

CURRICULUM VITAE

- 2019 -

PERSONAL INFORMATION

Name: Christos
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RESEARCH INTERESTS

- Virulence mechanisms of phytopathogenic bacteria. Breeding targets and molecular mechanisms of plant resistance to pathogenic bacteria.
- Structure, function and biotechnological applications of the plant microbiomes.

PROFESSIONAL EXPERIENCE

12/2018-now Assistant Professor in Plant Pathology
Department of Agricultural Development, Democritus University of Thrace

7/2014-11/2018 Phytopathology Researcher, Head of the Bacteriology Department
Rijk Zwaan Nederland B.V., De Lier, The Netherlands

10/2012-6/2014 Postdoctoral Researcher
Department of Biology, Plant-Microbe Interactions, Utrecht University

STUDIES

PhD [2007-2012] Department of Biology, Plant-Microbe Interactions, Utrecht University
"Signaling in Arabidopsis Roots in Response to Beneficial Rhizobacteria"

MSc [2003-2005] Department of Biology, A.U.Th., Applied Genetics and Biotech. (9.75/10)

BSc [1998-2003] Department of Agriculture, A.U.Th., Section of Phytopathology (8.38/10)

SCHOLARSHIPS & DISTINCTIONS

- Highest-ranking BSc graduate student (2003)
- Highest-ranking MSc graduate student (2005)
- Scholarship for postgraduate studies abroad (3,5 years). Greek State Scholarship Foundation (2007)

ACADEMIC TEACHING

[2019-now] Democritus University of Thrace | Department of Agricultural Development | BSc Curriculum

Lectures and Practical Classes:

- "Principles of Plant Phytopathology"
- "Diseases of Vegetable and Ornamental crops"
- "Diseases of Fruit Trees and Vines"
- "Diseases of Arable Crops"

[2012-2014] Utrecht University | BSc Curriculum Biological Sciences

- Visiting lecturer in the BSc course "Plant adaptation and defense"

GUIDANCE AND SUPERVISION OF MSc INTERNSHIPS**[2008-2012] Utrecht University | MSc Curriculum Biological Sciences**

Daily Supervisor in the following MSc projects:

- "The plant hormone methyl jasmonate differentially primes the defense system of Arabidopsis against necrotrophic and biotrophic pathogens" (Sep. 2008-Dec. 2008)
- "Mechanisms of plant growth promotion by *Pseudomonas* spp. bacteria" (Apr. 2009-Jan. 2010)
- "Upstream regulation of the root specific MYB72 transcription factor during rhizobacteria-mediated induced-systemic resistance" (Dec. 2011-Jul. 2012)

[2017-2018] Wageningen University | MSc Curriculum Plant Sciences

- "Exploring the causes of root decline in hydroponic lettuce" (internship held at Rijk Zwaan; Oct 2017-Mar 2018)

PUBLICATIONS

Total citations: 1.912 | **h-index:** 10

Source: Scopus®, January 2019

1. **Zamioudis, C.**, Korteland, J., van Pelt, J.A., Dombrowski, N., Bai, Y., Hanson, J., van Verk, M.C., Ling, H-Q., Schulze-Lefert, P., and Pieterse, C.M.J. (2015). Rhizobacterial volatiles and photosynthesis-related signals coordinate *MYB72* in Arabidopsis roots during onset of induced systemic resistance and iron deficiency responses. *Plant Journal* 84: 308-322. doi: 10.1111/tpj.12995. I.F.=5.468
2. Berendsen, R.L., van Verk, M.C., Stringlis, I.A., **Zamioudis, C.**, Tommassen, J., Pieterse, C.M.J., and Bakker, P.A.H.M. (2015). Unearthing the genomes of plant-beneficial *Pseudomonas* model strains WCS358, WCS374 and WCS417. *BMC Genomics* 16:539. I.F.=3.867
3. Pieterse, C.M.J.*, **Zamioudis, C.***, Berendsen, R.L., Weller, D.M., Van Wees, S.C.M., and Bakker, P.A.H.M. (2014). Induced systemic resistance by beneficial microbes. *Annual Review of Phytopathology* 52: 347–375. I.F.=9.308
4. **Zamioudis, C.**, Hanson, J., and Pieterse, C.M.J. (2014). β -Glucosidase BGLU42 is a MYB72-dependent key regulator of rhizobacteria-induced systemic resistance and modulates iron deficiency responses in Arabidopsis roots. *New Phytologist* 204: 368-379. I.F.=7.210
5. Alizadeh, H., Behboudi, K., Amadzadeh, M., Javan-Nikkhah, M., **Zamioudis, C.**, Pieterse, C.M.J., and Bakker, P.A.H.M. (2013). Induced systemic resistance in cucumber and *Arabidopsis thaliana* by the combination of *Trichoderma harzianum* Tr6 and *Pseudomonas* sp. Ps14. *Biological Control* 65: 14-23. I.F.=2.012
6. Bakker, P.A.H.M., Doornbos, R.F., **Zamioudis, C.**, Berendsen, R.L., and Pieterse, C.M.J. (2013). Induced systemic resistance and the rhizosphere microbiome. *Plant Pathology Journal* 29: 136-143. I.F.=0,920
7. **Zamioudis, C.**, Mastranesti, P., Dhonukshe, P., Blilou, I., and Pieterse, C.M.J. (2013). Unraveling root developmental programs initiated by beneficial *Pseudomonas* bacteria. *Plant Physiology* 162: 304-318. I.F.=6,280
8. Cruz-Ramírez, A., Díaz-Triviño, S., Blilou, I., Grieneisen, V.A., Sozzani, R., **Zamioudis, C.**, Miskolczi, P., Nieuwland, J., Benjamins, R., Dhonukshe, P., Caballero-Pérez, J., Horvath, B., Long, Y., Mähönen, A.P., Zhang, H., Xu, J., Murray, J.A.H., Benfey, P.N., Bako, L., Marée, A.F.M., and Scheres, B. (2012). A

- bistable circuit involving SCARECROW-RETINOBLASTOMA integrates cues to inform asymmetric stem cell division. *Cell* 150: 1002-1015.
I.F.=28,710
9. Pieterse, C.M.J., Van der Does, D., **Zamioudis, C.**, Leon-Reyes, A., and Van Wees, S.C.M. (2012). Hormonal modulation of plant immunity. *Annual Review of Cell and Developmental Biology* 28: 489-521.
I.F.=12,755
 10. **Zamioudis, C.**, and Pieterse, C.M.J. (2012). Modulation of host immunity by beneficial microbes. *Molecular Plant-Microbe Interactions* 25: 139-150.
I.F.=4.145
 11. Stringlis, I., Proietti, S., Hickman, R., van Verk, M., **Zamioudis, C.**, and Pieterse C. (2016). Root transcriptional dynamics induced by beneficial rhizobacteria and microbial immune elicitors reveal signatures of adaptation to mutualists (2018). *Plant Journal* 93(1):166-180. doi: 10.1111/tpj.13741.
I.F.=5.468

BOOK CHAPTERS

12. Pieterse, C.M.J., **Zamioudis, C.**, Does, D. V., and Van Wees, S. C.M. (2014) Signalling Networks Involved in Induced Resistance, in Induced Resistance for Plant Defense: A Sustainable Approach to Crop Protection (eds D. R. Walters, A. C. Newton and G. D. Lyon), John Wiley & Sons, Ltd, Chichester, UK. doi: 10.1002/9781118371848.ch4.

ABSTRACTS IN NATIONAL AND INTERNATIONAL MEETINGS AND CONFERENCES

INTERNATIONAL

1. Stringlis, I., Proietti, S., van Verk, M., Hickman, R., Zamioudis, C., and Pieterse, C. Time series RNA-seq reveals early root responses to ISR-inducing *Pseudomonas simiae* WCS417 and the microbial elicitors flg22, flg22417, and chitin. XVII International Congress on Molecular Plant Microbe Interactions. Oregon, U.S.A.; July 17-21, 2016.
2. Pieterse, C., Zamioudis, C., Berendsen, R., and Bakker, P. The root of rhizobacteria-induced systemic resistance. Rhizosphere-4- Conference. Maastricht, The Netherlands; June 21-25, 2015.
3. Verbon, E.H., Zamioudis, C., Liberman, L.M., Benfey, P.N., and Pieterse, C.M.J. Root cell type-specific gene expression in response to plant growth-promoting rhizobacteria. Rhizosphere-4- Conference. Maastricht, The Netherlands; June 21-25, 2015.
4. Stringlis, I., Zamioudis, C., and Pieterse, C. Utrecht University, Plant-Microbe Interactions. Early root responses to beneficial rhizobacteria and elicitors. Rhizosphere-4- Conference. Maastricht, The Netherlands; June 21-25, 2015.
5. Zamioudis, C., Dombrowski, N., Schulze-Lefert, P., and Pieterse, C.M.J. Root microbiota induce a novel photosynthesis-dependent iron uptake mechanisms in the Arabidopsis root. XVI International Congress on Molecular Plant Microbe Interactions. Rhodos, Greece; July 6-10, 2014. **SPEAKER IN THE SESSION "Plant microbiomes"**.
6. Stringlis, I.A., Pieterse, C.M.J., and Zamioudis, C. Fungal and bacterial elicitors activate root immunity and prime systemic tissues for defense. XVI International Congress on Molecular Plant Microbe Interactions. Rhodos, Greece; July 6-10, 2014.
7. Zamioudis, C., and Pieterse, C.M.J. *Pseudomonas* spp. bacteria initiate induced systemic resistance (ISR) in Arabidopsis by recruiting iron deficiency signaling cascades. XV International Congress on Molecular Plant Microbe Interactions. Kyoto, Japan; July 29-August 2, 2012. **SPEAKER IN THE SESSION "Biological control"**.
8. Zamioudis, C. The role of root-specific MYB72 transcription factor in rhizobacteria-mediated induced systemic resistance. PR-Proteins and Induced Resistance (PR-IR) Meeting. Neuchâtel, Switzerland; September 4-8, 2011. **SPEAKER**.

9. Zamioudis, C., and Pieterse, C.M.J. The role of root-specific MYB72 transcription factor in rhizobacteria-mediated induced systemic resistance. Gordon Research Conference on Plant Molecular Biology. Holderness, U.S.A.; July 18-22, 2010.
10. Alfredo Cruz-Ramirez, Ikram Blilou, Sara Diaz-Trivino, Christos Zamioudis, Beatrix Horvath, Ben Scheres. Retinoblastoma related protein (RBR) controls asymmetric cell division in the root meristem. 21st International Conference on Arabidopsis Research (ICAR 2010). Yokohama, Japan; June 6-10, 2010.
11. Zamioudis, C., Van der Ent, S., and Pieterse, C.M.J. Subcellular localization and combinatorial interactions of MYB72 and MYB10 transcription factors in the Arabidopsis root. XIV International Congress on Molecular Plant-Microbe Interactions. Quebec, Canada; July 19-23, 2009.
12. Zamioudis, C., Pozo, M.J., Van der Ent, S., and Pieterse, C.M.J. Methyl-jasmonate induced priming of plant defense. 9th International Congress of Plant Pathology. Torino, Italy; August 24-29, 2008.

NATIONAL

13. Zamioudis, C. "Breeding for resistance against bacterial diseases". Rijk Zwaan Research Days. Leiden, The Netherlands; November 22-23, 2016. **SPEAKER.**
14. Στριγγλής Ι.Α., Ζαμιούδης Χ. και Pieterse C.M.J. "Ενεργοποίηση του ανοσοποιητικού συστήματος της ρίζας από διεγέρτες βακτηριακής και μυκητολογικής προέλευσης". 17^ο Πανελλήνιο Φυτοπαθολογικό Συνέδριο. Βόλος, 13-17 Οκτωβρίου 2014.
15. Zamioudis, C. "Signaling in Arabidopsis roots in response to beneficial rhizobacteria". ALW Platform Molecular Genetics Annual Meeting. Lunteren, The Netherlands; October 4 & 5, 2012. **SPEAKER.**
16. Zamioudis, C. "Plant responses to beneficial microbes". EPW Environmental Plant Sciences Annual Meeting. Lunteren, The Netherlands; April 4-5, 2011. **SPEAKER.**
17. Zamioudis, C. Molecular mechanisms of plant growth promotion and induced systemic resistance by *Pseudomonas* spp. bacteria. Summerschool "Rhizosphere Signaling". Wageningen, The Netherlands; August 23-25, 2010. **SPEAKER.**
18. Zamioudis, C. Plant growth promotion by beneficial soil-borne microbes. "Willie Commelin Scholten Day" Symposium. Utrecht, The Netherlands; January 15, 2010. **SPEAKER.**

RESEARCH PROGRAMS

- (2012-2014). *Researcher* in the European Research Council (ERC) Advanced Grant no. 269072 [2011-2016]. (Scientific coordinator: Prof. C.M.J. Pieterse).
- (2014-2018). *Scientific Advisor* of Rijk Zwaan in 4 external research projects with Universities and Institutes focusing on plant pathogenic bacteria and the plant microbiomes.

OTHER SCIENTIFIC ACTIVITIES

- Reviewer in the following scientific journals: BMC Plant Biology, Environmental Microbiology and Environmental Microbiology Reports, European Journal of Plant Pathology, Molecular-Plant Microbe Interactions, Plant and Soil, Plant Biology, Plant Physiology, Frontiers in Plant Science, Frontiers in Microbiology, Microbial Ecology.
- Member of the International Society of Molecular Plant-Microbe Interactions (IS-MPMI)
- Member of the organizing committee of the XVI IS-MPMI Congress (Rhodes, Greece; July 6-10, 2011)