

'Lost Person Finder'

NLM Offers Technology to Locate Loved Ones During Disaster

When a natural disaster strikes, friends and family frantically search for information on the whereabouts and health of missing persons. The National Library of Medicine has come up with a tool to help in these situations.

NLM is a partner in the Bethesda Hospitals' Emergency Preparedness Partnership (BHEPP), a consortium of four medical institutions (NLM, Clinical Center, National Naval Medical Center and Suburban Hospital) created to improve response to man-made or natural disasters. The partnership conducts regular drills and, during a recent one, NLM engineers demonstrated a method of identifying casualties and a system to help relatives and friends obtain information about them.

Here's how the Lost Person Finder (LPF) works. A casualty is rushed to the hospital and triaged. A colored bracelet is placed on the person's wrist (colors indicating the seriousness of injury) and a staff member or volunteer takes a picture of the victim. That intake person also makes a report regarding the seriousness of injury. This information and the victim's photo is dispatched to a web site as well as to a notification wall display in the family reunification area of the hospital, so that visiting friends and family can instantly find out their loved ones' status.

"Hospital phone systems can be inundated with phone calls from loved ones during a disaster," noted Michael Gill, a Lister Hill Center staff engineer who helped implement the project. "Staff is already overwhelmed with patient care, so it makes sense to set up a system for easy identification."

From the drill it was a logical step to adapt the Lost Person Finder to international disasters such as the earthquake in Haiti.

Less than 3 weeks after that January catastrophe, NLM computer engineers had modified the LPF software to create a system that enabled the public to post photos of missing loved ones on an interactive, multilingual web site. With this modified version, a search could be conducted using all or a portion of the missing person's name and/or the person's presumed status (such as missing, found, injured and deceased). Loved ones could submit photos via an iPhone application or email them to a specific address at NLM.

For the earthquake in Haiti, most photos for the lost person wall were taken from the web sites of Google and CNN, organizations that had collected thousands of photos of persons lost during the quake. NLM computer scientists then created special search software.



"In the future, we'd like to improve the software so that searchers can find someone by physical characteristics such as hair and eye color, birthmarks and tattoos," said Dr. Glenn Pearson, a computer scientist working on the project. The software could also be configured to let users post photos directly to the Lost Person Finder web site rather than only using email.

"We hope that by effectively using digital technology, we can take some of the pain out of not knowing what's happened to a loved one during a disaster," said Dr. George Thoma, chief of the Communications Engineering Branch, which developed this system.

NLM Develops 'ReUnite' iPhone Application

NLM recently released the first version of ReUnite, an iPhone app in the Apple iTunes App Store. Apple honored the app in its "New and Noteworthy" iPhone Apps category. As a result, the software was downloaded by more than 1,000 users in the first week of its release.

ReUnite improves on the capabilities of the iPhone app Found in Haiti that was developed in response to the earthquake in Haiti in January. Both apps have been developed as part of ongoing research in NLM's Lost Person Finder project that seeks to improve post-disaster family reunification technologies.

ReUnite is primarily intended for medical aid and relief workers assisting in family reunification efforts after a disaster, but may also be used by the public to report missing and/or found people to the People Locator interactive Notification Wall (<http://pl.nlm.nih.gov>) offered by NLM.

Users of the app can choose to take a new photo of a found person seeking reunification using the iPhone's camera or use an existing image from their camera roll/library to report a missing person.