

UNIVERSITY SENATE

**UNIVERSITY AT ALBANY
STATE UNIVERSITY OF NEW YORK**

Introduced by: Graduate Academic Council
University Planning & Policy Council

Date: December 2005

**PROPOSAL TO ESTABLISH A GRADUATE CERTIFICATE PROGRAM IN
PUBLIC HEALTH SURVEILLANCE AND PREPAREDNESS**

IT IS HEREBY PROPOSED THAT THE FOLLOWING BE ADOPTED:

1. That the University Senate approve the attached "Proposal to Establish a Graduate Certificate Program in Public Health Surveillance and Preparedness" as approved by the Graduate Academic Council and University Planning & Policy Council.
2. That this proposal be forwarded to the President for approval.

November 4, 2005

Susan Herbst, PhD
Provost and Executive Vice President for Academic Affairs
University at Albany, SUNY

Dear Dr. Herbst:

The School of Public Health, in collaboration with the Center for Public Health Preparedness, proposes the introduction of a **Certificate in Public Health Surveillance and Preparedness (CPH-SP)**.

The proposed Certificate has been designed to attract local, regional and national public health workers interested in obtaining formal training in public health preparedness with a focus on bioterrorism and infectious disease. A major advantage of the Certificate will be the availability of most required courses through distance education as well as the traditional in-class modality. The School believes that providing such flexibility will increase the program's appeal to working professionals. The Certificate builds upon the School's goals to provide public health education to working professionals and to upgrade the skills of the public health workforce including the New York State Department of Health (DOH) and local health departments. Additionally, the Certificate program responds to the need for new ways to provide public health education. However, the Certificate's major attraction is its close association with the Center for Public Health Preparedness which will allow access to a rich database of training and educational resources for prospective students and faculty.

To complete the Certificate, a student must take 15 graduate course credits. These include 2 Master of Public Health (MPH) core courses (6 credits) that may be applied towards an MPH. Two of the CPH-SP courses will be offered in-class (SUNY-East Campus) and online through the SUNY Learning Network (SLN) (EPI 501 and EHT 590), one is only offered online (SPH 589 – Emergency Preparedness: The Public Health Perspective), and two are only offered in an in-class setting (EPI 605 and SPH 539 - Topics in Public Health Preparedness).

We were pleasantly surprised at the feedback from active public health professionals regarding the Certificate, and the demand expressed for such a degree. The fact that there is an increased need for a well-prepared public health workforce coupled with the very low number of public health professionals who have received any formal training in public health, makes the Certificate an attractive educational opportunity.

We hope that you would support the School of Public Health in its efforts to advance public health education through offering this unique educational opportunity to public health professionals.

Sincerely,

Peter J. Levin, Sc.D.
Dean

Cc: Jon Bartow, Assistant Dean for Graduate Studies

**STATE UNIVERSITY OF NEW YORK AT ALBANY
SCHOOL OF PUBLIC HEALTH**

CERTIFICATE IN PUBLIC HEALTH SURVEILLANCE AND PREPAREDNESS

PROPOSED STARTING DATE: FALL 2006

I. INTRODUCTION AND RATIONALE

The School of Public Health, in collaboration with the Center for Public Health Preparedness, at the State University of New York at Albany is proposing the introduction of a Certificate in Public Health Surveillance and Preparedness (CPH-SP). The proposed Certificate has been designed to attract local, regional and national public health workers interested in obtaining formal training in public health preparedness with a focus on bioterrorism and infectious disease preparedness. A major advantage of the Certificate will be the availability of most required courses through distance education as well as the traditional in-class modality. The School believes that providing such flexibility will increase the Certificate's appeal to working professionals. The Certificate builds upon one of the School's goals (to provide public health education to working professionals and to upgrade the skills of the public health workforce), and its unique relationship with the New York State Department of Health (DOH) and local health departments, and the emerging need for creative public health education modalities. However, the Certificate's major draw is its close association with the Center for Public Health Preparedness, which will allow access to a rich database of training and educational resources for prospective students and faculty.

Commitment to Professional Development

Since being founded in 1984, the School of Public Health at the University at Albany has been committed to developing and enhancing the skills and knowledge of public health professionals, as well as others interested in the field of public health. The commitment has been demonstrated by the School's continuous effort to create an academic setting that builds upon "real-world" experience and knowledge. This effort is reflected by the diverse background of the faculty and the School's partnerships with various state and private agencies that provide "natural labs" for students. The expertise and research interests of the School's more than 200 doctoral-level faculty cover a wide array of significant public health issues including HIV/AIDS, minority health, injury control, infectious and chronic disease prevention and control, environmental and occupational health sciences, and the politics and economics attendant on the fast-changing health care field.

The School of Public Health currently offers a Master of Public Health (MPH), which is considered a *terminal degree for the front-line public health worker*. Students enrolled in the MPH program are expected to choose one of six areas of concentration that include: behavioral science/community health, biomedical sciences, biostatistics, environmental health, epidemiology, or health administration. Students develop an area of concentration through taking several courses in that specific area in addition to the six required core courses. Other degrees offered by the School include the DrPH that is offered through the Office of Interdisciplinary Programs, as well as MS and PhD programs offered through individual departments (the PhD degree in Health Policy, Management and Behavior is in its final development phase).

The commitment to develop a competent local and regional public health workforce is also evident in the School's support of the Northeastern Regional Public Health Leadership Institute (NEPHLI) and the Center for Continuing Education. NEPHLI is a nationally recognized Institute that brings together state and local health departments, academia, public health associations and organizations committed to improving the skills of leaders in the field of public health. The Center for Continuing Education has been regionally recognized as a source of professional development activities for health professionals, community leaders, and the public of New York State and beyond.

Center for Public Health Preparedness

In recognition of that commitment to professional development, the School was designated by the Centers for Disease Control and Prevention (CDC) as a Center for Public Health Preparedness in September 2000. The Center is one of 40 such academic centers funded by the Centers for Disease Control and Prevention and has as its core mission the advancement of emergency preparedness in public health professionals and agency partners across New York State and the nation. The Center has successfully developed and provided training to thousands of public health professionals and their partners across the country (see Appendix).

Partnership with State and Local Health Agencies

The School of Public Health has a unique partnership with the NYS Department of Health (DOH) and Albany Medical College, as well as strong relationships with local health departments in New York and throughout the Northeast. Throughout the years, these partnerships have strengthened the School's educational mission by providing "natural labs" for students to test and implement the theoretical concepts learned in classes, as well as exposure to relevant research and practice experience.

An equally important benefit realized as a result of these partnerships is the access to highly qualified professionals who serve as faculty members in the various School departments. A memorandum of understanding between the Department of Health and UAlbany allows for the appointment of DOH employees as UAlbany (University) faculty with unqualified titles. Currently, DOH employees constitute more than 70% of the School's faculty and comprise the overwhelming majority in the Departments of Biomedical Sciences and Environmental Health Sciences (84 of 88 faculty members). Similarly, Memoranda of Understanding signed between the University and two prestigious local health institutions, Albany Medical College and Mary Imogene Bassett Hospital, allow for unqualified joint appointments at the School. Currently, a total of four unqualified faculty appointments at the Department of [Epidemiology and Biostatistics](#) are held by individuals whose primary appointments are in the above mentioned institutions.

Certificate Programs and Distance Education

The School's interest in pursuing the initiation of a Certificate in Public Health Surveillance and Preparedness is grounded in the field's need for such a program to develop the skills and knowledge of the workforce. In one of the most recent Institute of Medicine (IOM) reports titled "*Who Will Keep the Public Healthy: Educating Public Health Professionals for the 21st Century*", the authors acknowledge the central role schools of public health should play in the preparation of public health professionals. This role gains great importance given the significant proportion of public health workers who have no formal education in public health. The IOM report cites several studies conducted in various regions of the country that showed the need for formal training of the public health workforce¹. One of those studies, conducted by the CDC, estimated that "80 percent of public health workers lack basic training in public health." (CDC, 2001a)². The IOM report especially acknowledges the importance of public health certificates and

¹ IOM. 2003. *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*. Washington, DC: National Academy Press

distance education among other alternative methods in fulfilling that educational need for the public health workforce.

In response to the public health workforce's obvious need for formal education, many well-recognized schools of public health across the nation are starting to offer certificate programs. The list includes John Hopkins University, Emory University, the University of Michigan, the University of Minnesota and the University of North Carolina among others. Another trend in public health education, as is the case with other disciplines, is the use of distance learning, especially web-based learning. In recognition of logistic and access problems that hinder many working professionals from seeking formal education, an increasing number of courses are being offered via distance learning. This modality of delivery is becoming more popular with professionals who have to commute for a long distance to attend in-class courses and/or have time restrictions that would prevent them from attending classes. Web-based learning provides an opportunity for this pool of potential students to take courses and pursue degrees without the time and distance restrictions.

Potential Local and Regional Demand for the Public Health Certificate

National Data on Needs

Although recognized as an issue for several years, since September 11, 2001 and the subsequent anthrax events, public health and safety officials have become increasingly concerned regarding the nation's vulnerability to terrorist threats and emerging infectious diseases. These concerns have been magnified by recent natural disasters (e.g. Katrina) and emerging infectious disease outbreaks (e.g. SARS and Avian flu). The conceptual underpinning for developing public health preparedness is based on a number of national reports and guidance documents that followed the Presidential Directives of 1995 and 1996, including most recently *A National Public Health Strategy for Terrorism Preparedness and Response: 2003–2008* (March 2004). These publications pointed out the need for more preparation in order to successfully deal with these threats.

Reports by the General Accounting Office³ and the Rand Corporation's "Fifth Annual Report of the Gilmore Commission" (December, 2003), suggest that since September 11, 2001, the need for improvement in training related to bioterrorism has become widely accepted. A recent assessment of training needs in one state, carried out before and after 9/11, confirms this and lists specific training topics needed.⁴ This is also reflected in a national needs assessment of over 3,000 local health departments that showed that the perceived risk of a bioterrorism attack had increased dramatically, and that the most commonly reported barrier to receiving appropriate training was simply a lack of training opportunities.⁵

Only about 40% of the existing national public health work force has received formal training in epidemiology, critical for a satisfactory response to bioterrorism and disease surveillance.⁶ New York State and Vermont reflect national statistics, since fewer than half of public health professionals are formally trained for their positions in public health.⁷

State and Local Data on Needs for New York State and Vermont

² CDC. 2001a. A global lifelong learning system: Building a stronger frontline against health threats. In: *A global and National Implementation Plan for Public Health Workforce Development*.

³ "Bioterrorism: Public Health Responses to the Anthrax Incidents of 2001", GAO-04-152, October, 2003

⁴ *J Public Health Management Practice*, 2004; 10:290-298

⁵ *J Public Health Management Practice*, 2004; 10:282-289

⁶ "National Assessment of Epidemiologic Capacity: Findings and Recommendations", Council of State and Territorial Epidemiologists, March 2003. Washington, DC

⁷ Scutchfield and Keck, eds. *Principles of Public Health Practice*, Albany, NY: Delmar Publishers, 1997

Various studies completed at the state and local levels are consistent with national assessments of training needs. Local health department personnel in New York were surveyed in December 2003 (“Strengthening New York’s Public Health System for the 21st Century”, a Report to the Commissioner of Health from the New York State Public Health Council) and “...all reported substantial need for continuing education, particularly in areas related to emerging public health issues” (p. 46). Those surveyed also reported their access to training was severely constrained by limited resources, competing priorities and lack of dedicated time for training.

The University at Albany School of Public Health Center for Health Workforce Studies identified a great need for virtually all preparedness topics through a “Fax-Back Needs Assessment” of local health departments within NYS (2002). Respondents from 32 of the 57 counties of upstate NY reported. Results at that time indicated an urgent need to assist counties in establishing linkages to, and cooperative working arrangements with, a wide range of organizations and health professionals, and to foster such collaboration prior to a disaster. County public health personnel also requested training in biological, chemical and radiological preparedness for themselves, emergency personnel, physicians, hospital staff and other health providers. Much of what *the Center for Public Health Preparedness* has done, alone and in conjunction with our NYSDOH partners, has been targeted toward these basic concerns.

Data Collected by the UAlbany Center for Public Health Preparedness (2002-2004)

Surveys, program evaluations and focus groups have revealed preferred topics and methods of training for specific target groups. The Center regularly seeks input and data from our partner agencies, the New York State Department of Health (NYS DOH) and the New York State Association of County Health Officials (NYSACHO) on knowledge deficiencies and training needs. A web-based survey developed by the Center requested that local health department professionals identify priority topics related to terrorism about which they wanted further information and possibly formal training. Priority topics, not in ranked order, included: Infection Control/Quarantine/Isolation; Agroterrorism and Food Safety; Shelter & Mass Evacuation; Incident Command System; Zoonotic Disease; Decontamination and Personal Protective Equipment; Strategic National Stockpile; and, Radiological Weapons.

The Center’s *Communicable Disease/Bioterrorism Training Course* is a four-day program which has been offered twice to date. This course attracted an audience predominantly from local health departments, most of whom hold at least a Bachelor’s degree. Changes in knowledge were measured using 16 questions, three of which were changed between the two sessions. Data from the 13 common questions averaged 56.4% correct on pre-test and 72.3% on post-test. Post-test scores improved on all questions on average by 28% over the pre-test (range for individual questions: 3.3% to 289.5%). In general, greater improvement was observed on questions addressing specific technical knowledge as opposed to information about policies or best practices.

An e-mail needs assessment was sent to NYS County Public Health Commissioners and Directors, NYS DOH Regional Office Administrators, regional and county BT Coordinators, and participants in Center activities during the first year of operation. Preferred subjects overlapped strongly with and confirmed results of the survey mentioned above. Additional topics not already listed included: Public Health Response Team activities; details regarding BT agents; and integrated communication during crises. Many of these were addressed in Center broadcasts and training sessions during the first two years of programming. It is the expectation that new subject areas will be identified and programs providing greater depth than earlier introductory material will be offered during the proposed project period (based on the stated needs of our constituents).

Numerous meetings and teleconferences with Vermont partners clearly identified their need and preference for distance learning as a means of preparedness training. A formal needs assessment is now under development during the current project year that will better define needs both in terms of content area, deficiencies and preferred modalities for training delivery. Completion of the assessment is currently projected for September.

Although New York State is often perceived as an urban, highly technological and industrialized state,

largely due to the prominent role New York City plays in our society, geographically it is a predominantly rural state with the 4th largest rural population in the country.⁸ Agriculture remains the leading industry and 32,000 farms cover a quarter of the total land area of the state (*Farmland Information Library*, 1997). Vermont is similar to much of upstate NY in its geographical composition, largely agrarian in character, and climate. Therefore, promoting public health preparedness across upstate New York and Vermont poses similar challenges, such as difficulties in travel to training events during harsh northeastern winters. For this reason, the existing infrastructure developed by the UA SPH Continuing Education Office for delivery of distance learning programs to public health professionals all across the area provides an important foundation upon which the Center has already built many programs. Based on anecdotal information from our colleagues in Vermont, we anticipate that many specific issues of concern in upstate NY will also be identified in our needs assessment there, such as agro-terrorism and vulnerability along miles of rural roadways in sparsely populated areas proximal to the large, relatively open Canadian border.

Conclusion

The administration and faculty of the School of Public Health at SUNY Albany and the Center in Public Health Preparedness believe that offering a certificate in surveillance and preparedness, with courses being delivered in-class and online, will be attractive to a significant number of public health professionals. Three very encouraging indicators of the potential demand are 1) the number of attendees in Center-sponsored continuing education activities (Appendix A), 2) inquiries directed to faculty members by public health workers asking whether and when a certificate program will be offered, and 3) the success of existing distance learning courses in recruiting students to the School's programs. Also, the strong support expressed by the New York State Department of Health, local health departments and health care providers for the initiation of the Certificate is indicative of their perceived need for such a program.

It is worth noting that the only other accredited school of public health in New York State, Columbia University Mailman School of Public Health has initiated a certificate program in fall 2004. However, the certificate program offered by Columbia will be concentrated in global health and the contents will not overlap with the proposed School's certificate program that concentrates on public health surveillance and preparedness. In addition, Columbia's certificate courses will not be offered through distance education.

II. ADMISSION REQUIREMENTS

To be considered for admission into the Certificate in Public Health Surveillance and Preparedness, applicants must submit the following:

- Proof of a baccalaureate degree from academic institution(s) where degree was earned (an official English translation should be provided if the original is not in English).
- Official transcript(s) from academic institution(s) where degree was earned (an official English translation should be provided if the original transcripts are not in English).

⁸ "Rural and School Community Trust Report", 2000

- A letter of intent describing the applicant's background and his/her reasons for pursuing the Certificate.
- Evidence of proficiency in English for international applicants.
- A completed application and fee*

***All graduate applications at the University are processed through the Graduate Studies Admissions Office. For additional information on specific programs of study, you can contact the SPH directly.**

III. PLAN OF STUDY

The program requires the completion of 15 graduate course credits. These include 2 Master of Public Health (MPH) core courses (6 credits) that may be applied towards an MPH. Two of the CPH-SP courses will be offered in-class (SUNY-East Campus) and online through the SUNY Learning Network (SLN) (EPI 501 and EHT 590), one is only offered online (SPH 589 – Emergency Preparedness: The Public Health Perspective), and two are only offered in an in-class setting (EPI 605 and SPH 539 - Topics in Public Health Preparedness). The courses include:

- EPI 501 Principles and Methods of Epidemiology I (3 CREDITS)
- SPH 589 Emergency Preparedness: The Public Health Perspective (3 CREDITS)
- EPI 605 Infectious Disease Epidemiology (3 CREDITS)
- SPH 539 Topics in Public Health Preparedness (3 CREDITS)
- EHT 590 Introduction to Environmental Health (3 CREDITS)

To obtain the degree, each student must fulfill the following requirements:

- Maintain a cumulative grade point average of 3.0 or higher.
- File an application for Certificate completion within four years of admission.

Note: Course waivers can be obtained only through prior approval. There is a transfer credit limit of one course (3 credits).

Non-matriculated students can take a maximum of two Certificate courses before being admitted into the Certificate.

Students who are enrolled in a School degree program and would like to pursue the Certificate degree can do so if they fulfill the above-mentioned requirements for degree completion.

IV. RELATIONSHIP WITH DEGREE PROGRAMS

Students who have completed the CPH-SP and wish to apply these courses to a degree at the School must:

- Maintain a cumulative grade point average of 3.0 or higher while pursuing the Certificate
- Have completed the courses within five years of application to the degree program
- *Fulfill the admission requirements of the desired degree program*

V. CURRICULUM (5 courses; 15 credits)

All of the Certificate's five required courses are identified by the Master of Public Health (MPH) program at the School of Public Health. Students who earn the Certificate and are admitted to pursue an MPH can have two courses (EPI501 and EHT590) applied to the

core requirement of the MPH and the rest as elective courses or track-required (EPI605 for MS-EPI majors).

EPI 501 Principles and Methods of Epidemiology I (3 CREDITS)

Introduction to epidemiology for students majoring in any aspect of public health; covers the principles and methods of epidemiologic investigation including describing the patterns of illness in populations and research designs for investigating the etiology of disease. Introduces quantitative measures to determine risk, association and procedures for standardization of rates. *Prerequisites: None; Instructors: Louise-Ann McNutt and Erin Bell.*

SPH 589 Emergency Preparedness: The Public Health Perspective (3 CREDITS)

This course introduces public health workers to public health role in emergency response in a range of potential or possible emergencies and to recognize unusual events that might indicate an emergency and describe appropriate action. A minor focus is the chain of command in emergency response. Several activities are designed to help the learner identify personal limits of knowledge and direct the learner to useful resources when these limits have been exceeded *Prerequisites: Permission of instructor; Instructors: Robert Westphal*

EPI 605 Infectious Disease Epidemiology (3 CREDITS)

This course reviews infectious disease principles and the use of epidemiologic methods in the assessment of selected communicable diseases of national and international importance. Emphasis will also be given to methods of transmission, the role of surveillance, and methods of control and prevention. Specific disease examples to be covered will include: tuberculosis, legionellosis, measles, Lyme disease, and syphilis with examples of nosocomial, foodborne, and enteric infections. Case studies and literature examples will be used extensively to give students an appreciation for the application of epidemiologic principles to this field. *Prerequisites: None, but previous courses in biology and introductory epidemiology would be useful; Instructors: Dale Morse*

SPH539 Topics in Public Health Preparedness (3 CREDITS)

This course provides a rich overview on a variety of public health topics with a focus on skill and knowledge building in the areas of bioterrorism and infectious disease preparedness. Prospective students will benefit from the expertise of recognized researchers/practitioners in different fields. The course emphasizes the real-life applicability of acquired skills and knowledge through the design of course sessions (lecture and discussion) and required course activities. *Prerequisites: None; Instructors: Peter Levin and Shadi Saleh*

EHT 590 Introduction to Environmental Health (3 CREDITS)

Basic concepts of the modes of transmission of environmental stressors from source or reservoir to host and methods of reducing their impact on human population; basic concepts, methods and premises of environmental risk management. *Prerequisite: College level biology course or permission of instructor. Instructor: David Carpenter (in-class and online)*

VI. PROSPECTIVE STUDENTS

The Certificate is designed to primarily attract public health professionals. As mentioned above, a significant portion of that population lacks formal public health training. The availability of a Certificate will provide them the opportunity to enhance their knowledge and skill base, especially in the area of public health surveillance and preparedness. Also, being able to complete part of the Certificate via distance learning will be of great value to working professionals whose interest in continuing education can be hindered by logistic barriers, such as time and distance.

The School anticipates that the primary audience will be local and regional public health professionals. This is based on the strong relationship between the School and various governmental and private agencies throughout the State and region that have expressed support for the Certificate. Also, the two School-based regional public health training centers, CEC and NEPHLI, will play an important role in communicating the existence of the Certificate program to their constituents.

It is expected that the first few years of offering the Certificate will witness a moderate level of student enrollment (3-5 students). However, the School foresees an increase in enrollment (5-10 students) as more public health agencies and professionals are aware of the existence of the Certificate program.

VII. FACULTY PROFILES

Required courses for the completion of the Certificate will be taught by a number of faculty members. These courses are offered at the School and as mentioned above are core courses for the MPH and other School degrees.

Erin Bell, PhD: Assistant Professor in the Department of Epidemiology at the School of Public Health. She received her Ph.D. in Epidemiology from the University of North Carolina at Chapel Hill and completed a Postdoctoral Fellowship in the Occupational and Environmental Epidemiology Branch of the National Cancer Institute. Dr. Bell's research interests include examining the association of occupational and environmental exposures with cancer and adverse reproductive outcomes, such as birth defects. Dr. Bell's courses include EPI 501 (principles and methods of epidemiology), EPI 604 (cancer epidemiology), EPI 613 (occupational and environmental epidemiology) and EPI 697 (advanced methods in occupational and environmental epidemiology).

David Carpenter, MD: Professor of Environmental Health and Toxicology in the School of Public Health at SUNY-Albany, and Director of the Institute for Health and the Environment at the UA. Dr. Carpenter also has appointments as Professor in the Department of Biomedical Sciences (SPH), and Adjunct Professor in the Department of Biological Sciences (SPH) and is a member of the faculty in the UA interdisciplinary program in public policy. His teaching responsibilities include EHT 590 (introduction to environmental health), and participate in EHT 540 (principles of radiation sciences) plus several neurosciences courses in BMS and at Albany Medical Center.

Peter Levin, ScD MPH: Dean of the School of Public Health, University at Albany (UA SPH). He is actively involved in the Center's operations and plays an important role in coordinating with the senior management of the NYS Department of Health. Dr. Levin has served in a variety of leadership roles in health care management, policy and public health education. Most recently, he was Health Policy Counsel to Senator Connie Mack and was founding Dean of the College of Public Health, University of South Florida. He was director of two teaching hospitals (Einstein, NYC and Stanford, CA), and Associate Commissioner of Health in New York City.

Louise-Ann McNutt, PhD: Associate Professor of Epidemiology in the School of Public Health. Her research interests include infectious disease epidemiology, violence epidemiology, and the use quantitative methods. Dr. McNutt's co-teaches EPI 501 (with Erin Bell).

Shadi Saleh, PhD MPH: Assistant Professor in the Department of Health Policy, Management, and Behavior and Coordinator of the Certificate in Public Health Fundamentals and Principles at the School of Public Health. Dr. Saleh holds an MPH degree with a concentration in health services administration. He

earned his doctorate in health policy and management from the University of Iowa. His research interests include the organization, delivery and financing of prescription drug benefits, as well as evaluating the effect of managed care on health care providers. Dr. Saleh's teaching responsibilities include the online HPM 500 (healthcare delivery, organization and financing) and HPM 550 (financial management of healthcare institutions).

Robert Westphal, MD MPH: Dr. Westphal attended public schools in Ohio and Maryland, spent four years in the U.S. Navy and graduated from the University of Wisconsin in Madison. He received his MD from (then) Western Reserve University, is ABIM-certified in Internal Medicine and Hematology and spent 25 years at the University of Vermont as a member of the Department of Medicine (Hematology) and the Medical Director/Director of the VT-NH Red Cross Blood Services region. His interests in transfusion medicine, hematology and infectious diseases led him to a World Health Organization (WHO) Technical Advisory Committee membership followed by 3 years as a Medical Officer in the Blood Programme of the International Federation of Red Cross and Red Crescent Societies (IFRC) in Geneva, Switzerland. Working with WHO colleagues in the Global Blood Safety Initiative, Dr. Westphal spent three years with IFRC co-workers working to improve blood transfusion practice in less-developed countries around the world.

After returning to the U.S., he has continued some work with the American Red Cross, obtained an M.P.H., and served as the Coordinator for Bioterrorism Preparedness and Response Planning for the NY State Dep't. of Health from January 2000 to January 2002. He is the author of more than 30 articles and book chapters and has given numerous national and international presentations. Currently, he is a Clinical Associate Professor in the Department of Epidemiology at the School of Public Health, University at Albany, and the Director of the School's CDC-funded Center for Public Health Preparedness.

VIII. RESOURCES AND SUPPORT

The School of Public Health brings together an unusually impressive array of educational, scientific and policy-related resources. Students will find some of the most sophisticated, state-of-the-art laboratory equipment available anywhere in the world. In addition, the University and the Health Department offer advanced mainframe and personal computing facilities. Several excellent libraries are available with extensive information retrieval services. Students also have ready access to a number of unique databases that open many lines of epidemiological, statistical and policy-oriented research.

- ***Extensive Computing Facilities:***

Because of the unique structure of the SPH, students and faculty have access to state-of-the-art computing facilities in two settings: the University and the Department of Health. For further info on computing resources, please visit the School's website.

- ***Laboratory Facilities:***

The vast Health Department laboratories are the setting of two of the School's departments, Biomedical Sciences and [Environmental Health Sciences](#). Housed in 500,000 square feet of space at the modern Empire State Plaza, the [Wadsworth Center for Laboratories and Research](#) is the third largest public health research facility in the U.S. after the National Institutes of Health and the Centers for

Disease Control. The doctoral level researchers at Wadsworth have a long tradition of excellence in basic public health research.

In addition to the Wadsworth facility, the Health Department's new 125,000 square foot David Axelrod Institute, located on New Scotland Ave., is devoted to infectious diseases research.

- ***Library Resources:***

The extensive library collections of the University at Albany and the Health Department are available to students, as are the resources of Albany Medical College, the New York State Library and the libraries of the member institutions in the Capital District Library Council. By a cooperative arrangement, faculty and students may visit many of these libraries and borrow materials directly from them. Increasingly, each of the libraries is moving toward an electronic format that will speed up the search and retrieval of information.

The [University libraries](#) have holdings of 1.9 million volumes and over 5,000 periodical subscriptions. As a member of the Association of Research Libraries, the University library can supply materials in a variety of media from any major scholarly library in the country. The [Governor Thomas E. Dewey Graduate Library of Public Affairs and Policy](#), part of the University Libraries which supports Rockefeller College's programs, has 130,000 volumes in specialized holdings pertinent to public policy research.

The Health Department's [Dickerman Library](#), housed in the Wadsworth Center, is an up-to-date reference and information center specifically geared to the biomedical and public health sciences. The library houses 1100 journals as well as 50,000 books, monographs and technical reports dealing with biomedical and public health subjects. Medical librarians provide reference assistance during the normal work day, and a special 24-hour access is available for students in the School. Traditional reference services as well as computerized databases searching from a variety of systems are available. The [Schaffer Library at Albany Medical College](#) contains about 130,000 volumes, 3,000 multimedia programs and receives about 1,000 medical journals on a regular basis. Its on-line catalog is the computerized database of the monographic collections of the Albany Medical Center, Capital District Psychiatric Center Branch and the Albany College of Pharmacy libraries.

- ***New Financial and Human Resources:***

Offering the Certificate will require some additional human and financial resources on the behalf of the School and the Center.

The courses included in the Certificate are existing courses that are required for the completion for the MPH degree or are offered as electives in the School. However, developing the online versions of these courses would either require the developer (a School faculty member) to get a one-time course buy-out or some form of financial compensation (hiring a graduate teaching assistant for a year to help with the online version development). The financial resources needed for the

development of courses will be supplied by the Center for Public Health Preparedness based in the School.

The coordinator of the Certificate will be a SPH faculty member who will be granted a one course buy-out per year. Communication and recruitment efforts will be conducted by the Assistant Dean for Student Affairs who is currently responsible for School-wide recruitment.

IX. EVALUATION

Effort will be made to evaluate the certificate on a continuous basis. This will include activities such as conducting follow-up surveys of graduates to examine their satisfaction with the program, areas that can be improved and the role getting the certificate played in advancing their career. In addition, certificate courses will be continuously evaluated to make sure their objectives align with the overall objectives and goals of the certificate.

APPENDIX A: SAMPLE OF ACTIVITIES CONDUCTED BY CENTER FOR PUBLIC HEALTH PREPAREDNESS



SCHOOL OF PUBLIC HEALTH

UNIVERSITY AT ALBANY State University of New York

CENTER FOR PUBLIC HEALTH PREPAREDNESS

Programs to date and in progress:

- Monthly satellite broadcast series on preparedness topics reach over 2,300 viewers each month across 50 states and Puerto Rico. Programs are also viewed by countless others via videotape and web streaming files. Recent popular topics include: *Learning from & Preparing for SARS*; *The NYS Public Health Laboratory & National Security*; *Assessing Chemical Exposure*; *Terrorism Planning Through the Eyes of the Public*; and *Mass Casualty Incident Management*. Programs are aired and open to the public at the School of Public Health and available to any external site through downlinking. Visit our website to view prior programs: <http://www.ualbanycphp.org/calendar.htm>.
- Since its June 2004 launching, over 6,400 individuals from 50 states and international locations have registered for the six-module, interactive, on-line course: *Terrorism, Preparedness, and Public Health: An Introduction*. For further details about the course and/or to register, visit: http://www.ualbanycphp.org/learning/registration/detail_Terrorism.cfm.
- Two new modules are currently under development to compliment the online course:
 - 1) Preparedness & Community Response to Influenza Pandemics; and
 - 2) Introduction to Epidemiology
- Faculty from the Center and School of Education developed an online graduate level course to train educators and public health professionals to manage disasters in schools. 20 students enrolled for the first offering of the course this past spring and it will be offered again next spring semester 2006. For more details: <http://www.ualbanycphp.org/newsarchive.htm#news102804>
- Over 120 people attended the recent "GIS and Public Health Day, cosponsored by the CPHP and the UAlbany Prevention Research Center. The conference provided participants with an overview of Geographic Information Systems and its potential applications to Public Health.
- The Center has also provided training, academic coursework and general assistance to local public health professionals on a variety of preparedness topics for which training materials, CDs and/or videotapes are available by request: cphp@uamail.albany.edu:
 - o *Chemical & Radiological Awareness Training*
 - o *Communicable Disease/Bioterrorism*
 - o *Disease Forecasting with Geographic Information Systems: West Nile Virus*
 - o *Infectious Disease Epidemiology: Zoonotic Diseases*
 - o *Technical Assistance provision to local health departments related to drills and exercises*

