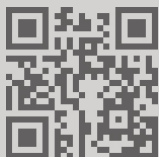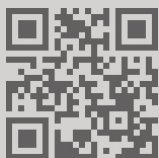# Tom W N Walker

@ tom.n.walker@gmail.com

📞 +41 77 954 64 41

✉ 1090 La Croix, CH

🎂 4th May 1986

PROGRAMMING

- R (expert)
- MySQL (beginner)
- Python (pre-school)

LANGUAGES

- English (native)
- French (B2)
- Italian (B1)

EDUCATION

2015 - 2011	**PhD Environmental Biology** Uni. Manchester, UK *Perfect score (no corrections)*
2009 - 2008	**MRes Biodiversity & Conservation** Uni. Leeds, UK *Distinction (Top of Class)*
2008 - 2005	**BSc Zoology** Uni. Leeds, UK *Class I Honours*

PROFILE

- Ecosystem scientist bridging ecology, biogeography, biogeochemistry & molecular biology
- Designed, managed and delivered 10 research projects (+5 ongoing), i.e. articulating questions, designing/doing experiments, handling data, making inferences and communicating findings
- Engaged with NGOs, practitioners, policymakers and the private sector to deliver research of real societal value
- Leader and collaborator of diverse groups of multi-disciplinary people, locally and globally
- 100% success on grants (CHF 1m) by creating projects that tackle Earth's greatest challenges

EXPERIENCE

JUL 22 - NOW | Chief Scientific Officer — SimplexDNA

- Developing science strategy and forging global partnerships to operationalise eDNA biodiversity monitoring on a planetary scale (millions of samples)
- Advocating for SimplexDNA in panel discussions (The Drop; ~500 climate investors) and VC investment pitches (plus follow-up)
- Supporting cutting-edge climate start-ups as Science Advisor and treasury member of Celo's Climate Collective

SEP 21 - NOW | Senior Scientist — Université de Neuchâtel

- Modernising Swiss biodiversity monitoring with "omics" and remote sensing (25 people)
- Innovating eco-"omics" by leading a global improvement initiative (37 people; 5 continents)
- Improved plant traits globally by 28% with databases and machine learning
- Leader of a *Journal of Ecology* 2022 Special Issues (8th in ecology) to envision ecology's future

JAN 18 - JUL 21 | Senior Scientist — ETH Zürich (prev. UNIL Lausanne)

- Revealed >100% errors in climate change predictions using diverse data and predictive models
- Developed a tool to predict hotspots of landscape phytochemical diversity from spatial models and ensemble machine learning models
- Resolving climate change effects on mountain soil C stocks by consolidating a global network of 18 experiments
- Investigating C-cycle feedbacks by reshuffling and warming plants/soils in field experiments
- Chosen to lead 1 of 5 keynote sessions at the largest EU ecology meeting (BES; 1000 people) to envision ecology's future
- Empowered ~50 MSc students and ~150 BSc students with quantitative skills with teaching
- Mentored 6 MSc students and co-mentored 2 PhD students through their research projects

JAN 17 - DEC 17 | Postdoctoral Scientist — EPFL Lausanne

- Discovered a large (+52%) C-cycle feedback using field/lab studies and 2-pool mixing-models
- Trained ~30 MSc students in multivariate statistics

JUN 15 - DEC 16 | Postdoctoral Scientist — Universität Wien (Vienna)

- Constrained soil C-cycle feedbacks using new methods and process-based models
- Promoted coding literacy in ~10 PhD and MSc students by leading an R bootcamp

SEP 11 - MAY 15 | PhD Student — University of Manchester (UK)

- Brought ecology to ~25k festival-goers by running science tents at Green Man Festival, UK
- Discovered that plant evolution affects C-cycle feedbacks using genomics and metabolomics
- Found that warming destabilises 2'000 y-old soil C using 14C dating and mass-balance models
- Promoted coding literacy in ~50 PhD students by leading R bootcamps at 2 universities

HONOURS & AWARDS

- University of Manchester PhD prize: graduated PhD with no corrections (top 4.5% nationally)
- University of Leeds MSc prize: graduated MRes Top of Class (46 students)
- Anne Keymer Student Talk Prize: best student talk at UK/FR ecology conference (>200 talks)
- Talk prize: best conference talk at BES Carbon Cycle conference (24 talks)