

Information overload

JMU professors create first of its kind biotechnology database

Breakneck growth in biotechnology, which includes the research and development of therapeutic drugs and medical diagnostic products, has created the need for a centralized, computerized database for the storage and retrieval of information. As the nation's biotechnology industry grows by leaps and bounds, JMU is taking steps to reign in the information overload.

Robert McKown and Rita Teutonico, associate professors in the College of Integrated Science and Technology, have received grants to create the much-needed biotechnology databases. Both professors' projects will tackle the collection, sorting and organization of worldwide biotechnology information and resolve how to compile the information into a single electronic source.

McKown says that he and Teutonico were invited to submit a proposal for a competitive infrastructure award from Virginia's Center for Innovative Technology. Both professors received grants from CIT, and the database project was divided into two parts. McKown has been working on a biopharmaceutical database for the past two years and expects a commercial release in June 2001. Teutonico is directing a biotech diagnostics database project, and also expects a June 2001 release.

"The market is exploding in terms of the number of new products being developed," says McKown. "Because of this rapid growth, many problems arise in data management. For example, there are about 70 FDA-approved biopharmaceutical products on the market today, but more than 1,500 in the pipeline in one from of development or another. A centralized database is needed to designate what the products are, who is developing them, what stage they are in, and so forth."

Assisting McKown and Teutonico at various times in the projects are at least one computer science faculty member, two computer science students, and eight to 10 ISAT students.

"As far as we know, this is a unique database project in the United States and possibly the world," says McKown.

Both databases will be available through a website and will require a subscription for most of the high value and often-updated information.

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