DANIEL J. LEITE

Inquisitive analytical scientific researcher, experienced in genomics, phylogenomics, evolutionary and developmental biology. Adept at integrating bioinformatics and wet-lab approaches to gain multifaceted perspectives. Proven track-record of leveraging modern experimental techniques and international collaborations to produce high-impact peer-reviewed publications. Excels in communicating complex concepts effectively. Seeking to apply adaptability and experience in advanced and impactful research.

SKILLS

Management: Conceptualisation | Team coordination | Experimental design | Project planning | Scheduling | Resources management | Fund management | Data archiving | CRM | Agile

Communication: Presentation | Teaching | Mentoring | Collaborating | Publishing significant contributions to the scientific community, with 16 peer-reviewed publications (<u>full publication list</u>) in journals with impact factors ranging from 3 to 15, collectively cited over 700 times.

Computational: Bioinformatics | Python | R | Bash | HPC | Linux/Mac/Win OS | Command-line | Tool development | Genome assembly | Genome annotation | Single-cell sequencing | non-coding DNA/RNA annotation | Transcriptomics | Phylogenetics | SNP/Variant Calling | Visualisation | Statistics | Microsoft Office | Data archiving | GitHub

Laboratory techniques: DNA/RNA extraction | NGS library preparation | PCR | Cloning | in-situ hybridisation | Molecular biology | Immunohistochemistry | Microscopy (bright-field/confocal/SEM/TEM) | Invertebrate husbandry | Species identification

EXPERIENCE

Senior Bioinformatician and Business Developer - Pragmatic Genomics

2024 May - Oct

Responsibilities:

- Developed genomics SaaS tools for cloud-based analyses
- · Conceptualised ideas, reviewed and tested using agile practices and GitHub version control
- Established and managed high and low-touch sales funnels
- Improved CRM (Hubspot), customer engagement, automation (Make), and feedback integration
- Optimised website (HTML/CSS), improved design, SEO (Lighthouse), online resources (blogs, tutorials, functionality information), and branding

Achievements:

- Improved front/back-end tool functionality, UX, security, and ensured biological and scientific rigour
- Increased B2B and B2C sales over £50k pa via improved sales funnels and CRM methods
- · Overhauled website content, performance, and resources to attract and support customers

Postdoctoral Researcher - Durham University

2020 - 2024

Responsibilities:

- Co-led team coordination, international collaborations, resource and fund management
- · Conceived experimental design, technical analyses and scientific interpretations
- Managed data collections, archiving, task designation, communications and publications
- Mentored and supervised Postdocs/PhDs/undergraduates, teaching computational analyses

Achievements:

- Discovered and published new insights of spider development at single-cell resolution
- Assembling and annotating four new spider genomes using NGS long-read (PacBio HiFi/Iso-Seq) and short-read (Illumina DNA/RNA-Seq and Arima HiC) technologies
- Developed novel bioinformatic approaches for studying genome synteny and evolution

Projects:

• Single-cell RNA-Seq (SPLiTseq) transcriptomics analyses of spider development

• Systematic identification of duplicate genes in chelicerate whole genome duplications

Associate Lecturer - Oxford Brookes University

2021 - 2023

Responsibilities:

- Design course material and examinations, in coordination with co-lecturers
- Taught theoretical and bioinformatic practical sessions and mentoring undergraduate students

Achievements:

• Received positive feedback from students and co-lecturers, evidenced by high exam scores

Postdoctoral Researcher - University College London

2018 - 2020

Responsibilities:

- · Co-led an international trip to collect live animals, transport, care, complied to law and regulations
- · Conceived of experimental design, technical analyses and scientific interpretations
- Managed data collections, archiving, collaborations and publications
- Mentored PhDs and In2Science outreach, teaching wet-lab and computational analyses

Achievements:

- Sequenced, assembled and published the first polyclad flatworm genome
- Learnt single-cell wet-lab and bioinformatic analyses

Projects:

- Genome assembly (PacBio CCS) and annotation of a polyclad flatworm
- · Single-cell analysis of early development of spiral cleavage and larva in lophotrochozoans
- Phylogenetic relationships of major animal clades

Postdoctoral Researcher - Oxford Brookes University

2017 - 2018

Responsibilities:

- Managed data collection, analyses, and archiving, and publications
- · Conceived experimental design, technical analyses and scientific interpretations
- Mentored and supervised PhDs/undergraduates, teaching computational and wet-lab analyses

Achievements:

- Established international collaborations, acquiring resources that expanded scientific perspective
- First characterisation of all homeobox genes in spiders and support for whole genome duplication

Projects

- Investigated the homeobox gene repertoires in chelicerate whole genome duplications
- · Genome assembly (SPAdes) and variant calling (GATK) between strains of baculoviridae

EDUCATION

Ph.D. - Oxford Brookes University

2013 - 2017

- Thesis "Duplication and divergence of homeobox genes and microRNAs in Chelicerata".
- Published three first-author papers and received accolades for presentations and posters.

BSc-Oxford Brookes University

2010 - 2013

• 1st Class Honours. Evolutionary | Developmental | Molecular | Cellular | Plant | Conservation

OTHER

Gatsby Plant Summer School (2011): Experience and training in ideas and solutions in plant science. **Journal Reviewer:** BMC Genomics | BMC Biology | Proc. of the Royal Society London B | Nucleic Acids Research | Development Genes and Evolution | JEZ Part B: Molecular and Developmental Evolution

Key conference presentations: Keynote at DZG, Kassel, Germany (2023) | Invited speaker at Durham, UK (2022) | Speaker at Darwin Tree of Life, UK (2021) | Speaker at SpiderWeb, Göttingen, Germany (2017) | Speaker at SpiderWeb, Jena, Germany (2014)

Teaching and outreach: Associate lecturer (2021 – 2023) | Supervisor of undergraduates, masters, and Ph.D. students (2013 – 2024) | Outreach with In2Science (2019) and primary schools (2014 – 2017)