

# **BME Design Courses**

## **Design Awards: Executive Summary Guidelines**

Your team is required to submit an Executive Summary (1 page only) that succinctly characterizes the merits of your project. This summary must be for only **ONE** of the design award categories, either the Tong BME Design Award, BME Design Excellence Award, or for team's that have been working with a medical student, the BME and UWSMPH-TECH Collaborative Innovation Award.

All designs will be judged during the BME Design Expo final poster session. The Tong BME Design Award panel will consist of entrepreneurs, innovators and biomedical industry leaders. The BME Design Excellence Award panel will consist of the design faculty and engineering faculty. The BME and UWSMPH-TECH Collaborative Innovation Award will consist of medical professionals from the School of Medicine and Public Health.

If you think you have created a prototype that has commercial potential, then complete an Executive Summary for the Tong BME Design Award. Alternatively, if you think you have thoroughly completed the design process, addressed the client's problem statement and design specifications and validated the prototype, then complete an Executive Summary for the BME Design Excellence Award. Finally, if you think you have well utilized the TECH collaboration, then compete for the BME and UWSMPH-TECH Collaborative Innovation Award.

The document must be a single page, not have any images or diagram, and the e-document file name must be in the following format: "**301 (or 402) - Tong (or Excellence or TECH) - Poster Number - Abbreviated Project Name - Executive Summary.pdf**" This name format should also be in the upper left header of your document. A first draft is due electronically to your advisor two weeks prior to the final presentations with your progress report. Your BWIG should also select the award you are competing for within project builder/Award Selection. Your project advisor will then assist you in finalizing the document, which will be due online the week prior to the final presentations by Noon to your webpage.

### **A. The Tong BME Design Awards**

This award is to highlight teams that have created engineered prototypes of their ideas that have the potential to be commercialized in pursuit of new business ventures in biomedical industries. The team should perform market analysis and discuss the potential impact of the design, and any resulting intellectual property. Criteria for assessment are:

How well did the team:

1. Characterize the problem.
2. Identify and review any competing devices and/or existing intellectual property.
3. Quantify the commercial opportunity (e.g., demographics of market, scope of problem/need).
4. Briefly describe the resulting prototype device.
5. Describe the intellectual property potential (i.e., what is novel, innovative?).
6. Very succinctly describe how the design was validated.
7. Summarize how well the design meets the problem and operational requirements.
8. Describe the impact of the design if commercialized.

### **B. BME Design Excellence Award**

This award is focused on critical-path research or specialized one-of-a kind devices. It *does not* require the team to perform market analysis, but instead should highlight how thoroughly the engineered solution addresses the client's problem through rigorous design, construction, testing and validation. Criteria for assessment are:

How well did the team:

1. Characterize the problem.
2. Identify and review any competing devices and/or existing intellectual property.
3. Briefly describe the design process.
4. Describe the resulting design and prototype.
5. Succinctly describe the design validation process and the completeness of this testing.
6. Summarize how well the design meets the problem and operational requirements.
7. Describe the impact of the design with respect to the user.

### **C. BME and UWSMPH-TECH Collaborative Innovation Award**

This award was established through a partnership between the BME department and School of Medicine and Public Health. It is intended to highlight outstanding work from BME teams that worked with a medical student on a project proposed by a UW physician. The team should demonstrate a thorough understanding of how their work can impact clinical practice and patient care as well as describe how their collaboration with the medical student helped in the design process. This award is only available to teams that have a medical student working with them.

How well did the team:

1. Coordinate with their client and medical student to characterize the design need.
2. Describe the impact of the design on the physicians work or practice.
3. Describe the impact of the design on patient care (If applicable)
4. Coordinating resources with the medical student to improve their design process.
5. Describe the resulting design and innovation as well as any medical student involvement in the design process.
6. Demonstrate the value of collaboration between BMEs and members of the medical field.