

Budget Justification: My budget request through the faculty research grant involves a stipend, consumable supplies, equipment/tooling costs, as well as professional photography which are critical to the production and documentation of this research project.

Consumable Supplies (\$1245.62): The forging and fabrication processes require the use of consumable supplies. Copper and sterling silver are the raw materials used to create my forms. The initial prototypes will be created using a variety of gauges of copper wire and sheet. Using an inexpensive material such as copper provides the freedom to experiment without the fear of losing precious materials. After examining the prototypes and gaining an understanding of their unique construction, forging, and twisting methods, I will recreate the sample forms in sterling silver.

I will be fabricating a variety of gauges of non-ferrous metal wire and sheet. In order to join these materials, I will require solder and TIG welding supplies. Silver solder wire and sheet, TIG welding rod, and tungsten electrodes are necessities to fabricate the prototypes and final forms.

Equipment/Tooling (\$304.25): Most of the equipment needed for the completion of this project is available to me. It will be essential for me to design and construct specialized twisting tools and soldering jigs in order to accomplish my research since they do not exist. Some of these tools will only work for specific twists and will not be compatible. Once the twisted motifs are complete, I will attempt to further form a variety of the objects. This will require the purchase of tooling for the *Bonny Doon* Electric Press in the UW-L Metalsmithing studio. By using forming dies into urethane, it is my belief that I will be able to accurately bend and form the completed twists without disrupting the continuous patterns they possess. Therefore I am requesting a 4" mushroom former, 4" form box, 4" round urethane plug, and a 6" x 6" urethane sheet.

Professional Photography (\$1500.00): Visual documentation is a crucial aspect of this research project. To document the research with an in depth, step by step approach to this unique process, I will seek the professional expertise of *Regan Photography* of Winona, Minnesota. Each stage of the process will be professionally photographed by *Regan Photography*.