

Budget Justification

Personnel

Clancy L. Kleaver, M.D., (2.4 academic months). As PI on the project, Dr. Kleaver will direct all facets of the proposed research. In addition, he will design the progression studies, perform all statistical analysis required for the various aspects of the study, and be involved in all of the discussions related to planning experiments, writing reports and manuscripts. He will be one of the two scientists who will participate in meeting with NIH program managers.

James McLeary, Ph.D., (6 CM). As Col on the project, Dr. McLeary will direct all laboratory work associated with the proposed research, participated in the studies, meet daily with the technicians involved in the project and the PI, and along with the PI, present findings at scientific meetings including those at NIH with program managers.

TBD, Graduate Research Assistant, (4.5 academic months and 1 summer month) The graduate research assistant will work under the direction of Drs. Kleaver and McLeary. The graduate research assistant will be from the Virology laboratory and will be responsible for assisting with experiments and writing reports.

TBD, Technical Assistant, (.24 calendar months) Drs. Kleaver and McLeary department and college require technical assistance and computer support. This person will insure data communication and security.

Fringe Benefits

Fringe benefits are applied in accordance with the UIUC FY 2010 benefit rates. Rates for the senior personnel, graduate and hourly students are 35.59%, 6.36% and 7.79% respectively.

Personnel expenses include a 3% inflation increase per year.

Equipment

Ultra-low freezer & Rack System: Due to the volume of clinical specimens that must be processed in batch, funds are requested for dedicated freezers to the project (2 @ 14,000 = \$28,000).

Travel

Domestic: Funds for two trips per year to Gettysburg, PA to conduct fieldwork are requested for the PI and the Co-PI. Per diem for meals, incidentals and lodging is \$160 per day, in accordance with current UIUC policy. The estimated duration of the trip is five days. Airfare is estimated at \$400 each.

Foreign: Funds for one trip per year is requested for the PI to attend a collaborative meeting in Amsterdam, the Netherlands. Per diem for meals, incidentals and lodging is \$250 per day, in accordance with current UIUC policy. Transportation to and from the airport is estimated to be \$50/trip. Airfare is estimated at \$800.

Other Direct Costs

Supplies. These are actual expenses incurred while running these hollow fiber experiments. The costs of the hollow fiber units are self evident. Several liters of medium for growing MDCK cells (MEM, FBS, and Pen/Strep) and medium for growing influenza viruses in flasks and hollow fiber units (MEM, BSA, TPCK-treated trypsin, Pen/Strep) are required for each experiment. We are planning to study two viruses for each of

the 4 drugs each year. Each set of experiments (dose ranging experiment and dose fractionation experiment) will be performed in its entirety two times.

Duet pumps. Dr. McSharry's laboratory currently has four duet pumps to pump medium and drugs through eight hollow fiber units. If this grant application is funded, his laboratory will require four additional duet pumps so this work can be carried out within the time frame of the grant proposal. With these four additional duet pumps the second BSL-2 Lab would be completely equipped to perform the proposed studies.

Subject Payments. Participants will be paid \$20 for completion of all data related to the study. The study involves three different times that the participants would need to come in ($\$20 \times 300 = \$6,000$).

Tuition Remission. Tuition remission (56% of graduate student salary) is included. This rate has been negotiated with the Office of Naval Research.

Indirect Costs

Facilities and Administrative (F&A) Costs are negotiated with the Office of Naval Research and for sponsored research are calculated at 58.5% of Modified Total Direct Costs (MTDC). MTDC includes Total Direct Costs less equipment >\$5,000, tuition, subaward costs over \$25,000, and lease expense.