

CURRICULUM VITAE

DAVID A. IBRAHIM, PhD

University of Illinois at Chicago
2121 W. Taylor Street (M/C 922)
Chicago, IL 60612
847-691-9453
dibrah1@uic.edu

EDUCATION

University of Illinois at Chicago School of Public Health, Doctor of Philosophy, 2009.

Program: Environmental & Occupational Health Informatics / Risk Management

University of Illinois at Chicago School of Public Health, Masters of Public Health, 2006.

Program: Environmental Health Data Management and Analysis

North Park University, Bachelor of Science in Biology, Minor in Chemistry, 2002.

Program: Biological Sciences, Chemistry

HONORS

Delta Omega Honor Society
Elected to Admissions & Recruitment Policies Committee
Elected to Honor Committee for School of Public Health

GRANTS / PARTNERSHIPS

Principal Investigator – Regional Catastrophic Planning Grant Program (\$1.5M), 2011. Sponsor: U.S. Department of Homeland Security Regional Catastrophic Preparedness Grant Program. David Ibrahim, Arkalgud Ramaprasad, Kevin Croke, Matthew Liotine. University of Illinois at Chicago.

Goal: Create a systematic framework that will facilitate communications and resource allocations between key Private and Public sector organizations during a catastrophic event.

Co-Principal Investigator – Building Resilience Against Climate Effects in Illinois (\$1M), 2012. Sponsor: U.S. Centers for Disease Control and Prevention National Center for Environmental Health. Samuel Dorevitch, Linda Forst, David Ibrahim, Bernard Turnock. University of Illinois at Chicago.

Goal: Develop strategies and programs to confront the health implications of climate change.

Business Emergency Operations Center (BEOC) Alliance, 2012. New Jersey Institute of Technology, New Jersey Business Force, and the Armament Research Development and Engineering Center.

Stephenson Disaster Management Institute a National Center for Security Research and Training, Louisiana State University 2012.

Virtual USA (vUSA) National Information Sharing; 2012.

University and Agency Partnership Initiative, Naval Postgraduate School Center for Homeland Defense and Security; 2009.

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COURSE & CURRICULUM DEVELOPMENT

HPA 407: Foundations of Emergency Management and Business Continuity Planning

This course provides the basics of disaster preparedness. The course takes the “All Hazards” approach, and is a study of natural disasters such as, earthquakes, hurricanes and tornados, as well as man-made incidents such as acts of terrorism, chemical spills or release, fire and explosions. The course focuses on the different aspects of potential hazards for each type of incident. These aspects include severity, risk of occurrence, methods of mitigation (risk reduction), and preparedness, response and recovery procedures.

HPA 466 / ENGR 494: Critical Infrastructure and Resource Protection

This course introduces students to analyses and tools to identify critical private and public sector infrastructure and optimal protection strategies. It focuses on infrastructure sectors such as water, power/energy, IT, chemical plant, transportation, health, financial, among others. The course develops and applies theory from network analysis, probability theory, vulnerability assessment, and risk analysis to show students how to develop mathematical models to evaluate, develop and improve operational infrastructure in these sectors, with the aim of eliminating faults, reducing risk and developing optimal protection and recovery features.

HPA 481: Development of Public Health Surveillance Information Systems

This course covers topics in public health related database design with an emphasis on the planning, design and implementation of databases related to public health surveillance. The development of public health related databases involves a design process that parallels the development of commercial databases: determining the problem the database will address, defining objectives of the database system, modeling and design of the system, implementing the system on a computer platform and evaluating the success of the system in meeting its objectives.

IDS 524: Strategic Emergency Management and Continuity Planning

This course introduces students to frameworks and methods for designing, developing, implementing and evaluating programs and plans for emergency management and business continuity operations in the public and private sectors. The course exposes students to techniques and processes to develop and evaluate operational plans designed to prevent and respond to critical events. The course integrates principles from various disciplines, including: emergency planning, business continuity, disaster recovery, risk analysis, reliability, systems engineering, strategic planning, technology planning, project management and operations management and others.

IDS 541: Disaster Response and Recovery Operations

This course is designed to provide the student with the requisite skills to create strategic emergency management plans with a hazard specific focus. This planning will develop a cohesive approach to emergency management that includes prepare, prevent, protect, respond and recover operational plans that will be integrated into a strategic planning concept. This strategic hazard specific plan will integrate the Planning Cycle as method to maintain a high-level of continual preparedness. This course will also integrate the knowledge acquired in developing functional operations planning to manage and coordinate complex natural, technological and political emergencies.

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PROFESSIONAL EXPERIENCE

University of Illinois at Chicago School of Public Health, 2010 - Present

Position: *Director of Curriculum–Emergency Management and Continuity Planning
Adjunct Assistant Professor–Environmental and Occupational Health*
Duties: - Course teaching; Curriculum design, development, and deployment

University of Illinois at Chicago Office of Facility and Space Planning, 2010 - Present

Position: *Campus Continuity of Operations Planning Specialist*
Duties: -Development of academic & business continuity plans for the University's three campuses and the University of Illinois Hospital and Health Science System
-Conduct Campus-Level risk and vulnerability/threat assessment
-Assess the operational, utility and physical risks to the Campus
-Identify and evaluate risk mitigation and risk reduction strategies
-Develop overall campus preparedness, response, resumption, and recovery strategies and plans
-Design and implement table-top and full scale functional exercises

JG Solutions, 2006 – 2011

Position: *Sr Consultant - Emergency Management & Business Continuity*
Duties: -Developed a fully online training and exercise program focusing on Continuity of Operations for **100+** hospitals, department of aviation, and public health departments for all-hazards preparedness and response
-Formulation of strategic and operational planning paradigms for Emergency Response and Disaster Recovery
-Developed HSEEP-compliant and Continuity of Operations tabletop and functional exercise programs for metropolitan health departments and hospitals
-Integrated public health processes, systems, plans, and personnel into an overall emergency response infrastructure
-Development of Continuity of Operations Planning Toolkit and Template for Chicago Health System Coalition for Preparedness and Response.

University of Illinois at Chicago School of Public Health, 2006 - 2010

Position: *Teaching Assistant
Research Assistant, Health Informatics and Risk Management*
Duties: -Provide instructional reinforcement to students in public health
-Coordinate and maintain online-based curriculum and spearhead discussion forums
-Database management for Continuity of Operations
-Performed statistical analyses
-Situational Awareness and Risk model development

Illinois Department of Public Health 2008 - 2009

Position: *Office of Preparedness and Response Hospital Preparedness Program Intern*
Duties: -Spearheaded feasibility study for implementing Syndromic Surveillance System (ESSENCE) in ten Illinois Bioterrorism RHCC/POD Hospitals
- Devised state-wide Motorola STARCOM 21 interoperable communications systems training infrastructure for Illinois ASPR participating hospitals, IDPH staff; and American Red Cross Blood Banks
-Collaborated with staff epidemiologist in the Division of Infectious Disease to assist Illinois hospitals in enrolling in CDC Influenza Sentinel Provider Network

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Chicago Department of Public Health, 2006 - 2007

Position: *Marketing Consultant – Preparedness & Response for Special Populations*

Duties:

- Identified, developed, coordinated, and provided an infrastructure to facilitate and ensure the timely dissemination and transfer of public health, emergency preparedness, and bioterrorism response information, to Chicago's special needs populations
- Provided a quality mitigation strategy that includes before and after strategies
- Utilized strategically effective marketing portals, to disseminate the appropriate information to the desired target market

U.S. Environmental Protection Agency, 2006

Position: *Geographic Information Systems Research Analyst - Intern*

Duties:

- Collected, maintained, and analyzed spatial datasets, applications, and Geographic Information Systems
- Developed and Implemented steps to improve performance & efficiency measures to assist decision-maker better manage environmental protection programs
- Advised citizens, industries and government agencies regarding availability and use of digital data and maps

Akzo Nobel Non-Stick Coatings, 2004-2005

Position: *Environmental Health Strategic Planning Specialist*

Duties:

- Database development for Emergency Operations Plans, Evacuation Plans, Material Safety and Technical Data for raw materials, chemicals, and polymers
- Successfully worked in conjunction with FDA, EPA, Canadian EPA, Toxic Substance Control Act, and DSL's
- Implemented S.W.O.T. Analysis & Strategic Planning to strengthen client/enterprise relations and improve mission services

GRADUATE TEACHING

Ibrahim, D. Instructor for Critical Infrastructure and Resource Protection course (HPA 466/ENGR 494), **University of Illinois at Chicago School of Public Health**, 2011 – 2012.

Ibrahim, D. Instructor for Foundations of Emergency Management and Business Continuity Planning course (HPA 407/ENGR 494), **University of Illinois at Chicago School of Public Health**, 2009 – 2012.

Ibrahim, D., Liotine Co-Instructor for Crisis Management and Communications Planning course (HPA 407/ENGR 494), **University of Illinois at Chicago School of Public Health**, 2012.

Ibrahim, D. Instructor for Principles of Environmental and Occupational Health Sciences course (EOHS 400), **University of Illinois at Chicago School of Public Health**, 2009 – 2012.

Ibrahim, D. Instructor for Integrative Project in Emergency Management course (HPA 497), **University of Illinois at Chicago School of Public Health**, 2010 – 2012.

Ibrahim, D. Instructor for Disaster Response and Recovery and Operations (IDS 541/ENGR494), **University of Illinois at Chicago School of Public Health**, 2010 – 2012.

Ibrahim, D. Instructor for Strategic Emergency Management and Continuity Planning (IDS 524), **University of Illinois at Chicago School of Public Health**, 2009 – 2011.

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Cailas, M., **Ibrahim, D.** Co-Instructor for the Environmental Risk Assessment and Management course (EOHS 572), **University of Illinois at Chicago School of Public Health**, Spring 2010.

Cailas, M., **Ibrahim, D.** Teaching Assistant for Internet-based Environmental Health Database Design course (EOHS 475), **University of Illinois at Chicago School of Public Health**, Fall 2009

Croke, K., **Ibrahim, D.** Teaching Assistant for the Internet-based Development of Public Health Surveillance Information Systems (HPA 481), **University of Illinois at Chicago School of Public Health**, Spring 2009.

Cailas, M., **Ibrahim, D.** Teaching Assistant for the Principles of Environmental and Occupational Health Sciences course (EOHS 400), **University of Illinois at Chicago School of Public Health**, 2006-2009

Forst, L., **Ibrahim, D.** Teaching Assistant for the Internet-based Principles of Environmental and Occupational Health Sciences course (EOHS 400), **University of Illinois at Chicago School of Public Health**, Fall 2008.

Cailas, M., Bing-Canar, J., and **Ibrahim, D.** Teaching Assistant for the Internet-based Principles of Environmental and Occupational Health Sciences course (EOHS 400), **University of Illinois at Chicago School of Public Health**, Spring 2008.

Cailas, M., Bing-Canar, J., and **Ibrahim, D.** Teaching Assistant for the Internet-based Principles of Environmental and Occupational Health Sciences course (EOHS 400), **University of Illinois at Chicago School of Public Health**, Spring 2007.

Cailas, M., Bing-Canar, J., and **Ibrahim, D.** Teaching Assistant for the Internet-based Principles of Environmental and Occupational Health Sciences course (EOHS 400), **University of Illinois at Chicago School of Public Health**, Spring 2006.

Croke, K., Cailas, M., and **Ibrahim, D.** Teaching Assistant for the Environmental Risk Assessment and Management course (EOHS 572), **University of Illinois at Chicago School of Public Health**, Fall 2006.

Cesarotti, D., Croke, K., and **Ibrahim, D.** Teaching Assistant for the Foundations of Emergency Management and Business Continuity Planning course (HPA 494), **University of Illinois at Chicago School of Public Health**, Fall 2006.

INVITED PRESENTATIONS / LECTURES

Ibrahim, D., Liotine, M. Regional Public-Private Interoperable Communications for Catastrophic Events Using a Cloud Computing Based Portal. **International Disaster Conference and Expo**, Spring 2013

Ibrahim, D., *Continuity Planning in Higher Education*. Information session on the importance of academic continuity planning and disaster recovery. **Kuali Days Conference**, Fall 2012

Ibrahim, D. Private Sector Integration Plan. **FEMA Regional Catastrophic Planning Whole Community Conference for IL-IN-WI**, Fall 2013

Ibrahim, D., *Public Health and Emergency Response*. Functional presentation and panelist on Public Health's role in emergency management and response. **University of Illinois at Chicago College of Nursing**, Spring 2012

Ibrahim, D., *Continuity Planning in Higher Education*. Functional presentation on a planning framework for continuity planning. **Kuali Foundation**, Fall 2011

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Ibrahim, D., *Designing a Continuity of Operations Plan for Public Health Agencies*, a one hour lecture in Environmental and Occupational Health Interdisciplinary Seminar for the Great Lakes Center for Occupational Environmental Safety and Health, **University of Illinois at Chicago School of Public Health**, Fall 2009

Ibrahim, D., *Syndromic Surveillance*, Customized Video-capture online lecture that incorporated individual slides. Development of Public Health Surveillance Information Systems (HPA 481), **University of Illinois at Chicago School of Public Health**, Spring 2009

Ibrahim, D., *Syndromic Surveillance: Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)*. A one hour feasibility study presentation to the 11 Illinois POD hospital coordinators, **Emergency Preparedness Summit, Oak Brook, IL.** July 2008

Ibrahim, D., *War and the Environment*, a two hour lecture in the Global Environmental and Occupational Health Sciences course (EOHS 553), **University of Illinois at Chicago School of Public Health**, Spring 2008

Ibrahim, D., *Geographical Epidemiology and the Applications of Geographical Information Systems*, a one hour lecture in the Occupational and Environmental Epidemiology course (EOHS 554), **University of Illinois at Chicago School of Public Health**, Spring 2008

Ibrahim, D., Catalin, B., Choudhry, S., *Bioterrorism Response and Emergency Preparedness Communication and Community Involvement*, a two hour lecture in the Biological, Chemical, Explosives, and Nuclear Weapons as Public Health Threats course (EOHS 408), **University of Illinois at Chicago School of Public Health**, Spring 2007

GRADUATE STUDENT CAPSTONE / INTEGRATIVE PROJECT ADVISING

Spring 2012

Role of the Burmese Military within the Newly Developing Civilian-led Government's Crisis Management Structure

Summer 2011

Personal Preparedness: Are Preparedness Campaigns Preparing Citizens?

The DuPage County Health Department Strategic National Stockpile Mass Dispensing Plan

Analysis of a Terrorist Attack in City of Chicago (Loop)

Summer 2010

The Dental Emergency Responder for Illinois: Developing the Role of Dental Health Professionals in Disaster Response

Multi-Unit Integration in Response to a School Terrorist Attack

Combined Aviation Response for Emergencies in the Chicago Metropolitan Area Bridging the Gaps among Current Plans and Preparation

Use of Traditional Emergency Management Planning in Cyber-disaster Management and Response

The Integration of Incident Response for Public and Private Sectors

Chicago Department of Public Health Critical Infrastructure Protection Plan

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PUBLICATIONS

Liotine M, **Ibrahim DA**, and Howe, J. “*Regional Public-Private Interoperable Communications for Catastrophic Events Using a Cloud Computing Based Portal.*” *Journal of Emergency Management.* Spring 2013.

Ibrahim DA, Cartado G. “White Paper: Introduction to Kuali Ready.” *Kuali Foundation.* 2012.

Ibrahim DA, Croke K, and Cailas MD. “Decision Support System Design for Continuity Assessment of Emergency Situational Awareness.” *Online Journal of Public Health Informatics* - Under preparation.

Ibrahim DA, Croke K, Cailas MD., and Mensah EK. “Relational database informatics management system for projecting the current state of the public health agencies environment during an emergency” *Journal of Homeland Security and Emergency Management.* - Under preparation.

Sambanis A, **Ibrahim, DA**. “The Use of SADA for Potentially Exposed Population Restrictive Zones”. - Under preparation for *Environmental Modeling & Software.*

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Decision Support System Design for Continuity Assessment of Emergency Situational Awareness, 2010.

(Pending) Public/Private Interoperable Communications Portal for Catastrophic Response

PROFESSIONAL AFFILIATIONS

American Society of Safety Engineers
American Public Health Association
Association of Contingency Planners
Business Resumption Planners Association
Center for Homeland Defense and Security
Kuali Foundation – Ready Functional Council
Society of American Military Engineers
Society for Risk Analysis

CERTIFICATIONS

Health Insurance Portability and Accountability Act Research
Health Resources and Services Administration Protecting Human Subjects
Homeland Security Exercise and Evaluation Program
Investigator Training in Human Subjects Protections

FACULTY ADVISOR FOR STUDENT ORGANIZATION

UIC Assyrian Student Organization