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Boston University
Unique Computer Software Helps Elders Find Services

Experts estimate that the majority of senior citizens are unaware of the range of elderly services that exist, let alone the ones for which they qualify. To address this problem, the University Hospital (UH) is offering a free service, the first of its kind in New England, called Benefits Eligibility Service System. The computer software system can instantly inform Boston elders of their local, state and federal entitlements.

"Not knowing what services they are entitled to can cause unnecessary suffering for elders who may be faced with chronic illnesses, rent increases, and medical emergencies as they begin living on fixed incomes," says Mary Chin, L.I.C.S.W., the director of UH's Social Work Department. She adds that elders often don't have this information because of a lack of outreach from service agencies and because, for the most part, elders are unaccustomed to seeking help and unfamiliar with the benefits system. Even case-workers who work with elders do not have all the information at their fingertips.

With UH's new system, Boston residents over age 65 need only complete a two-page questionnaire about their personal, economic and health status and send it to the Social Work Department at UH. The information is entered into a computer, which instantly matches a client to services and prints out a list of benefits for which the elder is eligible, along with directions for applying for those entitlements.

New Method Developed To Study Important Cellular Process

Scientists at Boston University School of Medicine (BUSM) have confirmed the process by which some molecules selectively enter the cell nucleus and have developed a simple *in vitro* system to study this process. This knowledge could eventually help scientists understand how to intervene in this process and thus prevent the replication of certain types of viruses, including the AIDS virus.

The regulated transport of specific molecules to and from the nucleus is an essential factor in all cellular processes. Recent studies have suggested that some molecules are equipped with specific nuclear location signals (NLS) that bind—with varying degrees of efficiency—to receptors that mediate their transport across the nuclear envelope (NE) into the nucleus. Questions still remain concerning whether each signal has a separate receptor, whether signals compete with varying degrees of efficiency for the same receptors, or whether both processes are in effect.

In the December issue of *The Proceedings of the National Academy of Science*, BUSM researchers confirmed an interaction between the NLS of one viral tumor-inducing protein and NE receptors. More importantly, they developed and proved the efficacy of a new system that uses immunofluorescence to visualize the binding process and identify the binding site. According to Norbert Riedel, Ph.D., an assistant professor of medicine at BUSM, the system—which is simple yet specific—will help scientists study the regulated exchange of materials between the two major cellular compartments. "This system will help us to test the number of different receptor signals and the number of receptors for which they are competing, and will help us determine whether similar or dissimilar mechanisms are involved."

Once the process is understood, researchers can search for ways to prevent nuclear uptake of and transformation by certain tumor-inducing proteins and can look for ways to interfere with the nuclear export and assembly of the AIDS virus genome.

(more)
Ancient Healing Practices May Be Relevant To Modern Medicine

Although medical practices have come a long way since the days of ancient Egypt, those early approaches to sickness may be relevant to modern medicine. In his new book, The Medical Skills of Ancient Egypt, J. Worth Estes, M.D., a professor of pharmacology at Boston University School of Medicine, examines ancient Egyptian therapies and suggests that the underlying reason for their long-lived success is the body's ability to heal itself.

Ancient Egyptian physicians did not offer their patients as much in the way of truly beneficial treatments as we can today. What they did provide, however, was an opportunity for normal healing to take place, says Estes. "Today, it is often assumed that all medical intervention is necessarily good. Judging from the past, that assumption may not be valid in all cases," he adds.

Although they lacked today's knowledge of how the body works in health and disease, ancient Egyptian physicians practiced a rational system of medicine based on observations made over many generations. It is probable that many of their treatments were "effective" simply because they permitted the body to heal of its own accord, says Estes.

"Unfortunately, today many people feel they haven't received adequate treatment unless they leave the doctor's office with a prescription," he continues. "When we realize that the ancient Egyptians knew that drugs and surgery are not always optimal approaches to healing, we can begin to balance a reliance on modern medicine with an understanding of our own healing capabilities."

Holiday News Briefs

• Holidays mean celebrating with family and friends, which often includes alcohol and, unfortunately, drinking and driving. While most people are well aware of the fatalities caused by drunk driving, what isn't well publicized is the number of serious injuries that result from these accidents. For instance, almost half of all spinal-cord injuries are caused by motor-vehicle accidents, and drinking is often a factor.

"Spinal-cord injuries occur most often on weekends or holidays," says Deborah Slater, M.S., the director of Occupational Therapy at the University Hospital's New England Regional Spinal Cord Injury Center. "During this time more people are drinking and driving and not using care."

• When traveling by car to visit friends and relatives over the upcoming holiday season, remember that obeying posted speed limits could save your life. According to Ralph Hingson, Sc.D., the chief of Social and Behavioral Sciences at Boston University School of Public Health, a greater proportion of fatal crashes in the state involve speeding (38 percent) than involve drunk driving (33 percent). "Speed has become a common factor in fatal accidents," says Hingson.

Hingson's study also has shown that more people are driving faster overall, and further, more people die speeding on local roads than on highways.