**Budget Justification**

**Key Personnel**

The Principal Investigator, **XXXXX**, will be providing leadership and ensuring successful completion of the project. Compensation is expected for 0**.X** **summer** month level of effort every year during **the 3-**year period.

Co-PI**, XXXX** will be responsible for directing the development of ….*briefly describe*. Compensation is expected for X.X of the calendar month **every year** during the 3-year period. He will also be providing project coordination and assist in the training of the two graduate students and the three undergraduate research assistants.

Co-PI, XXX, will direct the design and integration of the candidate material…… is calculated on the basis of X.X of summer month level of effort every year during the 3-year period**.**

*Recommend giving each person their own paragraph. This is especially true if there are more than two PI’s and more than a line or two per person. If you leave it as one paragraph (here or ever), you might want to bold the names so they stand out and make it easier to read.*

**Other Personnel**

Two graduate student research assistants will… *describe what they will be doing*. They will be compensated for XX calendar months’ level of effort **every year** for the 3-year period of the project. Also, three undergraduate research assistant will *describe what they will be doing*. They will be compensated for *X summer months’* level of effort every year based on Iowa State University rate, for the 3-year duration of the project.

Labor costs for participating faculty and staff are projected costs based on actual monthly salaries for the university fiscal year ending 6/30/14. Labor costs for post docs and graduate students are based on projected monthly salaries paid by the participating academic departments at ISU. Wages are based on hourly rates typically paid to upper-level undergraduate research assistants in the College of Engineering at ISU. An annual increment of 3% is applied to all salaries and wages for each year of the project.

**Fringe Benefit Rates**

At Iowa State University, fringe benefits are specifically identified for each employee and are charged individually as direct costs. These costs are budgeted as a percentage of an individual’s salary based on his/her labor category. Current rates for applicable labor categories are calculated at … *Delete rates not used)*

 Faculty 31.5%

Professional 37.8%

Merit 50.0%

Graduate Students 13.0%

Postdoctoral Associate 23.0%

 Undergraduate Students 4.6%

 Non-student Hourly 12.0%

**Equipment**

*Please describe equipment needed and what it will do. Equipment is anything over $5,000. Please see Karin with questions.*

**Travel**

Travel budget will be used to support research related conference travel for the investigators and graduate student. Some of the important conferences for this field, such as XXX, are held internationally, typically in European countries, but exact locations are unknown at this time. *(Name conference and locations if they are known.)*

**Other Direct Costs**

**Materials and Supplies**

PI is requesting for materials and supplies for use in the project. This includes the cost of raw materials for producing the samples and costs of designing and development of a *XXXX.* *I recommend* ***against*** *including dollar amounts unless they justify per-item rates for specific, high-cost item requests. Be aware that any item that is over $5,000 usually needs to be listed as equipment.*

**Publications:**

The PI plans to publish (your plans…..at least two papers per year with one at online, all-accessible journal with mandatory publication charge.). These costs are requested to help to defray publication costs of scientific articles in various peer-reviewed journals as a result of this research.

**Tuition**

Per University policy, tuition remission is being requested for each graduate student, commensurate with their time on the project.

**Services:**

The PI requests $1,000 per year for the use of on-campus glass/machine shops and cleanroom facilities.

**Sub Contract**

Brief summary of who will be receiving the sub-contract from this proposal.

**Indirect Costs**

**Facilities and Administrative Costs (Indirect Costs):**

For sponsored research at ISU, indirect rates are applied to Modified Total Direct Costs (MTDC). MTDC consists of all salaries and wages, fringe benefits, materials, supplies, services, travel, and subgrant or subcontracts up to the first $25,000 of each subgrant or subcontract (regardless of the period covered by the sub grant or subcontract). MTDC excludes equipment, capital expenditures, charges for patient care, student tuition remission, rental costs of off-site facilities, scholarships and fellowships, as well as the portion of each subgrant and subcontract in excess of $25,000. Current rates are provided below. These rates were approved by the Department of Health and Human Services (effective 07/01/2012 – 06/30/2016).

On-campus – Organized Research 50.0%

On-campus – Instruction 51.0%

On-campus – Other Sponsored Activities 32.0%

Off-campus 26.0%

Because the majority of work on this project (> 50%) will be performed on ISU’s campus, 50.0% was the rate used to calculate indirect costs. (Put the correct IDC in this last sentence!)