Postdoctoral Research Associate, Urban Forest Composition

Location: Chicago, IL

Employer: Field Museum

The Field Museum seeks a post-doctoral Research Associate to conduct modeling and spatial analysis focused on understanding fine-scale patterns in urban forest composition, structure, and benefits across the Chicago metropolitan region, and to assist in the development of an online interactive map to be used by the public. The position will be primarily based at the Field Museum in downtown Chicago and will be supported for 1 year, with the possibility of extension based on performance and funding availability.

The Field Museum and Morton Arboretum are working collaboratively to develop a fine-scale urban forest composition, structure, and benefits model for the greater Chicago metropolitan region. This work supports the Chicago Region Trees Initiative (CRTI), a collaborative partnership for coordinated action on key issues facing urban trees. It is the largest such initiative in the country, with leading organizations and agencies from across the >10,000km² seven-county metropolitan region working together. CRTI is leveraging funding, knowledge, skills, and expertise to build a healthier, more diverse regional forest.

Duties and Responsibilities

- develop a model of forest composition across the Chicago metropolitan region;
- develop materials and resources for the distribution of this information by others to a broad audience of end users in the format of an interactive map;
- work collaboratively with organizations outside of The Morton Arboretum and the Field Museum to leverage resources, integrate forest composition data from other regional, state and national efforts including:
  - U.S. Forest Service Urban Tree Canopy Analysis
  - Chicago Metropolitan Agency for Planning mapping resources and GoTo2050 Plan
- research how other organizations and agencies across the country have utilized forest composition data and build on those examples; and
- develop methods to collect additional data. Use this platform to facilitate data collection with schools and volunteer organizations. Use as a framework for a citizen science program.

Qualifications

- strong scientific thinking, reasoning and interpretation skills;
- significant working knowledge in use and interpretation of GIS tools;
- working knowledge of sound statistical approaches and methods;
experience with and be able to conduct modeling with large data sets and perform spatial data analysis;

ability to explain the data and analysis in such a way that it may be utilized by a wide range of audiences including regional planners, state and federal agencies, organizations, communities and individual landowners and managers;

ability to work collaboratively with organizations and individuals outside of The Morton Arboretum and Field Museum to leverage resources for the development and update of the tools and resources;

Ph.D. in Ecology, Forestry, Biology, Environmental Science, Geography or a related field;

ability to effectively present results and recommendations both in written documents and through presentations to a variety of audiences.

To Apply