AIDS researchers centralize efforts

By Gail Javitt

It is perhaps the most controversial disease in history. Identified less than a decade ago, AIDS has raised a variety of political and social issues, including discrimination, patients’ rights, and the responsibilities and ethics of physicians.

The medical reality is that AIDS is a virus with properties similar to viruses whose behavior in the body is already understood. However, AIDS also has characteristics very different from any other known virus.

Only through studying the Human ImmunoDeficiency Virus (HIV) at a molecular level can researchers learn how the interaction of the AIDS virus with the cells of the body is unique.

Doctors hope that through this understanding they will be able to disrupt the virus’ activity and thereby develop a cure for this complex and frightening disease.

In response to growing interest in the HIV virus, doctors at Columbia’s College of Physicians and Surgeons (P&S) are begin-
ning to centralize their AIDS research, according to Higgins Professor of Microbiology and Medicine Dr. Harold Ginsberg.

Until recently, Ginsberg said, studies of the virus at P&S have been conducted by individual doctors whose research on other biological issues led them to ask questions about the biology of AIDS. These doctors have been using their own grants to fund their research.

Now, however, P&S researchers are in the midst of developing a multi-discipline AIDS project that will bring together researchers from the departments of Medicine, Microbiology, Biochemistry, Physiology and Pathology, to attempt to answer fundamental questions about the disease, according to Professor of Medicine Dr. Leonard Chess.

Chess said that he recently submitted a Program Project grant for Basic Research on the Immunology and Virology of AIDS to the National Institutes of Health (NIH) in order to provide some of the funding for this project. Although Chess, who is the principal investigator of the grant, would not say how much money the group is requesting, one of the doctors suggested that it is a multi-million dollar sum.

According to Chess, the project, if funded, will focus on the questions of what activates the AIDS virus once it enters the body, and why a person can carry the HIV infection for years without showing symptoms of the disease.
Ginsberg, who is co-investigator of the grant, said that it is not yet known in which parts of the body AIDS is harbored during this interim period of inactivity, why it can lie dormant for a long period of time, and what mechanism finally causes the virus to attack the cells of the body.

"Why [is this virus] kept silent so long like a Trojan horse?" Ginsberg asked.

Presbyterian Hospital has devoted a lot of effort to clinical care of AIDS patients, but studying the disease at the level of basic research was not a major concern to P&S researchers until recently because they were concentrating on other areas of research, Ginsberg said.

"Everyone [was] doing other things," Ginsberg said. "I think we’ve been negligent," he added.

Chess stressed that the new project will be "a logical extension of the basic studies of all the investigators in the study."

According to Dr. Leonard Samuel, lead investigation chair for the grant and professor of the Department of Physiology and Cellular Biophysics, "Each of us independently began to work on aspects of HIV infection, and at some moment in time Len Chess realized that..."
there were enough of us to develop a project
that would be larger than the sum of its parts."

But according to Associate Vice President
for Columbia's Health Sciences Dr. Robert
Levy, the wealth of other research projects
were not the only reason that many Columbia
scientists did not choose to get involved in col-
lective AIDS research until now.

Levy said that recent increases in govern-
ment funding for AIDS research has made
more comprehensive basic research in AIDS
possible.

According to Director of Federal Relations
at Columbia Corinne Rieder, the U.S. Con-
gress has proposed nearly a 100 percent in-
crease for AIDS in the 1988 budget. At pre-
sent, total NIH spending on AIDS research is
over $400 million.

Rieder said that it is difficult to determine
how much is being spent on AIDS in com-
parison with other diseases because money
spent on AIDS research may benefit other
diseases, and money appropriated for basic
research may help AIDS as well.

Levy said that one reason that so much
money is necessary for comprehensive AIDS
research is that a greater degree of safety and
control is required because researchers will be working with the actual virus.

Ginsberg said that the University will build new facilities, including a “core” facility where the virus will be grown, a containment center and animal facilities, which he said will probably not be started until next July.

According to Professor of Biochemistry and investigator of the grant Stephen Goff, while there are other grants being applied for and presently supporting AIDS research at P&S, “the most important thing about this grant is that it will provide funding to build and equip a facility to handle the virus safely.”

Many of the doctors said that one problem in getting sufficient funding for AIDS research is that spending on basic research like biology and immunology has been neglected by the federal budget under the Reagan administration.

“I think that the NIH needs more money,” Chess said. “Society has to decide that medical research is worth a greater percentage of the budget,” he added.

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