

**Northern Arizona University
City of Flagstaff
Budget Justification**

A. Salaries and Wages: \$42,514

Pursuant to NAU policy, salaries in the initial budget period are based on current published NAU salary scales and include University mandated range adjustments and merit increases scheduled to occur before the proposed project start date except for those individual(s) with actual or expected salary exceeding NIH salary CAP at the time of project start date.

Crystal Hepp, Ph.D. (PI; not requesting salary coverage): Dr. Hepp will serve as the contact Principal Investigator on this project. She is an Associate Professor in the School of Informatics, Computing, and Cyber Systems and an Assistant Director of the Pathogen Microbiome Institute at Northern Arizona University. She started conducting wastewater surveillance for SARS-CoV-2 in March of 2020 and has secured all collaborations needed for this project. She will oversee all laboratory processes and the dissemination of results to involved partners (which includes a weekly public report in the case of the Flagstaff Unified School District and City of Flagstaff wastewater samples). She will additionally oversee and partially carry out bioinformatic analyses for variant detection and detection of other viruses.

Daryn Erickson, B.S. (6 months): Ms. Erickson will serve as the project coordinator. She will oversee all labwork and will conduct PCR and qPCR tests to identify which viruses are present in the wastewater at any given time and will prepare samples for genomic sequencing. She will additionally develop weekly reports for our collaborative partners with PI Hepp. Ms. Erickson has extensive molecular biology experience and has been working in the Hepp lab for 4 years.

Ryann Whealy, M.S. (1 semester): Ms. Whealy will participate as a graduate research assistant and will participate in sample processing (RNA and DNA extractions from samples). She will continuously update the sample database, which will contain data for approximately 1000 samples by the end of the project.

Zachary Barrand, B.S. (1 semester): Mr. Barrand will participate as a graduate research assistant and will participate in sample processing (RNA and DNA extractions from samples). He will continuously update the sample database, which will contain data for approximately 1000 samples by the end of the project.

TBD Temporary Employee (10 hours per week): This individual will work for 10 hours each week collecting wastewater samples from around the City of Flagstaff, including the Flagstaff Unified School District and City of Flagstaff Wastewater Treatment plants. They will undergo training on the use Moores Swab with PI Hepp.

B. Fringe Benefits: \$8,929

This organization charges the actual cost of each fringe benefit direct to Federal projects. However, it uses a fringe benefit rate which is applied to salaries and wages in budgeting fringe benefit costs under project proposals. The following fringe benefits are treated as direct costs: FICA, workers compensation, health/dental insurance, basic life insurance, unemployment insurance, long-term disability, pension plan, and retiree accumulated sick leave.

Calculated at: Technical Staff, 39.2%; Graduate Students, 0.37% during the academic year. NAU's fringe benefit rate varies by salary and position.

C. Equipment: \$0 – We are not requesting funds for equipment

D. Travel: \$3,000 - We are requesting travel support for sample collection efforts across sites throughout the project.

E. Participant Support: \$0 – We are not requesting funds to cover participant support (this is a required category for NIH and NSF grants, so we kept it here).

F. Subaward Costs: \$0 – We are not requesting funds for subawards

G. Other Direct Costs: \$45,000 – We are requesting funds for 1) sample collection and processing materials (\$45,000). For the materials budget, we have included expenses for Nalgene jars (sample collection), a manhole hook, as well as viral concentration, extraction, reverse transcription, qPCR, and genomic sequencing reagents and consumables.

H. Total Direct Costs: \$99,443

I. Indirect Costs: \$0

We are requesting that indirect costs are waived for this pandemic response project.

J. Total Direct and Indirect Costs: \$99,443

K. Amount of this Requested: \$99,443