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PERSONAL PROFILE

I am a Plant Physiologist with a strong research track record in plant-environment interactions and significant independent funding success. In recent years, my work has primarily focused on the effects of Climate Change on the photosynthetic physiology and its impact on the exchange of carbon and water between plants and their environment. I have proven teamwork, mentoring and management skills and I have been actively communicating my research to academic and general audiences throughout my career.

EDUCATION

- 2015 **Certificate in Project Management (CPM, QQI FETAC Level 6).**
Grade: Merit.
- 2012 **Ph.D. degree in Plant Physiology,** University of Patras, Greece.
Thesis: Green stemmed plants: a comparative anatomical and physiological study,
DOI: 10.12681/eadd/27460. Supervisor: Prof. Yiannis Manetas.
- 2005 **B.Sc. (Hons) degree in Biological Sciences,** University of Patras, Greece.
Dissertation: Anatomy and physiology of leaf and stem photosynthesis in the
drought-deciduous shrub *Calicotome villosa* (Poiret) Link. (Leguminosae).
Supervisor: Prof. G.K. Psaras.

EMPLOYMENT

- 2021- **Assistant Professor of Plant Biology (University of Ioannina, Greece).**
- 2020-21 **Visiting Researcher (Trinity College Dublin)**
- 2018-20 **iCrag Research Fellow (Trinity College Dublin).**
Project: Exploration and optimization of a novel negative carbon emission
technology using enhanced plant-mediated chemical weathering.
Role: Post-doctoral researcher.
- 2016-18 **Government of Ireland Post-doctoral Fellow - Irish Research Council (University
College Dublin).**
Project: Futu-Rye: Identification of key traits associated with increased yield and
resilience in grasses under future climatic conditions.
Role: Principal investigator.
- 2013-18 **Occasional Lecturer (University College Dublin).**
- 2012-16 **European Research Council Post-doctoral Fellow (University College Dublin).**
Project: Oxyevol: Atmospheric oxygen as a driver of plant evolution over the past
400 million years.
Role: Post-doctoral researcher.

FUNDING & AWARDS

- 2018 **Environmental Protection Agency Medium Scale Project.**
 Project: The phenology of perennial ryegrass and its potential contribution to grassland carbon sequestration.
 Role: Project partner (Unfunded partnership).
- 2017 **UCD Seed Funding Award – Dissemination and Outputs.**
 Proposal: Key traits for increased resilience in grasses under climate change.
 Role: Principal applicant.
- 2016 **Government of Ireland Post-Doctoral Fellowship (Irish Research Council).**
 Project: Futu-Rye: Identification of key traits associated with increased yield and resilience in grasses under future climatic conditions.
 Role: Principal investigator (Independent Fellowship).
- 2016 **UCD Seed Funding Award – Dissemination and Outputs.**
 Proposal title: At the mercy of O₂ and CO₂ - A novel approach on Plant Evolution.
 Role: Principal applicant.
- 2015 **UCD Seed Funding Award – Dissemination and Outputs.**
 Proposal title: Evolution of stomatal and mesophyll gas diffusion resistances in higher plants.
 Role: Principal applicant.
- 2008 **Bodossaki Foundation award for excellence.**
- 2006 **Karatheodori Grant Post-graduate Scholarship (Patras University).**
 Project: Photo-protective and anti-oxidant systems in green and red leaves.
 Role: Post-graduate researcher.
- 2006 **Karatheodori Grant Post-graduate Scholarship (Patras University).**
 Project: The role of anthocyanins in leaves.
 Role: Post-graduate researcher.

TEACHING

- 2021- University of Ioannina
 Modules: **Plant Anatomy and Morphology** (BEY303, Level 2)
 Plant Physiology (BEY401, Level 2)
- 2019-20 Trinity College Dublin
 Modules: **Global Environmental Change** (TCD BD7059-A-Y-201920, Masters level)
- 2013-18 University College Dublin
 Modules: **Biology for the Modern World** (UCD BIOL10070, Level 1, 2016-18)
 Biological Systems (UCD BIOL20030, Level 2, 2016-18)
 Diversity of Plant Form & Function (UCD BOTN30050, Level 3, 2013-18)
 Current Developments in Plant Biology (UCD BOTN40200, Masters level, 2015)
- 2005-10 Teaching assistant, University of Patras

Modules: **Plant Morphology** (Level 1, 2005-10)
Plant Physiology (Level 3, 2006-10)
Plant eco-physiology (Level 3, 2006-10)

SUPERVISION

Undergraduate level

- 2013-14 Co-supervision of the 4th-year undergraduate project of Adam O'Shea entitled 'Light and Atmospheric Composition; Variations of photosynthetic efficiency among different plant groups'.
- 2010-11 Co-supervision of the 4th-year undergraduate project of Elena Koutra entitled 'Flower photosynthesis of *Hydrangea Macrophylla*'.
- 2010-11 Co-supervision of the 4th-year undergraduate project of Anny Rentzou entitled 'Green plastids, maximal PSII photochemical efficiency and starch content of inner stem tissues of three Mediterranean woody species during the year'.

Post-graduate level

- 2016-18 Co-supervision of the Ph.D. student Misbah Bilal. Thesis title: 'Reduction of photorespiration in *Arabidopsis thaliana* mutants using a multi-gene manipulation approach'.
- 2012-17 Co-supervision of the Ph.D. student Christiana Evans-Fitz.Gerald. Thesis title: 'Morphological and physiological plant responses to simulated palaeo-atmospheres'.
- 2012-17 Co-supervision of the Ph.D. student Amanda S. Porter. Thesis title: 'Plant carbon isotopes and stomatal morphology as proxies for deep time atmospheric O₂:CO₂ reconstruction'.

RESEARCH PROJECTS

- 2018- **Exploration and optimization of a novel negative carbon emission technology using enhanced plant-mediated chemical weathering.**
 Role: Main (post-doctoral) member of the research team.
 Funding body: Science Foundation Ireland - iCrag Research Centre.
 Principal investigator: Prof Jennifer C. McElwain.
- 2018- **PhenoGRASS: The phenology of perennial ryegrass and its potential contribution to grassland carbon sequestration.**
 Role: Project partner.
 Funding body: Environmental Protection Agency.
 Principal investigators: Dr John Yearsley and Dr Rainer Melzer.
- 2016-19 **Exploration of cyanobacterial glycolate-decarboxylation pathway genes expression in *Arabidopsis thaliana*.**
 Role: Collaborator.
 Funding body: Higher Education Commission of Pakistan.
 Principal investigator: Dr Raza Ahmad.

- 2016-18 **Futu-Rye: Identification of key traits associated with increased yield and resilience in grasses under future climatic conditions.**
Role: Principal Investigator.
Funding body: Irish Research Council.
- 2016-17 **Reconstruction of atmospheric CO₂ during the late Changhsingian based on fossil conifers from the Talong Formation in South China.**
Role: Collaborator.
Funding body: National Natural Science Foundation of China and the Open Fund of the State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences.
Principal investigator: Prof Jennifer C. McElwain.
- 2015-17 **Integrated Data-Model Analysis of CO₂-Climate-Vegetation Feedbacks in a Dynamic Paleo-Icehouse.**
Role: Collaborator.
Funding body: National Science Foundation.
Principal investigators: Prof Isabel P. Montanez, Prof Jennifer C. McElwain and Prof William Dimichele.
- 2014-16 **Predicting biome-level vegetation responses to future global change: Implications for future flood risk.**
Role: Collaborator.
Funding body: Science Foundation Ireland.
Principal investigator: Prof Jennifer C. McElwain.
- 2012-16 **Oxyevol: Atmospheric oxygen as a driver of plant evolution over the past 400 million years.**
Role: Main (post-doctoral) member of the research team.
Funding body: European Research Council.
Principal investigator: Prof Jennifer C. McElwain.
- 2006 **Photo-protective and anti-oxidant systems in green and red leaves.**
Role: Member of the research team.
Funding body: Karatheodori Grant for Basic Research.
Principal investigator: Dr Yola Petropoulou.
- 2006 **The role of anthocyanins in leaves.**
Role: Member of the research team.
Funding body: Karatheodori Grant for Basic Research.
Principal investigator: Professor Yiannis Manetas.

PUBLICATIONS

Peer-reviewed journal articles (SCI)

1. Abbasi A.Z., Bilal M., Khurshid G., **Yiotis C.**, Zeb I., Hussain J., Baig A., Shah M.M., Chaudhary S.U., Osborne B. and Ahmad R. 2021. Expression of cyanobacterial genes enhanced CO₂ assimilation and biomass production in transgenic *Arabidopsis thaliana*. *PeerJ*, 9: e11860, [Link](#).

2. **Yiotis C.**, McElwain J.C. and Osborne B.A. 2021. Enhancing the productivity of ryegrass at elevated CO₂ is dependent on tillering and leaf area development rather than leaf-level photosynthesis. *Journal of Experimental Botany*, 72 (5), pp: 1962-1977, [Link](#).
3. Batke SP, **Yiotis C.**, Elliott-Kingston C., Murray M., Soh W.K. and McElwain J.C. 2020. Plant responses to decadal-scale increments in atmospheric CO₂ concentration – comparing two stomatal conductance sampling methods. *Planta*, 251 (2): 52. [Link](#).
4. Murray M., Soh W.K., **Yiotis C.**, Spicer R.A, Lawson T. and McElwain J.C. 2020. Consistent relationship between field-measured stomatal conductance and theoretical maximum stomatal conductance in C₃ woody angiosperms in four major biomes. *International Journal of Plant Sciences*, 181 (1), pp: 142-154, [Link](#).
5. Soh W.K., **Yiotis C.**, Murray M., Parnell A., Wright I.J., Spicer RA., Lawson T., Caballero R. and McElwain J.C. 2019. Rising CO₂ drives divergence in water-use efficiency of evergreen and deciduous plants. *Science Advances*, 5, eaax7906, [Link](#).
6. **Yiotis C.** and McElwain J.C. 2019. A new hypothesis for the role of photosynthetic physiology in shaping macroevolutionary patterns. *Plant Physiology*, 181, pp: 1148-1162, [Link](#).
7. Porter A.S., Evans-FitzGerald C., **Yiotis C.**, Montanez I. and McElwain J. C. 2019. Testing the accuracy of new paleoatmospheric CO₂ proxies based on plant stable carbon isotopic composition and stomatal traits in a range of simulated paleoatmospheric O₂:CO₂ ratios. *Geochimica et Cosmochimica Acta*, 259, pp: 69-90, [Link](#).
8. Bilal M., Abbasi A.Z., Khurshid G., **Yiotis C.**, Hussain J., Shah M.M., Naqvi T., Kwon S-Y., Park Y-I., Osborne B.A. and Ahmad R., 2019. The expression of cyanobacterial glycolate–decarboxylation pathway genes improves biomass accumulation in *Arabidopsis thaliana*. *Plant Biotechnology Reports*, 13 (4), pp: 361-373, [Link](#).
9. Murray M., Soh W.K., **Yiotis C.**, Batke S.P., Parnell A., Spicer R.A., Lawson T., Caballero R., Wright I.J., Purcell C. and McElwain J.C. 2019. Convergence in maximum stomatal conductance of C₃ woody angiosperms in natural ecosystems across bioclimatic zones. *Frontiers in Plant Science*, 10:558, [Link](#).
10. Li H., Yu Jinaxin, McElwain J.C., **Yiotis C.** and Chen Z-Q. 2019. Reconstruction of atmospheric CO₂ concentration during the late Changhsingian based on fossil conifers from the Dalong Formation in South China. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 519, pp: 37-48, [Link](#).
11. Purcell C.*, Batke S. P.* , **Yiotis C.***, Soh W.K., Murray M., Caballero R. and McElwain J. C. 2018. Increasing stomatal conductance in response to anthropogenic climate change, *Annals of Botany*, 121 (6), pp: 1137-1149, [Link](#).**
 * Co-first authors
 ** Editor's choice (i.e. The manuscript of the issue that was considered by the Chief Editor to be especially impressive and of broad interest to the scientific community)
12. Porter A.S., **Yiotis C.**, Montanez I. and McElwain J. C. 2017. Evolutionary differences in Δ 13C detected between spore and seed-bearing plants following exposure to a range of atmospheric O₂:CO₂ ratios; implications for paleoatmosphere reconstruction. *Geochimica et Cosmochimica Acta*, 213, pp: 517-533, [Link](#).

13. **Yiotis C.**, Evans-FitzGerald C. and McElwain J.C. 2017. Differences in the photosynthetic plasticity of ferns and *Ginkgo* grown in experimentally controlled low [O₂]: high [CO₂] atmospheres may explain their contrasting ecological fate across the Triassic-Jurassic mass extinction boundary. *Annals of Botany*, 119 (8), pp: 1385-1395, [Link](#). **
** Editor's choice (i.e. The manuscript of the issue that was considered by the Chief Editor to be especially impressive and of broad interest to the scientific community)
14. McElwain J.C., Montanez I., White J.D., Wilson J. and **Yiotis C.** 2017. Reply to Comment on "Was atmospheric CO₂ capped at 1000 ppm over the past 300 million years?" [Palaeogeography, Palaeoclimatology, Palaeoecology 441 (2016) 653–658]. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 472 (1), pp: 260-263, [Link](#).
15. Evans-FitzGerald C., Porter A.S., **Yiotis C.**, Elliot-Kingston C. and McElwain J.C. 2016. Co-ordination in morphological leaf traits of early-diverging angiosperms is maintained following exposure to experimental palaeo-atmospheric conditions of sub-ambient O₂ and elevated CO₂. *Frontiers in Plant Science*, 7: 1368, [Link](#).
16. McElwain J.C., Montanez I., White J.D., Wilson J. and **Yiotis C.** 2016. Was atmospheric CO₂ capped at 1000 ppm over the past 300 million years? *Palaeogeography, Palaeoclimatology, Palaeoecology*, 441 (4), pp: 653-658, [Link](#).
17. McElwain J.C., **Yiotis C.** and Lawson T. 2016. Using modern plant trait relationships between observed and theoretical maximum stomatal conductance and vein density to examine patterns of plant macroevolution. *New Phytologist*, 209 (1), pp: 94-103, [Link](#).
18. Porter A.S., Evans-FitzGerald C., McElwain J.C., **Yiotis C.** and Elliot-Kingston C. 2015. How well do you know your growth chambers? Testing for chamber effect using plant traits. *Plant Methods*, 11: 44, [Link](#).
19. **Yiotis C.** and Psaras G.K. 2011. *Dianthus caryophyllus* stems and *Zantedeschia aethiopica* petioles/pedicels show anatomical features indicating efficient photosynthesis. *Flora*, 206 (4), pp: 360-364, [Link](#).
20. **Yiotis C.** and Manetas Y. 2010. Sinks for photosynthetic electron flow in green petioles and pedicels of *Zantedeschia aethiopica*: evidence for innately high photorespiration and cyclic electron flow rates. *Planta*, 232 (2), pp: 523-531, [Link](#).
21. **Yiotis C.**, Petropoulou Y. and Manetas Y. 2009. Evidence for light-independent and steeply decreasing PSII efficiency along twig depth in four tree species. *Photosynthetica*, 47(2), pp: 223-231, [Link](#).
22. Konoplyova A., Petropoulou Y., **Yiotis C.**, Psaras G.K. and Manetas Y. 2008. The fine structure and photosynthetic cost of structural leaf variegation. *Flora*, 208 (3), pp: 653-662, [Link](#).
23. **Yiotis C.**, Psaras G.K. and Manetas Y. 2008. Seasonal photosynthetic changes in the green-stemmed Mediterranean shrub *Calicotome villosa*: A comparison with leaves. *Photosynthetica*, 46(2), pp: 262-267, [Link](#).
24. Kotakis C., Petropoulou Y., Stamatakis K., **Yiotis C.** and Manetas Y. 2006. Evidence for active cyclic electron flow in twig chlorenchyma in the presence of an extremely deficient linear electron transport activity. *Planta*, 225 (1), pp: 245-253, [Link](#).

25. **Yiotis C.**, Manetas Y. and Psaras G.K. 2006. Leaf and green stem anatomy of the drought-deciduous Mediterranean shrub *Calicotome villosa* (Poiret) Link. (Leguminosae). *Flora*, 201 (2), pp: 102-107, [Link](#).

Conference publications

1. Bilal M., Osborne B.A., Ahmad R. and **Yiotis C.**, International Association for Plant Biotechnology Congress 2018, Dublin, Ireland 19-24 August 2018. Functional characterization of cyanobacterial glycolate metabolic pathway genes in *Arabidopsis thaliana*. *In vitro* cellular and developmental biology-Plant 54, S34.
2. Soh W.K., **Yiotis C.**, Murray M, Batke S. and McElwain J.C., European Geosciences Union General Assembly 2017, Vienna, Austria 23-28 April 2017. Global trends in biome-level plant water-use efficiency in the past 25 years from rising atmospheric carbon dioxide concentration. *EGU General Assembly Conference Abstracts*, 19, 19371.

PRESENTATIONS

Invited talks and seminars

- **Yiotis C.**, University of Patras, Greece, 2 June 2022. To the end of the world investigating stomatal responses to rising CO₂. *16th Meeting of the Postgraduate students of Patras University Biology Department*.
- **Yiotis C.**, Galway, Ireland, 5 November 2019. Shifting patterns of plant dominance in Earth history determined by interplay between atmospheric change and photosynthetic physiology. *National University of Ireland, Galway, Botany department seminar series*.
- **Yiotis C.**, London, UK, 5 April 2019. Shifting patterns of plant dominance in Earth history determined by interplay between atmospheric change and photosynthetic physiology. *3rd UK Plant Evolution Meeting*.
- **Yiotis C.**, Liverpool, UK, 4 December 2017. Plant-atmosphere interactions provide insights into Darwin's "abominable mystery". *Edge Hill University, Edge Hill Biology research seminar series*.
- **Yiotis C.**, Dublin, Ireland, 2 December 2016. Breathing new air: Atmospheric change control of plant evolution. *Trinity College Dublin, School of Natural Sciences seminar series*.
- **Yiotis C.**, Edinburgh, U.K, 26 May 2016. Atmospheric change control of plant evolution. *Royal Botanic Garden Edinburgh seminar series*.
- **Yiotis C.**, Dublin, Ireland, 8-10 September 2015. OXYEVOL-Plants and atmospheric oxygen - a review of research results from UCD Programme for Experimental Atmospheres and Climate Lab. *Annual Meeting of the Controlled Environment Users' Group*.

Conference presentations

- **Yiotis C.** and McElwain J.C., Athens, Greece, 7-8 February 2020. Plant-Climate interactions through time. 1st Panhellenic Scientific Meeting of Plant Physiologists (Oral presentation).
- Xu W., **Yiotis C.**, Kamber B.S., Gill L.W. and McElwain J.C., Dublin, Ireland, 2 December 2019. Exploration and optimization of a novel negative carbon emission technology using enhanced plant-mediated chemical weathering. *iCRAG 2019* (Poster presentation).

- **Yiotis C.**, McElwain J.C. and Osborne B.A., Carlow, Ireland, 25-27 June 2019. Biomass productivity in *Lolium* under current and future atmospheric conditions is largely unrelated to variations in leaf photosynthetic rate. *Irish Plant Scientists' Association Meeting (IPSAM) 2019* (Oral presentation).
- **Yiotis C.**, Evans-FitzGerald C. and McElwain J.C., Dublin, Ireland, 12-17 August 2018. Assessing the role of [O₂] and [CO₂] in driving physiological convergence/divergence among higher plants: Implications for palaeo-physiology and macroevolutionary patterns. *10th European Palaeobotany and Palynology Conference (EPPC)* (Oral presentation and Session Convener).
- **Yiotis C.**, McElwain J.C. and Osborne B., Copenhagen, Denmark 18-21 June 2018. Screening of natural and man-made variability in *Lolium* under ambient and future atmospheric CO₂ indicates that selection for increased biomass productivity is largely unrelated to variations in leaf photosynthetic rate. *FESPB/EPSO Plant Biology Europe 2018* (Poster presentation).
- Murray M., Soh W.K., **Yiotis C.**, Batke S.P., Parnell A., Spicer R., Lawson T., Caballero R., Wright I., Purcell C. and McElwain J.C., Dublin, Ireland 11-13 June 2018. Convergence in maximum stomatal conductance of C₃ woody angiosperms observed in natural ecosystems across six bioclimatic zones. *Irish Plant Scientists' Association Meeting 2018* (Poster presentation).
- Bilal M., **Yiotis C.**, J. Kacprzyk J., Ahmad R. and Osborne B., Dublin, Ireland 11-13 June 2018. Functional characterization of cyanobacterial glycolate metabolic pathway genes in *Arabidopsis thaliana*. *Irish Plant Scientists' Association Meeting 2018* (Oral presentation delivered by M. Bilal).
- McElwain J.C., Porter A.S., **Yiotis C.**, Evans-FitzGerald C. and Montañez I., London, UK 17-19 December 2017. Stomata, carbon isotopes and past CO₂ reconstruction: a critical comparison of fossil plant-based CO₂ proxy models and methods. *61st Annual Meeting of the Palaeontological Association* (Oral presentation delivered by J.C. McElwain).
- **Yiotis C.**, McElwain J.C. and Osborne B.A., Lucca (Barga), Italy 30 April-5 May 2017. Futu-Rye: Identification of key traits associated with increased yield and resilience in grasses under future climatic conditions. *Gordon research conference, CO₂ assimilation: Genome to biome* (Poster presentation).
- **Yiotis C.** and McElwain J.C., Salvador de Bahia, Brazil 22-27 October 2016. At the mercy of O₂ and CO₂ - A novel approach on Plant Evolution. *XIV International Palynological Congress/X International Organization of Palaeobotanists Congress* (Oral presentation).
- Evans-FitzGerald C., Porter A.S., **Yiotis C.** and McElwain J.C., Salvador de Bahia, Brazil 22-27 October 2016. Growing plants in palaeo-atmospheres: effects on plant carbon isotopes and stomatal function. *XIV International Palynological Congress/X International Organization of Palaeobotanists Congress* (Poster presentation).
- **Yiotis C.** and McElwain J.C., Maastricht, Netherlands 7-12 August 2016. Breathing new air: Atmospheric change control of plant evolution. *The 17th International Congress on Photosynthesis* (Oral and poster presentation).
- **Yiotis C.** and McElwain J.C., Edinburgh, UK 13-16 December 2015. Low resistance to CO₂ diffusion and the fine control of stomatal aperture facilitated the explosive radiation of early angiosperms. *British Ecological Society Annual Meeting 2015* (Oral presentation).

- Porter A.S., Elliott-Kingston C., Evans-Fitz.Gerald C., **Yiotis C.** and McElwain J.C., Dublin, Ireland 8-10 September 2015. How well do you know your growth chambers? Testing for chamber effect using plant traits. *Annual Meeting of the Controlled Environment Users' Group* (Oral presentation delivered by A.S. Porter).
- Evans-Fitz.Gerald C., Porter A.S., **Yiotis C.** and McElwain J.C., Dublin, Ireland 8-10 September 2015. A strong relationship persists between stomatal density and vein density in a range of basal plants under low O₂:high CO₂ conditions. *Annual Meeting of the Controlled Environment Users' Group* (Poster presentation).
- **Yiotis C.** and McElwain J.C., Padua, Italy 26-31 August 2014. Low resistance to CO₂ diffusion and the fine control of stomatal aperture facilitated the explosive radiation of early angiosperms. *9th European Palaeobotany and Palynology Conference (EPPC)* (Oral presentation).
- Evans-Fitz.Gerald C., **Yiotis C.**, Lawson T. and McElwain J.C., Dublin, Ireland 22-26 June 2014. The influence of elevated CO₂ and sub-ambient O₂ on stomatal function in different evolutionary plant groups. *FESPB/EPSO Congress 2014* (Poster presentation).
- **Yiotis C.**, Evans-Fitz.Gerald C., Lawson T. and McElwain J.C., Dublin, Ireland 22-26 June 2014. *Ginkgo's* limited physiological plasticity at low [O₂]:[CO₂] may have contributed to its near extinction across the Triassic-Jurassic boundary (200 million years ago). *FESPB/EPSO Congress 2014* (Poster presentation).
- **Yiotis C.**, Lawson T. and McElwain J.C., Waterville Valley, NH, U.S.A. 8-13 June 2014. Contrasting physiological responses of angiosperms, gymnosperms and pteridophytes are a legacy of differences in atmospheric composition at the time of radiation. *Gordon research conference, CO₂ assimilation: Genome to biome* (Poster presentation).
- **Yiotis C.**, Lawson T. and McElwain J.C., Waterville Valley, NH, U.S.A. 7-8 June 2014. Contrasting physiological responses of angiosperms, gymnosperms and pteridophytes are a legacy of differences in atmospheric composition at the time of radiation. *Gordon research seminar, CO₂ assimilation: Genome to biome* (Poster presentation).
- **Yiotis C.**, Evans-Fitz.Gerald C., Lawson T. and McElwain J.C., Saint Louis, MO, U.S.A. 11-16 August 2013. The Devonian challenge. *The 16th International Congress on Photosynthesis* (Oral and poster presentation).
- Evans-Fitz.Gerald C., **Yiotis C.**, Lawson T. and McElwain J.C., Saint Louis, MO, U.S.A. 11-16 August 2013. The influence of elevated CO₂ and sub-ambient O₂ on stomatal function in different evolutionary plant groups. *The 16th International Congress on Photosynthesis* (Poster presentation).
- **Yiotis C.**, Manetas Y. and Psaras G.K., Patras, Greece 7-10 October 2010. The anatomical and physiological examination of leaves and petioles of *Zantedeschia aethiopica* reveals significant differences between their photosynthetic mechanisms. *5th Scientific Conference of the Hellenic Ecological Society* (Poster presentation).
- **Yiotis C.**, Kalachanis D. and Manetas Y., Volos, Greece 9-12 October 2008. Space-time study of the biophysical photosynthetic phenotype of 4 Mediterranean species. *4th Scientific Conference of the Hellenic Ecological Society* (Poster presentation).

- Zeliou C., Peropoulou Y., **Yiotis C.** and Manetas Y., Elena, Bulgaria 12–18 May 2008. Transient leaf reddening in *Cistus creticus* during winter is not photoprotective and is accompanied by a gradual development of shade-adapted traits. *PISA Conference: Responses of plants to environmental stresses* (Poster presentation).
- **Yiotis C.**, Manetas Y. and Psaras G.K., Ioannina, Greece 5-8 May 2005. Comparative study of the photosynthetic machinery of leaves and green stems of *Calicotome villosa*. *10th Scientific Conference of the Hellenic Botanical Society* (Poster presentation).

CONFERENCE ORGANISATION

- Member of the Organising Committee. *10th Congress of the Hellenic Ecological Society*. Ioannina, Greece, 14–17 October 2021.

COLLABORATORS

During my academic career I have established collaborations with the following scientists:

- Associate Professor Raza Ahmad, Department of Biotechnology, COMSATS University, Pakistan.
- Dr Sven Batke, Department of Biology, Edge Hill University, UK.
- Professor Rodrigo Caballero, Department of Meteorology, Stockholm University, Sweden.
- Assistant Professor Caroline Elliott-Kingston (Lecturer), School of Agriculture and Food Science, University College Dublin, Ireland.
- Professor Laurence Gill, School of Engineering, Trinity College Dublin, Ireland.
- Assistant Professor Michael Hren, Department of Chemistry, University of Connecticut, USA.
- Professor Tracy Lawson, School of Biological Sciences, University of Essex, UK.
- Professor Jennifer C. McElwain, School of Biology and Environmental Science, University College Dublin (until 2017) and Department of Botany, Trinity College Dublin (since 2017), Ireland.
- Assistant Professor Rainer Melzer, School of Biology and Environmental Science, University College Dublin, Ireland.
- Dr Weimu Xu, School of Earth Sciences, Trinity College Dublin, Ireland.
- Assistant Professor Jonathan Yearsley, School of Biology and Environmental Science, University College Dublin, Ireland.
- Professor Isabel P. Montanez, Department of Earth and Planetary Sciences, University of California, Davis, USA.
- Professor Bruce A. Osborne, School of Biology and Environmental Science, University College Dublin, Ireland.
- Dr Wu Kuang Soh, Curator of National Herbarium of Ireland located at The National Botanic Gardens of Ireland, Glasnevin, Ireland.
- Professor Joseph D. White, Department of Biology, Baylor University, Waco, TX, USA.
- Assistant Professor Jonathan P. Wilson, Department of Biology, Haverford College, Haverford, USA.

REVIEWING ACTIVITIES

Earth-Science Reviews (IF: 12,413), *New Phytologist* (IF: 10,151), *Methods in Ecology and Evolution* (IF: 7,780), *Journal of Experimental Botany* (IF: 6,992), *Plant Physiology* (IF: 8,340),

Environmental and Experimental Botany (IF: 5,545), *Computers and Electronics in Agriculture* (IF: 5,565), *PLoS ONE* (IF: 3,240), *Photosynthetica* (IF: 3,189), *Australian Journal of Botany* (IF: 1,24).

ADMINISTRATIVE ROLES

- 2019-20 Postdoc representative in the Athena SWAN committee of the School of Natural Sciences, Trinity College Dublin.
- 2017-18 Postdoc representative in the Teaching and Learning committee of the UCD School of Biology and Environmental Science, University College Dublin.

ACADEMIC OUTREACH AND MEDIA COVERAGE

- 2019 I recorded a podcast about my work for the iCRAgorama podcast series. [[Link](#)]
- 2019 I gave an invited talk about Climate Change to 3rd-year Civic, Social and Political Education students of Templeogue College as part of their action project. [[Link](#)]
- 2018 I recorded a promotional video and gave a talk about my research to a general audience as part of the Festive Research Showcase organized by the Dean of Research and the Dean of Arts, Humanities and Social Sciences of Trinity College Dublin. [[Link1](#), [Link2](#)]
- 2018 I recorded a podcast about project “Futu-Rye” with Sean Duke for the East Coast FM’s “Cool Science & Curious Minds” podcast series. [[Link](#)]
- 2018 I was interviewed by and project “Futu-Rye” was featured in the Irish Times. [[Link1](#), [Link2](#)]
- 2018 I led a scientific walk focusing on Climate and Plant-Atmosphere Interactions in the context of the 2018 UCD Festival. [[Link](#)]
- 2018 I led a scientific walk focusing on Weather and Climate and their impact on plants hosted by UCD Earth Institute in the lead up to Earth Day 2018. The walk received a 100% satisfaction rating on the post-walk online survey. [[Link](#)]
- 2017 I was interviewed for and my comments were included in a review article for the European Geosciences Union blog. [[Link](#)]
- 2017 I participated in the organization of the UCD Rosemount Expo and presented my work to the president of UCD Prof. Andrew Deeks and many other attendees. [[Link](#)]
- 2016 I participated in Intervarsity BioBlitz 2016 and contributed to University College Dublin winning the first place. [[Link](#)]
- 2016 I contributed to the production of the promotional video entitled ‘Biome-level vegetation response to future global change: implications for future flood risk’. [[Link](#)]
- 2015 I was interviewed by and my work was featured in the Irish Times. [[Link](#)]
- 2014 I trained secondary school teachers in Infrared Imaging in the context of the ERC ‘Science for schools’ outreach program. [[Link](#)]

- 2013 I participated in UCD Science Summer School and presented a series of experimental techniques to secondary school students.
- 2013-18 I gave several tours of Péac (Program for Experimental Atmospheres and Climate) facility to prominent visiting scientists and groups of students.

PROFESSIONAL AFFILIATIONS

British Ecological Society
International Society of Photosynthesis Research
International Plant Phenotyping Network

LANGUAGES

English	Fluent
Greek	Native speaker