JOHN Z. DULING GRANT PROGRAM

INTRODUCTION

The John Z. Duling Grant Program was established and funded by a bequest from the estate of John Z. Duling of Indiana, a strong advocate of research who in 1972 proposed the establishment of the ISA Research Trust. The goal of this program is to provide start-up or seed funding to support innovative research and technology transfer projects that have the potential of benefiting the everyday work of arborists. John Z. Duling Grants may be used to support exploratory work in its early stages on untested, but potentially transformative, research ideas and approaches. Examples may include application of new approaches to research questions, or application of new expertise involving novel disciplinary or interdisciplinary perspectives.

Projects are expected to be completed within one to three years with a maximum grant award of \$25,000. No project may receive more than one award from this program. Due to the similarity of the Jack Kimmel International Grant and John Z. Duling Grant, TREE Fund requests that applicants submit to only one of these programs per annual project and funding cycle. Related but unique projects submitted across programs may be considered within a given funding cycle. If identical proposals/projects are submitted to both funding programs within one funding cycle, neither will be considered for review.

TREE FUND RESEARCH PRIORITIES

TREE Fund's current research priorities include the following areas of professional interest; proposals outside of these core areas must clearly and explicitly identify why TREE Fund consideration of the requested scopes of work is warranted:

- **Root and soil management:** Many urban tree problems originate below ground. Promoting root development, protecting roots from injury, managing conflicts with infrastructure, improving existing soil, and/or use of other media for root growth are issues that arborists encounter regularly.
- **Tree planting and establishment:** Methods of ensuring survival and vigorous growth of trees after planting are of concern to arborists and the entire green industry. Arborists are increasingly dealing with problems that originate in or could be avoided during the planting process.
- **Plant health care:** Healthy plants have more effective defense systems, are better able to resist pests, and often require less life-time investment of resources for successful performance in the field. Improved understanding of natural and anthropogenic factors that impact plant health is most likely to lead to new pest/pathogen management strategies for use in the field.
- **Risk assessment and worker safety:** Safety is a major concern to practicing arborists, especially as incomplete knowledge of potential hazards can be a life-or-death issue for both tree workers and the public they serve. Detection and prevention of structural degradation of trees via decay and other factors are especially important. However, practitioners face additional challenges when working in sites with live utility wires and whenever their work

requires leaving the ground to attend to problem areas. Thus, research leading to improved equipment and work practices is also a high priority.

• Urban and community forest management: Trees offer immeasurable economic and health benefits to their home communities, and maximizing these benefits requires an improved understanding of how urban forest ecosystems function, their management, and how they interact with people in communities and at the urban/rural interface.

APPLICATION PROCESS

Applications may be made between August I and October I annually and will only be accepted through the online application form at treefund.org. Applicants will need the following information to complete the application; work in progress may be saved before final submittal:

- Written application narrative, to include the following elements and information:
 - **Project Summary:** A concise synopsis of the other sections of the proposal. (250 words maximum)
 - Statement of Problem: What needs to be learned, and why? (250 words maximum)
 - **Current Knowledge in Project Area:** Pay particular attention to previous work that provides a basis for questions posed in the current proposal or for the origin/application of new or novel methods to be used herein. (500 words maximum)
 - **Description of Outcomes:** Identify up to five measurable outcomes that are most likely to result from work proposed herein. (100 words maximum)
 - **Project Work Plan:** Clearly define the scope of the work to be performed, including design, hypotheses, methodology, and analyses and approximate timetable. (1,000 words maximum)
 - **Dissemination Plan**: A brief description of activities and outlets used to share the results of this project; see "Reporting Requirements" section below for additional guidance. (100 words maximum)
 - **Literature Cited:** List all relevant literature cited in the proposal including personal citations that appear in the author's CV.
 - N.B. Here and elsewhere, applicants should use author-year method for in-text literature citations as described under "Guidelines for Citing in Text" which can be viewed here.
- An itemized project budget; note that:
 - TREE Fund requires a match of least 10% cash or in-kind support from other sources; applicant should be prepared to identify such sources;
 - TREE Fund caps institutional overhead costs in its grant awards at 10% of the total TREE Fund-funded amount of the project; unrecovered institutional overhead costs above this cap may be counted toward the required grant match.

CRITERIA FOR SELECTION

Proposals will be evaluated by TREE Fund's Research Committee using the following criteria:

• **Potential Impact of the Topic:** Does the project address a problem/issue within TREE Fund's mission? Does the project pose a novel research question, propose a novel approach

to an existing research question or represent a new area of research for the applicant? Does the project address topics that benefit the everyday work of arborists and urban foresters? Will this project have application to a broad sector of the arboriculture and urban forestry communities? Will measurable outcomes occur as a result of this project?

- **Rigorous Approaches to the Process and Problem:** Are the methods and proposed analysis appropriate and scientifically sound? Is the project creative, unique or novel in its approach to the problem? If this is a technology transfer project, is the transfer vehicle/method appropriate for the target audience?
- Feasibility of the Proposed Scope of Work: Has the investigator demonstrated appropriate qualifications and resources to accomplish the project? Can the project be completed within the given time frame?
- **Budget:** Is there a clear explanation of how grant funds will be used in the context of the total project budget? Are additional sources of funding for the project being pursued? Is the potential cost/benefit ratio for this project appropriate?

Applications will be specifically rated and screened per the following rubric:

- Applicant's C.V. demonstrates acceptable qualifications. (0 to 5 points)
- Proposed project directly meets one or more of TREE Fund's research priorities, identified above. (0 to 10 points)
- Research has practical application. (0 to 10 points)
- Methods (including means for data analysis) are clear. (0 to 15 points)
- Objectives are achievable within proposed time frame and budget (0 to 5 points)
- Requested funds are matched with at least 10% cash or in-kind support from other sources (0 or 5 points; all or nothing).

TREE Fund does not discriminate on the basis of race, color, creed, gender, sexual orientation, disability or national or ethnic origin. Current trustees of TREE Fund or any member of the family of any such trustee are ineligible to receive grants from TREE Fund.

AWARD PROCESS AND FUNDS DISTRIBUTION

Recommendations on grant awards will be presented by the Research Committee to the TREE Fund Board of Trustees for approval in early December 2017, and grant recipient(s) will be notified in writing within two weeks of Trustee approval. A Grant Conditions and Agreement Form will be provided with notification, and it must be completed within two weeks of notification, and returned to TREE Fund with all required supporting documentation.

Upon TREE Fund's receipt of the signed Grant Conditions and Agreement Form and additional required documents, the full amount of the award less \$1,600 will be sent to the recipient. This \$1,600 retention will be held until final and successful completion of all required documentation, including a fair and complete financial statement reflecting the original budget submitted and the actual expenditures. This final report is due to TREE Fund within 15 days of the project completion date identified in the application.

Applicants are *strongly* encouraged to review the sample Grant Conditions and Agreement Form (which can be viewed here) with their employers' financial or grant management offices, as appropriate, to ensure that the Agreement Forms can be signed expeditiously upon receipt. Potential difficulties with Agreement terms that are identified during the application process may be considered and negotiated more favorably than those presented after the grant award process. Grant recipients will also be required to submit a brief summary of their projects in lay terms, as well as a photo for use in TREE Fund and industry publications, prior to initial payment being disbursed.

The reports shall supply sufficient information as described in the Grant Conditions and Agreement Form to verify that the grant is being used for the purposes intended and to allow TREE Fund to fulfill its public reporting responsibilities.

REPORTING REQUIREMENTS

It is TREE Fund's explicit desire that research findings eventually be freely and widely available to any and all parties who may benefit from the author's work, though TREE Fund recognizes the importance of academic and professional journal publications and will work with grant recipients to ensure that findings are disseminated in a manner that is respectful to all parties' schedules and needs. Any anticipated proprietary elements of proposed research must be identified clearly in the initial application; should applications fail to make such declarations, TREE Fund reserves the right to negotiate royalties from patents, sales, copyrights, or other commercial results of funded research.

Recipient should inform TREE Fund when funded research findings are published or presented at conferences so that these accomplishments can be widely publicized. Recipients should also recognize the support provided by TREE Fund in their articles or presentations related to the funded project. Recipients are strongly encouraged to publish findings to relevant professional journals, i.e. Arboriculture and Urban Forestry, Urban Forestry & Urban Greening, Arboricultural Journal, Trees: Structure and Function, Journal of Horticultural Science and Biotechnology, Plant Pathology, Hortscience, Horticultural Science, Sustainable Development, Landscape and Urban Planning, Journal of Urban Health, Environment and Urbanization, Urban Ecosystems, etc.