

## Research Assistant (RA) in Tree Conservation Biology, emphasis in Genetics and Spatial Ecology

Are you interested in using genetics, geography, informatics, and/or spatial statistics for plant conservation? The Hoban Lab at The Morton Arboretum is hiring a Research Assistant in Tree Conservation Biology. We seek to understand how species, communities, and genes change over time (especially during climatic changes), and how to develop evidence based, efficient conservation actions. A Bachelor's degree is required; a Master's degree or Bachelor's plus one or more years of work experience is preferred. Applicants should have some experience with DNA lab work (e.g. PCR, etc.), coursework in genetics and ecology, and basic computer programming or R. Preferred experience includes genetic or molecular ecology data analysis, basic statistics, laboratory management, meta analysis, or geospatial analysis (e.g. ArcGIS, niche modeling, etc.). See below for a detailed list. **Note that this description is more detailed than what is shown on the application website.**



Research Assistants at The Morton Arboretum are involved in all aspects of research: designing studies, planning and executing laboratory and field work, utilizing a variety of scientific instruments, assisting with lab management, testing protocols, training volunteers, organizing data, performing analysis, reading scientific literature, interpreting results, and editing manuscripts. The Morton Arboretum emphasizes professional development. There will be opportunities to collaborate on scientific publications, present research at scientific meetings, and build new skills. Three of our four past RAs are now in graduate school at top tier universities, and the other works for an international conservation NGO. The position is full time, non-term limited, and hard-funded.



The applicant should be enthusiastic, curious, passionate for plant conservation, persistent, and self-motivated. They should also be able to work without constant supervision (after training), quickly learn new skills, solve problems, communicate clearly in person and electronically, and cooperate with supervisors and co-workers. A 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 letter! Also we have several open positions at The Morton- state that you are applying for the RA in Tree Conservation Biology.

- Planning laboratory activities and keeping detailed lab notebook; ordering and managing supplies; organizing samples from multiple projects
- Experience in a molecular lab (PCR, DNA extraction, microsatellites, DNA sequencing, NGS/ GBS); trouble-shooting and optimizing lab protocols
- Use of a statistical software (SAS, JMP, STATA, R, etc.); organizing samples and data in a large database; basic statistical analysis; theoretical ecology or other mathematical modeling
- Computer programming/ informatics including writing and troubleshooting code; translating biological models into code; advanced statistics; genomic analysis
- Geography/ spatial analysis such as ArcGIS or other mapping program; niche modeling
- 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 November 1st. If you have questions please contact Sean Hoban ([shoban@mortonarb.org](mailto:shoban@mortonarb.org) or 630-719-2419).