### **Budget Justification**

#### Personnel

Jimmy Johns, Ph.D., Co-Investigator; *Years 1-4:* .60 Calendar Months of Effort per Year. Dr. Jimmy Johns is an Affiliate Researcher, Infectious Disease Division, Harvard University, Boston, MA. He will serve as a Co-Investigator on this grant application. Dr. Johns will directly supervise the Research Technician, Laura Flowers, assisting with this project. Dr. Johns also will guide data analysis, prepare presentations and participate in manuscript writing.

## Laura Flowers, Research Technician III; *Years 2 & 3:* 1.80 Calendar Months of Effort per Year.

Ms. Laura Flowers is a Research Technician in the Johns Lab. Ms. Flowers is an outstanding technician and scientist, with extensive experience in a wide variety of laboratory procedures and analysis systems. She is particularly well-versed in molecular biology including *in situ* hybridization techniques, RNA expression analysis such as global gene expression microarrays, and immunohistological staining and analysis procedures. She will contribute effort toward the RNA genotyping and sequencing scientific aspects of this research project. In particular, she will perform RNA isolation from biopsies and advise on *in situ* hybridization assays. She also will actively contribute to the preparation of data presentations and writing of manuscripts.

#### Travel

# Co-Investigator—Johns: One Domestic National or International Conference per Year; \$1,635 per year.

Travel funds are requested for Dr. Johns to attend one domestic national or international conference per year during Years 1-3 of the proposed research project in order to discuss and/or present study results. These funds will be used for round trip airfare, lodging and per diem.

#### Indirect Cost

The federally negotiated indirect cost rate for Harvard University is 50% MTDC.