Identifying Emergent Public-health Events
(Cyber Infrastructure and Higher Ed)

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Sept 8, 2010

Higher Ed Impact on CI

- Universities and Colleges are incubators for creation, use and development of technology

- Innovations generated from research, education and outreach lead to economic development

- Research universities and industry are becoming more closely integrated for the R&D functions

Some NC State Activities

- NCB-Prepared – DHS Grant for Biosecurity
  - UNC Chapel Hill, NC State and SAS developing advanced analytic system
    - Improve situational awareness
    - Improve decision making
  - Connecting unique data sources in NC and developing use cases and scenarios
  - Providing value to owner (DPH, EMS, Hospitals) and cross datasets for all, including Dept. of Homeland Security

http://Ncb-prepared.org

Some NC State Activities (cont.)

- TUCASI – "TRUShare"
  - Duke, UNC Chapel Hill and NC State developing federated storage systems to share, archive and search for University generated content

- Virtual Computing Laboratory (VCL)
  - Infrastructure and Platform as a service, open source, dynamic provisioning system
  - Being adopted by many state university systems and universities throughout the world (Private Cloud)

- Google Apps for Education
  - Moved students, considering Faculty and Staff (Public Cloud)

Future Impact of CI on Higher Ed

- Transparent blending of local, private and public services – frees faculty, staff and students to focus on core activities

- Modular, Mashable, Accessible, Integrable data and services to allow creative & innovative ideas, new developments and educational activities

- Bandwidth, accessibility and computation are assumed available for most functions