Thornton Tomasetti Foundation

Technical Literacy Fellowship Guidelines For 2022-2023 Academic Year

Overview

The Thornton Tomasetti Foundation (TTF) was established in 2008 with a mission to fund projects, scholarships and fellowships in building engineering, design or technology. The Technical Literacy Fellowship, now in its 5th year offers up to \$5,000 in funding for specific projects that further the technical literacy of the public at large especially regarding extreme loading events, wind and earthquake performance, environmental issues, risk, reliability and the engineering processes that provide the foundation for the safety of the public in our built environment. Any projects that fulfill the goal of education will be considered.

1. Goal of the initiative

The initiative aims to fund the development of a specific proposal. The applicant(s) should be an engineering student, journalism student, or a partnership between an engineering and a journalism student. The applicant(s) should propose how they are planning to engage the public either through the development of a marketing packet, web-site, social media, or publication in a student newspaper or other public media. We encourage the use of visual communications including infographics to explain the topic and to explain how such approaches can be used to educate the public.

As examples, New York Times article on Beirut explosion as well as the New York Times article on Uncertainty in Hurricane Path Prediction. Examples of topics include but are not limited to: earthquakes, storms, wild fires, fluid mechanics of particles and aerosols during a pandemic. As an option, the student(s) may focus on a single current major event.

Students developing these skills for journalistic purposes are encouraged to participate. For partnerships, the funding will be \$7,500 for both students. The foundation reserves the right to publish any findings, computer programs, and drawings on the foundation website. Although the intent is to award one or two annual fellowships, the Foundation reserves the right not to award or to split the award, as it deems appropriate. Your research program should consider including but not necessarily be limited to the following:

- Public understanding of the expected performance of buildings, infrastructure, air and water quality.
- What do codes design for?
- The statistical nature of "Safe."
- The economic constraints on "Safe."
- Defining resilient design and resilient planning.
- Applying your approach to recent events.

Include examples about how the concepts are currently misunderstood (see example in Figure 1 at end of solicitation), and how this fellowship would address the problem. Part of the challenge of this initiative is to encourage creativity and innovation in explaining these concepts to the wider public.

2. Eligibility

The applicant(s) must be graduating from a U.S. university or college and entering into a Master's program, or currently enrolled in a Master's or Ph.D. program.

3. Application Process

Candidates and their projects must be nominated by a department chair. The department chair must submit one candidate qualifications (#4, below) via email to the Thornton Tomasetti Foundation (info@ThorntonTomasettiFoundation.org) by April 4, 2022. The Thornton Tomasetti Foundation jury will meet in April and notify the participating department chairs by the end of April.

4. Submission Requirements

- In addition to the nomination from the department chair, a one-page letter of recommendation from another faculty member.
- A one-page description of the project including the topic that the wider public is being educated about and the suggested venues for delivering this information.
- A list of tasks required to achieve the project goals.
- Any equipment required its description and costs.
- A one-page resume.

5. Recipient Responsibilities

The recipient agrees to provide a high-resolution headshot (in .jpg format) for the Foundation to use to announce the award. The recipient agrees to provide a progress report (up to 750 words with illustrations and high-resolution photos if needed) within 6 months of receipt of the award.

Upon completion, the recipient agrees to provide, at minimum, a technical white paper describing the project goals and the results of the sponsorship. An acknowledgment of TTF support must appear in publications (including World Wide Web sites) of any material, whether copyrighted or not, based on or developed under TTF-support: "This material is based upon work supported by the Thornton Tomasetti Foundation."

TTF support also must be orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

The following disclaimer must be included: "Any opinions expressed are those of the author(s) and not those of the Thornton Tomasetti Foundation."

The recipient is encouraged to reach out to the foundation to help find mentors for the project and venues for publication of successful results. The recipient agrees to complete the project within 12 months. If the applicant(s) cannot complete the project, fellowship reimbursement will be in accordance with the university policies.

Payment will be 50% of the grant up front and the remainder at the end of the fellowship program. This can vary depending on the expenses required to commence the project.

6. Other Thornton Tomasetti Foundation programs

The TTF foundation is currently supporting our mission with the National Scholarship, the Student Innovation Fellowship, and this Technical Literacy Fellowship as well as several grant programs and collaborating arrangements with other nonprofits.

FIGURE 1:

