

CHIRON MAKES PROTOTYPE POLYVALENT VACCINE

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REASONS

The highly immunogenic hepatitis B virus surface antigen protein has been produced via recombinant DNA techniques by a number of companies (see First Generation Vaccine in the artist's rendering above). In this issue of *Bio/Technology*, Pablo Valenzuela and his colleagues at Chiron Corp. (Emeryville, CA) report the manipulation of this particle so that it serves as the matrix for the presentation of an unrelated antigen (labeled Second Generation Vaccine). This novel approach could lead to more efficient vaccines because it clearly exposes the second antigen on a complex that is already effectively immunogenic. In their paper, the researchers detail the construction of a model hybrid particle containing both hepatitis B virus and herpes simplex virus surface antigens.

DIAGRAM BY ERIC STOLTZING

EQUIPMENT FUNDING

SHARED INSTRUMENT GRANTS FIND VARIED USES

BETHESDA, Md.—Does your research require an exorbitantly expensive cell sorter or mass spectrometer? Does your institution have a Biomedical Research Support (BRS) grant from the Division of Research Resources (DRR) of the National Institutes of Health (NIH)? If so, then the DRR's Shared Instrumentation Grant (SIG) program may be for you.

Designed to help researchers overcome the problem of high-priced equipment rapidly becoming obsolete, SIGs can be used to buy or update biomedical instruments that cost more than \$100,000. The maximum award is \$300,000, and the equipment must be shared by three or more NIH grantees at an institution that receives a BRS grant. Since its inception in 1982, the competitive program has awarded close to \$60 million. While only 11 percent of the

applicants received awards and split just \$3.7 million in SIG's first year, fiscal year 1985 saw some 76 percent of the applicants awarded grants totaling close to \$32 million. According to Marjorie Tingle, chief of the SIG program, the initial year's competitiveness and the relatively small amount of funding available then may have scared off or discouraged many investigators and kept the number of applicants from rising in subsequent years.

Applications for fiscal year 1986 grants were due in February; funding decisions will be announced next November. Tingle says the new grants will again total \$31.8 million, and she is expecting more applications this year than the record 225 her office received for 1985 grants.

She stresses that SIG grants, unlike some others, do not require matching

funds from the recipient institution. This means that researchers can try to get additional funding—such as that available from the National Science Foundation—to cover costs not picked up by SIG.

"It's the only way we would have gotten enough money to purchase the instrument," says Albert L. Chapman of the University of Kansas Medical Center (Kansas City). The Center received a \$100,000 SIG toward the purchase of a scanning transmission electron microscope that is used by about 40 different investigators a year.

A drawback of SIGs is that the equipment often becomes accessible only to NIH grant recipients because these researchers receive priority among additional users. This means that non-NIH grantees may lose out on equipment they *would* have been