déploiement du biocontrôle ? éditions Quae, INRAE.

- Barret, M., Frey-Klett, P., Guillermin-Erckelboudt, A.-Y., Boutin, M., Guernec, G., Marchi, M., Daval, S. and Sarniguet, A. (2013) Combined effects of wheat roots and pathogenic fungus *Gaeumannomyces graminis* var. *tritici* on gene expression of the biocontrol bacterium *Pseudomonas fluorescens* Pf29Arp. **Molecular Microbial Ecology of the Rhizosphere**, Volume 1 & 2 (ed F. J. de Bruijn)

## Presentations and Posters

- Poisson A. - S., Marchi M., Grappin P., Léchappé J. « BiBioS : Biocontrôle et Biostimulation des Semences ». In : Colloque Graines 2019. 21-23 Mai 2019, Angers.
- M., Bastide F., Sochard D., Hamon B., Aligon S., Guillemette T. « Screening strategy to select new fungal biocontrol products against plant diseases ». In : Natural Products and Biocontrol. 25-28/09/2018, Perpignan.
- Marchi M., Bastide F., Sochard D., Hamon B., Aligon S., Guillemette T. « Screening strategy to select new fungal biocontrol products against plant diseases ». In : XXX. International Horticultural Congress. 12-16/08/2018, Istanbul.
- Marchi M., Kwasiborski A. « Biocontrôle & Semences : Identifier et optimiser des activités phytoprotectrices chez les champignons ». In : Journée d'animation scientifique de la SFR Quasav: Le Biocontrôle dans la lutte contre les bioagresseurs. 24/11/2017, Angers.
- Benbelkacem Z., Le Ray A. - M., Bruguière A., Suor-cherer S., Bréard D., Blon N., Marchi M., Rolland A., Simoneau P., Bataille-Simoneau N., Guillemette T., Richomme P. « Identifying natural products (NPs) as potential UPR inhibitors for crop protection ». In : 5th AFERP International Conference "Pharmacognosy from here and there". 17-19 juillet, Angers.
- NGuyen G., Marchi M., Mouchès C., Bataille-Simoneau N., Guillemette T., Simoneau P. « Responses of a seed-borne fungus to hydric stress ». In : 13th European Conference on Fungal Genetics. 3-6 avril, Paris.
- Nguyen G., Marchi M., Calmes B., Pochon S., Bataille-Simoneau N., Campion C., Simoneau P., Guillemette T. « Roles of hydrophilin-like protein in the filamentous fungi *Alternaria brassicicola* ». In : 9ème Colloque de la Société Française de Phytopathologie. 2-5/06/2015, Colmar.
- Nguyen G., Marchi M., Dias E., Pochon S., Calmes B., Bataille-Simoneau N., Campion C., Simoneau P., Guillemette T. « Roles of hydrophilin-like protein in the filamentous fungus *Alternaria brassicicola* ». In : 28th Fungal Genetics Conference. 17-22/03/2015, Pacific Grove.