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Niigata University Champions Health GIS Development Program Emphasizes Collaborative Health GIS Training and Research with an International Scope

Niigata University School of Medicine, Japan, is taking an innovative approach to health and environmental education by integrating geographic information system (GIS) courses and research into its medicine, human health, and environmental programs. When the university started a long-term action plan to establish GIS education programs in its schools of Medicine and Science in 2005, the School of Medicine quickly established a technical laboratory,

began raising health GIS awareness locally and internationally, and introduced a model of public-private collaboration for health GIS programs. The activities added momentum to the Department of Public Health's five years of previous experience using GIS.

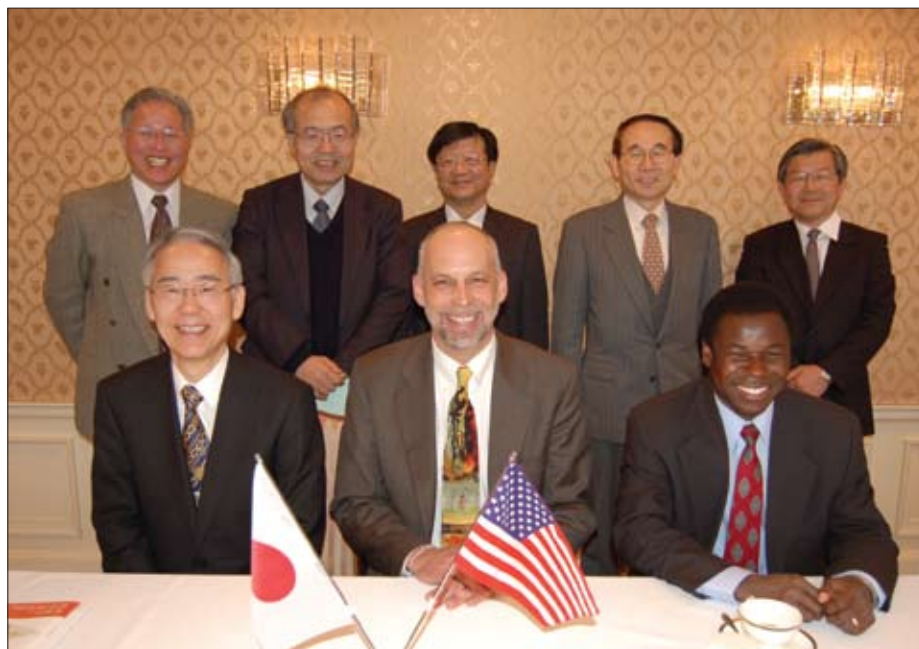
Located about 250 kilometers north of Tokyo in Niigata City, the university's School of Medicine offers advanced degrees in medicine and health sciences. Niigata University's

charter calls for an innovative approach to education that promotes excellence, interdisciplinary and public-private collaboration, and international involvement. The university's International Academic Support Office guides the development of these goals and provides support for GIS development in both schools.

As a first step, the university joined the Niigata GIS Association, an existing local GIS user group formed by representatives from several corporations to promote GIS literacy and data infrastructure development. (Niigata Prefecture received a 2008 ESRI Special Achievement in GIS Award for promoting GIS.)

To make it easy for all departments to acquire GIS technology, in 2006 the university purchased an ESRI ArcGIS site license with all extensions. An orientation seminar to introduce students to GIS and its practical applications was also launched. That same year, the School of Medicine hosted the First International Symposium on Applications of GIS in the Fields of Medicine and Public Health. The symposium sought to raise interdisciplinary, local government, and public awareness of GIS in the Niigata community. It also introduced a model for public-private collaboration in the use of GIS in health.

The following year, the university established two technical instruction centers, one for human health GIS and the other for environment and



Representatives from Niigata University and Loma Linda University (LLU) celebrate the signing of a memorandum of understanding for collaboration in health GIS education, research, and related fields. Front row, from left: Takefumi Gejyo, president, Niigata University; David Dyjack, dean, LLU School of Public Health; and Seth Wiafe, assistant professor, LLU School of Public Health. Back row (Niigata University representatives): Hiroshi Suzuki, director, Human Health GIS Center; Masakazu Sengoku, director in charge of research and international affairs; Akiyoshi Yamada, vice president in charge of research and international affairs; Makoto Uchiyama, dean, faculty of medicine; and Toru Tanaka, professor, International Exchange Support Center.