

Research Assistant (RA) in Tree Conservation Biology, Emphasis in Bioinformatics and Genomics

Are you interested in using genomic data, bioinformatics, simulations, and ecology for conservation? The Hoban Lab at The Morton Arboretum is hiring a two-year Research Assistant in Tree Conservation Biology. We seek to understand dynamics and adaptation of species, communities, and genes over time (especially during environmental change), and to develop evidence-based conservation actions. A Bachelor's degree is required; a Master's degree, or Bachelor's plus work experience, is preferred. Applicants should have experience with bioinformatic processing of next generation sequencing data (e.g. RADseq/GBS), computer programming or R, and/or computational simulations (e.g. SimCoal, Slim, etc.). Preferred experience includes genetic data analysis and interpretation. Experience teaching these skills to others is a plus. **Note that this description is more detailed than what is shown on the application website.**



Research Assistants (RAs) at The Morton Arboretum are involved in all aspects of research: designing studies, planning and executing work, utilizing a variety of scientific approaches, testing protocols, performing analysis, reading literature, interpreting results, and editing manuscripts. The Morton Arboretum strongly emphasizes professional development. There will be opportunities to collaborate on scientific publications, present research at scientific meetings, and spend time building new skills. Three of four past Hoban Lab RAs are now in graduate school at top-tier universities, and the other is a laboratory manager and team leader for an international conservation NGO.



This position is full time, term-limited (approx. 24 months), and grant-funded. The applicant should be enthusiastic, curious, well-organized, passionate for plant conservation and genomics, persistent, and self-motivated. They should be able to work without constant supervision, quickly learn new skills, solve problems, communicate clearly in person and electronically, and cooperate with others in a team environment. Very strong attention to detail and meticulous record keeping (e.g. lab notebooks, coding) is essential.



APPLY HERE. Please explain your fit for the position and describe your experience in *one or more of the following* in your application cover letter. Also, we have several open positions at The Morton; state that you are applying for the RA in Tree Conservation Biology.

- Planning informatic and/or laboratory activities and keeping detailed lab or digital code notebook; organizing samples or data from multiple projects
- Experience in a managing NGS and/or microsatellite data, from raw files to analysis
- Use of statistical software (SAS, JMP, STATA, R, etc.)
- Use of simulation software, and which kind
- Computer programming including writing and troubleshooting code; translating biological models into code; genomic data analysis
- Interpreting genetic data in a conservation context
- Writing; literature search; meta-analysis or systematic reviews; writing reports

Review of applications will begin immediately. The position will start as soon as possible but at latest August 1st. We are open to remote work for at least part of the first year due to the covid pandemic. If you have questions please contact Sean Hoban (shoban@mortonarb.org). The Morton Arboretum is a world renowned botanic garden and plant science research institute with a research department of 30+ scientists, a highly collegial and supportive atmosphere, a strong emphasis on work life balance, a research building embedded in 1800 acres of forest and gardens, close proximity to Chicago, and a mission driven focus.