

WORK EXPERIENCE

- 04/2021 - present • Postdoctoral fellow, Marie Curie Individual Fellowship, IRD at AMAP, Montpellier, France. Supervisor: Dr Raphaël Pélissier, co-supervisor: Dr Claire Fortunel
- 04/2020 - 04/2021 • Postdoctoral researcher at Uppsala University, Uppsala, Sweden. Supervisor: Assoc. Prof. Bob Muscarella
- 09/2019 - 03/2020 • Postdoctoral assistant/data manager at Prentice Climate Group, Imperial College London, UK. Supervisor: Prof. Colin Prentice. Part-time (50%).
- 09/2018 - 03/2019 • Postdoctoral researcher, Forest Dynamics Research Unit at the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), Birmensdorf, Switzerland. Supervisors: Dr Roman Zweifel and Dr Sophia Etzold. Part-time (60%).
- 07/2016 - 07/2018 • Independent Postdoctoral Putnam Fellow at the Arnold Arboretum of Harvard University, Boston, USA.
- 11/2015 - 06/2016 • Postdoctoral researcher, Ecosystems Laboratory, Oxford University, UK. Supervisor: Prof. Yadvinder Malhi.
- 11/2008 - 10/2009 • Research assistant, Comparative Ecology Lab, Macquarie University, Sydney, Australia. Supervisor: Prof. Mark Westoby.
- 01/2008 - 11/2008 • Plant anatomist and database manager, Jodrell Laboratory, Kew Royal Botanic Gardens, London, UK. Supervisor: Dr Peter Gasson. First as a volunteer (four months) and then advanced to a full-time employee (six months).

EDUCATION

- 11/2009 - 06/2014 • PhD, Comparative Ecology Lab, Macquarie University, Sydney, Australia. Supervisor: Prof Mark Westoby, co-supervisor: Prof. Ian Wright. Thesis: Anatomical variation in twig wood across Australian angiosperms.
- 09/2005 - 07/2007 • MSc, Mickiewicz University, Poznań, Poland. Thesis: Leaflet anatomy of two *Encyphalartos* Lehm. species. Supervisor: Prof. Adam Wozny.
- 09/2002 - 07/2005 • BSc, Mickiewicz University, Poznań, Poland. Thesis: Genera and species of cycads in the Poznań Greenhouse. Supervisor: Dr Justyna Wiland-Szymanska.
- 09/2003 - 02/2004 • Erasmus student exchange program, Masaryk University, Brno, Czech Republic.

PUBLICATIONS

- 2020 • **Ziemińska K**, Rosa, Gleason SM, Holbrook NM. Wood day capacitance is related to water content, wood density, and anatomy across 30 temperate tree species. *Plant, Cell & Environment* 43: 3048-3067. [LINK](#)
- 2020 • Aguirre-Gutiérrez J, Malhi Y, Lewis L, Fauset S, Adu-Bredu S, Affum-Baffoe K, Baer TR, Gvozdevaite A, Hubau W, Moore W, Peprah T, **Ziemińska K**, Phillips OL, Oliveras I. *Long-term droughts may drive drier tropical forests towards increased functional, taxonomic and phylogenetic homogeneity*. *Nature Communications* 11: 1-10. [LINK](#)
- 2020 • Kattge J, Bonisch G, Diaz S, ..., **Ziemińska K**, et al. *TRY plant trait database – enhanced coverage and open access*. *Global Change Biology* 26(1): 119-188. [LINK](#)
- 2019 • Aguirre Gutiérrez J, Oliveras I, Rifai S, Fauset S, Adu-Bredu S, Affum-Baffoe K, Baker T, Feldpausch TR, Gvozevaite A, Hubau W, Kraft NJB, Lewis SL, Moore S, Niinemets Ü, Peprah T, Phillips OL, **Ziemińska K**, Enquist B, Malhi Y. *Drier tropical forests are susceptible to functional changes in response to a long-term drought*. *Ecology Letters* 22: 855-865. [LINK](#)
- 2019 • Etzold S, **Ziemińska K**, Rohner B, Bottero A, Bose AK, Rühr NK, Zingg A, Rigling A. *One century of forest monitoring data in Switzerland reveals species-specific trends of climate induced tree mortality*. *Frontiers in Plant Science*, 10. [LINK](#)
- 2018 • Morris H, Gillingham MAF, Plavcová L, Gleason SM, Olson ME, Coomes DA, Fichtler E, Klepsch MM, Martínez-Cabrera HI, McGlenn DJ, Wheeler EA, Zheng J, **Ziemińska K**, Jansen S. *Vessel diameter is related to amount and spatial arrangement of axial parenchyma in woody angiosperms*. *Plant, Cell & Environment* 41: 245–260. [LINK](#)

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- 2016 • Morris H, Plavcová L, Cvecko P, Fichtler E, Gillingham MAF, Martínez-Cabrera HI, McGlenn DJ, Wheeler E, Zheng J, **Ziemińska K**, Jansen S. *A global analysis of parenchyma tissue fractions in secondary xylem of seed plants*. *New Phytologist* 209(4): 1553-1565. [LINK](#)
 - 2015 • **Ziemińska K**, Westoby M, Wright IJ. *Broad anatomical variation within a narrow wood density range – a study of twig wood across 69 Australian angiosperms*. *PLoS ONE* 10(4): e0124892. [LINK](#)
 - 2014 • **Ziemińska K**. *Anatomical variation in twig wood across Australian angiosperms*. PhD thesis. Macquarie University, Sydney, Australia. [LINK](#)
 - 2013 • **Ziemińska K**, Butler DW, Gleason SM, Wright IJ, Westoby M (2013) *Fibre wall and lumen fractions drive wood density variation across 24 Australian angiosperms*. *AoB PLANTS*, Volume 5, plt046. [LINK](#)
 - 2012 • Gleason SM, Butler DW, **Ziemińska K**, Waryszak P, Westoby M. *Stem xylem conductivity is key to plant water balance across Australian angiosperm species*. *Functional Ecology* 26 (2): 343-352. [LINK](#)
 - 2010 • Gasson P, Miller R, Stekel DJ, Whinder F, **Ziemińska K**. *Wood identification of *Dalbergia nigra* (CITES Appendix I) using quantitative wood anatomy, principal components analysis and naïve Bayes classification*. *Annals of Botany* 105 (1): 45-56. [LINK](#)

Peer-review service • I have reviewed manuscripts for: *New Phytologist*, *Functional Ecology*, *Trees – Structure and Function*, and *Annals of Botany*.

MANUSCRIPTS

- Zweifel R,..., **Ziemińska K**, Etzold S et al. *Why trees grow in the dark?* **Submitted to *New Phytologist***.
- Falster D, Gallagher R, Wenk E, Wright I, ..., **Ziemińska K**, et al. *AusTraits – a curated plant trait database for the Australian flora*. **Submitted to *Scientific Data and bioRxiv***. [LINK](#)
- **Ziemińska K**, Roddy A. *Comparison of two techniques for measuring wood water potential: pressure chamber and thermocouple psychrometers*. **In preparation**.
- **Ziemińska K**, Brown E, Gibson L. *Anatomical drivers of wood mechanical properties with focus on wood rays*. **In preparation**.
- Roddy A, **Ziemińska K**. *Upscaling plant physiology to community and ecosystem processes depends on understanding structure-function relationships*. A commentary **in preparation** as a Letter for submission to *New Phytologist*.
- Gvozdevaite A, Oliveras I, Blonder B, **Ziemińska K**, Peprah T, Boakye M, Afriyie L, Martini D, Jodra M, Adu-Bredu S, Malhi Y. *Water availability drives venation architecture along a tropical rainfall gradient in West Africa*. **In revision**.

GRANTS/AWARDS

- 2021-2023 • Marie Skłodowska-Curie Actions Individual Fellowship, at the Institut de Recherche pour le Développement, France
- 2019/2020 • Smithsonian Postdoctoral Fellowship at the Smithsonian Environmental Research Centre, USA (\$50,000/year; declined)
- 2016 - 2018 • Independent Postdoctoral Putnam Fellowship, Arnold Arboretum of Harvard University, USA (\$50,000/year + ~10,000 research budget)
- 2009 - 2013 • Macquarie University Research Excellence Scholarship (\$25,000/year)
- 2013 • My *AoB PLANTS* paper has been selected as “Editor’s Choice”
- 2012 • Daintree Rainforest Observatory Research Student Grant awarded by James Cook University (\$6,000)

SUPERVISING

- 2020 - present • I co-supervise a PhD student, Sam Farrar, based at Uppsala University. Assoc. Prof. Bob Muscarella is a primary supervisor.
- 2020 - present • I supervise research assistant, Silvia Bibbo, who is working on image analysis together with me.
- 2016 - 2018 • I have supervised two undergraduate internship students at Harvard University (Emily Rosa, Emily Brown) and two postgraduate internship students at Oxford University (Natascha Luijken, Karabi Prathak), who all finished their projects on time. Emily Rosa’s impressions about her internship can be found here: [LINK](#)
- before 2016 • Throughout my entire career since 2008, I have trained multiple students in wood

anatomy (Palasiah Jotan, Paweł Waryszak, Henrique Fürstenau Togashi, Zhou Shuangxi, Ian MacLachlan, Daniel Oakley, Frances Whinder, Alisa Zhiteneva).