**Budget Justification (UNC at Chapel Hill)**

The proposed costs on the UNC–Chapel Hill side of this project are all in personnel to support the activities towards the goals of the proposal. Working closely with the prime site (NCCU), the UNC PI will be primarily responsible for codes for community detection, network robustness, and multilayer network analyses, leveraging the UNC team’s expertise.

**Personnel**

For phase 1 of the contract, 1 month of summer salary is requested for PI Zach Boyd. For phase 2 of the contract, 2 months of salary are requested for PI Zach Boyd. The salary will be $5,417 in phase 1 and will include a 3% inflation rate for phase 2.

**Fringe Benefits**

The postdoc fringe benefit rate is 8.99% of salary. Postdoc health insurance costs are currently $4,740 per year, will be charged to the contract based on months effort, and include a 3% inflation rate for all years. The total dollar amount of postdoc benefits (fringe and health insurance) in phase 1 will be $882 and $1,764 for phase 2.

**Indirect Costs**

Indirect costs are calculated at 55.5% of modified total direct cost (MTDC). Equipment, participant costs, graduate tuition and fees, and amounts in excess of $25,000 on sub-awards are excluded from the base.

The total requested from the National Science Foundation is therefore $29,383.