

**KAMPALA INTERNATIONAL UNIVERSITY**

TITLE:

**RELEVANCE OF FOREIGN PARTNERSHIPS WITH  
UNIVERSITIES TO INTEGRATION OF HEALTH STUDIES IN  
KENYA SCHOOLS**

65%

CASE STUDY:

**YALE UNIVERSITY AND UNIVERSITY OF PITTSBURGH  
LINKS WITH KAAGA PRIMARY SCHOOL**

BY

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A RESEARCH REPORT SUBMITTED TO THE FACULTY OF BUSINESS  
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**APRIL 2009**

APRIL 2009

DECLARATION

I, NDABA JANE WANGARI, BED 13340/61/DF

do declare that the information given in this research report is made by myself and has never been presented by any other person, for the award of the degree of Bachelor of Education

Signature:  .....

Date: 14-04-09 .....

**APPROVAL**

This is to certify that NDABA JANE WANGARI, BED- 13340/61/DF  
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Signed: ..... *Rev Erich Kasirye* .....

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DATE ..... *14.04.2009.* .....

## DEDICATION

To my beloved husband, Wilson Githae and Children-Beth, Duncan and Emily.

## ACKNOWLEDGEMENT

I would like to thank the good Lord for giving me strength and courage to compile this research report because without Him I would not be able to accomplish anything.

Special thanks go to my supervisor, Rev. Erich Kasirye who was a good mentor and advisor during the compilation of this work. To my family members and staff members of Kagaa Primary School.

May the Good Lord reward you abundantly.

## Foreword

Claude Earl Fox, MD, MPH  
Acting Administrator, Health Resources and Services Administration-Government of Kenya

Programs administered by the Health Resources and Services Administration (HRSA) are designed to improve the health of the nation by assuring quality health care is available to underserved and vulnerable populations and promoting health professions education and practice. Through its health service and education programs, HRSA provides for national maternal and child health needs, works with communities to develop HIV/AIDS services, assures the provision of essential health services through its national network of community/migrant health centers and the National Health Service Corps, monitors the supply and quality of health professionals, and administers special initiatives concerning education of the health workforce.

Essential to the HRSA mission is the two-part goal of preparing an adequate supply of professionals to meet the health care needs of the nation and ensuring these health professionals are prepared to meet the challenges and demands placed upon them. The Bureau of Health Professions (BHP) is responsible for this goal, a component of which is the education and training of the public health workforce. BHP accomplishes this mission through work with schools of public health, preventive medicine residency programs, dental public health residency programs, health administration programs, and through their representation of these professionals within the Federal government.

Following publication of the 1988 report, *The Future of Public Health*, developed by the Institute of Medicine, BHP has supported a number of grant and contract initiatives to strengthen linkages between academia and public health practice; enhance the training and education of the public health professionals, preventive medicine physicians, public health dentists, and environmental health and protection personnel; ensure the continuum of leadership development in public health; and build a reliable public health intelligence-gathering capability. In an age where managed care organizations are increasing, BHP also is working with managed care providers to define the fundamental role preventive medicine and population-based sciences play in the delivery of effective managed care.

The Public Health Special Project Grants Program, administered by the Public Health and Dental Education Branch in BHP, supports projects which develop academic and community partnerships to provide urgently needed education to the current public health workforce as well as practical education experiences for students and faculty. Community partnerships include formal relationships with State and local health agencies, managed care organizations, hospitals, local boards of health, public school systems, community-based organizations, professional associations and private industry.

For the past three years, the BHP's Public Health and Dental Education Branch has contracted with the Association of Schools of Public Health (ASPH) to plan and conduct an annual meeting of the Council of Public Health Practice Coordinators. These meetings have been successful arenas for discussion of successes, problems and the future needs for increased academic/public health practice linkages and partnerships.

For each of the past four years, the BHP's Public Health and Dental Education Branch has provided small contracts to each accredited school of public health to support and encourage academic outreach activities to the community. The information for this report was prepared from progress reports submitted by schools of public health in response to the request to describe activities each school has initiated to increase their public health practice activities. With FY 1996 funding, the schools of public health were requested to develop two initiatives. One initiative would concern a linkage between the school of public health, a local public school and a community-based environmental health program. The second initiative would concern a new linkage between the school and a managed care organization.

I want to thank Ms. Jane Ndaba for this research which provides examples of the links between schools of public health and communities of Kenya made possible by the partnership between HRSA and ASPH. It is a partnership enabling both entities to achieve their shared missions of bridging the gap between academia and public health practice, thus ensuring a public health workforce prepared to meet future public health challenges. The public's health depends upon sound working relationships between academicians, practitioners, public health agencies, students and communities. HRSA is very proud of its collaboration with ASPH and supports the endeavors represented within this document and those relationships yet to be created.

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## ACRONYMS USED IN THIS REPORT

**HRSA** - Health Resources and Services Administration, a federal agency  
**CDC** - The Centers for Disease Control and Prevention  
**DOH** - a term used in this report to refer to an unspecified health department  
**SPH** - a school of public health  
**CBO** - community-based organization  
**MPH** - master of public health, a professional graduate degree  
**Forum** - the Public Health Faculty/Agency Forum, a group supporting practice linkages in schools  
**IOM** - Institute of Medicine  
**CEPH** - Council on Education for Public Health, the accrediting agency for schools of public health

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**THIS DOCUMENT WAS PREPARED BY  
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# EXECUTIVE SUMMARY

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“A compilation of the number of hours spent in the practice setting or the number of requests made of the school and its faculty [cannot] adequately demonstrate the value of the exchanges that take place between the schools and the practice community. The stories that surround these activities are more informing.”

- *University of Pittsburgh  
final report*

The release in 1988 of a report by the Institute of Medicine entitled The Future of Public Health effectively shook the foundations of academic public health. Faculty, criticized for being “isolated from public health practice,” and “unresponsive” to the training and education needs of public health professionals, began looking over their research agenda, reviewing their curriculum, and wondering what could, and should, be done. Similarly, the call for health care reform and the increasing evidence of an eroding public health infrastructure raised new questions in the practicing community, as federal agencies such as the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC), and state and local health departments came to grips with the changing face of public health.

Because much of the research in schools of public health is conducted on a grant and contracted fund basis from the federal government and private foundations, typically schools could find funding to support research in basic science, but had greater difficulty in funding applied research in community settings. (In comparison with other health professional colleges, however, schools of public health have long been involved in these areas.) Schools were therefore tied to research funded from sources other than the ones that most needed it - state and local health agencies. And yet, schools do not (and *should* not) want to be in the position of assuming a strictly “service” function, captive to state agency needs and losing their posture of independence as a research entity. Many schools are, first and foremost, research institutions, and theoretical research in itself also fills a vital public health function that few other institutions can address. Complicating this was the fact that school policies, built on the science research model, did not necessarily recognize other areas of effort as worthy of merit.

Clearly, something needed to be done to accommodate the research priorities of academia, the need for a well-trained public health workforce and a public health practice infrastructure that could support a vigorous public health agenda.

Crystallizing the problem in the IOM report gave both the government and the universities a starting place. Further research, as published in the Public Health Faculty/Agency Forum report, Linking Graduate Education and Practice, the PEW Health Professions Commission report and elsewhere, indicated there was much work ahead.

At the federal level, the Public Health Service, with its extensive research and practice arms - the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC) - was in a good position to foster change. Large- and small-scale funding of research programs, leadership training centers, practice initiatives and, most importantly, the development with ASPH of a system of

Public Health Practice Coordinators in each school of public health, has reached deep into the walls of academia and effected real change. Likewise, foundation support and other ASPH-related projects have infused schools with greater ability to make major contributions to the effective practice of public health.

Additionally, individual schools began planning faculty retreats, school-wide strategic planning sessions, self-study reports and other activities to review their own policies, research agenda, and preparedness of students to face the public health practice workforce. Steadily, "goals" and "objectives" of public health practice activities went from being items on policy and planning reports to becoming effective instruments in changing academic attitudes toward practice activities.

One area of concern among academics who are involved in bringing schools of public health and practice agencies together, has been to establish a working definition of exactly what academic public health practice encompasses. Such a definition would need to be sufficiently broad to cover all the areas in which agencies and schools can work together, and yet be founded on a clear understanding of what each party can do for the other. For the purposes of this document, "practice" activities are teaching, learning and research which respond to specific public health problems or the delivery of public health through federal, state, local, clinical and community organizations.

This report is a summary of some of the linkage, capacity building and student practice experience activities undertaken by schools of public health between 1989 and 1995. From this summary, a glimpse of some of the creative and meaningful ways in which schools and public health agencies are working together can be gleaned. The information for this document was culled from reports submitted by 26 schools of public health in response to a purchase order 'minigrant' from HRSA to detail what each school has done to increase its practice activities. These reports, read together, give a picture of the broad range of practice activities, of the problems and successes universities face in increasing their practice agendas, and of the status of practice experiences in schools of public health.

"It is important for schools of public health to *reinvent* their practice mission and make it relevant to the public health needs of the 1990's and beyond. This renewed interest in practice may change the public health system as we know it."

*-from University of Illinois at Chicago, background report*

Clearly, much has been accomplished. *Schools of public health have had practice activities in nearly every state in the country, and on all continents of the world.* Every school, without exception, has mechanisms in place for providing students a learning experience based not just on solid, theoretical foundations of the core disciplines of public health, but also on the problems of the *real world*, problems they will then be better equipped to handle when they leave academia to work as public health practitioners.

Schools of public health have served as a resource to the world. Forty-three countries, spanning every continent, were recipients of consulting services, research projects, and student placements during the time of these reports. Collaborative studies in human genetics through the **University of Pittsburgh** alone are underway on all continents except Antarctica. Schools such as the **University of Hawaii, UCLA, San Diego State** and the **University of Puerto Rico** engage in projects that served communities in neighboring countries. Additionally, students from other countries often come to these and other schools for training, and return home to provide (among other things) an alumni "resource" for establishing further relations.

A 1993 revision to the CEPH accreditation requirements for schools of public health has concretely institutionalized this involvement with public health practice organizations. Provisions to the new accreditation guidelines require schools to: a.) specify a practice experience as an important component of the curricula; b.) emphasize the need for community-based, applied research undertaken in collaboration with health agencies; c.) pursue service activities; d.) provide continuing education; e.) integrate the perspectives of public health practitioners into teaching; and, f.) involve various constituents, including the public health community, in evaluating the school's progress toward relevant practice activities. Such an ambitious agenda clearly shows that schools need to be ready to open their doors to new ideas, and to meeting the challenge of providing public health

*"Academic review of the relationship of a school of public health to the community, and its role in providing leadership for public health development and advancement. Improvements in public health practice, preventive health, and community health and well-being will require an increased emphasis on domestic public health policy development and closer ties with constituencies within the community, in both the public and private sectors. It follows that the scholarship base required to effectively contribute to improvements in the practice of public health will be multidisciplinary, multisector and applied in character."*

education that is relevant to the real world. Further, it is an endorsement that schools have made great strides already, and are posed to meet these challenges.

Every school of public health in the country has already begun some form of internal review in response to past criticisms and the changing accreditation requirements.

In case after case, schools have reviewed their entire curricula, adding input from adjunct and clinical faculty practitioners to make their courses more relevant, adding courses to introduce topical public health practice issues, and changing MPH degree requirements to include the option of a more practical focus. Schools have added faculty tracks to bring practitioners into academia, and have allowed faculty pathways to increase their practice activities without compromising their promotion and tenure possibilities.

Schools of public health are increasingly supporting research centers and clinical programs with interdisciplinary teams of scientists, which are changing the face of public health delivery. *In many cases where others have failed to extend health care to minorities, rural residents and others underrepresented in the health care system, schools of public health have joined with medical schools to open clinics and, in some cases, entire health systems.* While delivering care to individuals, these institutions also offer the research bases necessary to train future public health workers and to conduct studies to advance the field of learning and solve tomorrow's problems.

This report was written in part because of the present imperative for the public to understand the scope and importance of public health in light of the changes being made in health care delivery and in the defining roles of government. It is important for the public to see the academic community as not just serving the needs of an isolated group of academic elite. Example after example shows instances where schools are working in the community, sometimes in research centers or clinics, sometimes guiding and supporting public health agencies in their efforts to prevent disease and promote public health. Whatever the need, they are, to a greater extent than ever before, involved.

*Just as clearly, much work remains.* Putting mechanisms in place to address a need is only one step toward meeting that need. Making education relevant to the real world, channeling the resources of the best minds in academia to solve problems of public health delivery and the challenges of building a solid public health infrastructure - these are monumental tasks and should not be faced with quick or easy answers. It is hoped that, through understanding what other schools have done and will be doing, through sharing experiences and learning from mistakes, this document will stimulate discussion among schools, the federal government and public health practitioners on how to work together to continue to build a solid, viable public health system that will serve the public well in the next century.

## BACKGROUND ON THE PUBLIC HEALTH PRACTICE COORDINATOR REPORTS

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Public health practice activities among schools of public health have been occurring for decades, but were largely the result of the interests and efforts by a single faculty member or public health agency professional. Few mechanisms existed to coordinate, document and support such activities on an ongoing basis.

A major effort to address this shortcoming occurred in 1992, when the Association of Schools of Public Health established the Council of Public Health Practice Coordinators. Deans from each of the (at the time) 27 schools of public health appointed a Public Health Practice Coordinator at their schools to coordinate practice activities. (A current list of practice coordinators is available at the end of this document as a reference.) Typically, the coordinator was a faculty member with practice experience and interest, or a dean in the school. Coordinators had a huge task, since "practice activities" within a school could encompass research and technical assistance, continuing education, curriculum and faculty appointment review, and student internship placement. Some schools had mechanisms in place to address these areas, others were decentralized within each department of the school, or not available at all.

In an effort to assess the scope of practice activities among schools, and to establish a baseline against which to measure progress, HRSA began a program of small contracts to each practice coordinator to enable them to catalogue and describe their schools' activities related to practice. Under this program, each school was asked to submit a **background report** detailing their practice activities from 1989 until the institution of the practice coordinator function in 1992, and a **final report** describing activities from 1992-94 (some schools completed their reports through 1995.)

The reports were to include measurable educational accomplishments and outcomes of practica and other field practice experiences, to describe activities the school has undertaken in medically underserved areas, to address the barriers the schools have faced in establishing capacity-building relationships, and to include relevant information on relationships established with undergraduate and non-public health graduate programs in their own and other universities and government agencies.

These reports often followed a fairly open-ended format, appropriate to the differences between schools and the wide range of types of practice activities. Indeed, each of the 26 schools which prepared reports not only listed their activities differently, but also differed in their interpretation of exactly *what* a practice activity was. For the most part, the reports concentrated on practica and student placement activities; faculty research with a practice emphasis was less frequently discussed.

These reports, taken together, were an enormous resource of anecdotal information about the scope of practice activities, but allowed for few ways to quantify the results of activities against a

measurable standard. It would not be fair, for example, to calculate how far a school had progressed by counting its research contracts and then comparing it to other schools to measure progress, when schools were not specifically asked to include this information, and may or may not have it available. Nor was it feasible, after each school had already submitted its reports, to go back and ask for this information. Most schools are only beginning to fully realize their involvement in practice-related activities, and it is not yet reasonable to expect that this sort of quantitative data would be available. As the **University of Pittsburgh** stated in its report, it is the anecdotal information that is much more interesting.

## A NOTE ON METHODOLOGY....

In order to make sense of this huge compendium of information and compile, if not the complete picture of practice activities among schools of public health, at least a sense of the progress that had been made, some general measurement tools were needed.

Since the problems had been well documented - in the IOM and Forum reports, by research at the **University of Illinois at Chicago**, through reports of the Pew Foundation and others - one way to view progress was to break the recommendations in these sources down into component parts and compile data from the practice coordinator reports in light of these elements. For example, according to the IOM report, "schools should undertake an expanded program of short courses to help upgrade the competencies of [agency] personnel" (*The Future of Public Health*, p.158). Since this recommendation has a number of components, it was further broken down into individual elements - does the school have distance learning programs, grand rounds, leadership institutes? The sidebar on the next page details the elements from the IOM and Public Health Faculty/Agency Forum recommendations, from the list of "sentinel" activities defined in the article "Building Bridges Between Schools of Public Health and Public Health Practice" published in the July, 1994 issue of *The American Journal of Public Health*, and from a "Report Card" on academic-agency collaboration published by the Council on Linkages Between Academia and Public Health in the Summer, 1994 issue of their bulletin, *The Link*.

From these recommendations, a master list was made of activities that a school *could* undertake to increase its capacity for building a strong “practice” element as part of its academic mission. This list formed a set of indicators against which to catalogue progress made by schools as stated in their reports.

**HOWEVER, it should be clearly understood that schools were not required to measure their activities according to these indicators.** Reports from the schools of public health were written as an “open-ended” discussion of that school’s practice activities. These criteria were applied to gather a general sense of successes, failures and progress of practice activities, as described by the school. **This is not quantitative, scientific data.**

A master list was compiled of all activities mentioned in the reports, broken down into the smallest component parts. If, for example, one of the recommendations was that students should have the opportunity to obtain a practical experience, the reports could be read against the following questions: Are practica available? Are practica required? What is the scope of the practica - hours, types of placement, etc.? What types of practica placements are available? And so on.

Once this master list was developed and segmented into its smallest parts, it lent itself to an easy grouping into four areas in which to categorize the changes undertaken by schools - practica, administrative changes, curriculum and research areas. The actual questions which were considered when looking over each school’s report are found early in each section, in a box marked “Assessing [Practicum, Curricula, etc.] Changes.” The question as to how schools address these four criteria areas in their reports are compiled anecdotally and, where appropriate, with numbers derived from the reports.

The reader is cautioned that the field of academic public health practice suffers from lack of consistent definitions in terms, many of which are central to this report. There is no single definition of what constitutes collaborative research with an agency, of how and what capacity-building activities fit in with agency and academic alliances; there is not even consensus on the definition of a public health agency (...even what actually constitutes *public health* itself). This ambiguity makes comparisons difficult, but should not preclude the reader from having a general idea of the progress

**RECOMMENDATIONS  
GOVERNING PRACTICE  
ACTIVITIES IN SCHOOLS OF  
PUBLIC HEALTH  
(EXCERPTED)**

*INSTITUTE OF MEDICINE:*

- establish firm practice links
- fulfill role as significant resource to government
- provide students opportunity to learn entire scope of public health practice
- strengthen their response to the needs of minority groups and international health

*FORUM REPORT:*

- universal, mandatory practicum
- collaboration with community and public health agencies
- bring practitioners onto faculty
- government funding to make the above happen

*SENTINEL ACTIVITIES:*

- public health practice steering committees
- multicomponent agreements
- formal practica
- joint research agendas
- clinical tracks and faculty exchanges
- two-way technical assistance

that schools have made in forging alliances of various sorts with practitioners. A clarification of terms is covered in the appropriate sections of this report.

One further caution needs to be addressed. In reading these reports and compiling their information, a great deal of care was made to include only projects that were fairly completely described and viable at the time of the report. If a project sounded tentative, that is if it was described using future tense, or connoted something that did not then currently exist, it was not reported in the findings. Intent is not the same as action. This lends the findings of this report a conservative bias, but it would have been impossible to check on the status of each and every project. Similarly, if there was an ambiguity in describing a project, for example it was unclear if a research topic or a student practica was being described, the project was not included in any tallies made for this report.

These numbers, therefore, do not represent a quantitative measurement of how well the schools stand against some numerical standards of capacity building. Rather, they are grouped, described and occasionally tallied as carefully as possible to give the reader a sense of progress being made in various activities. Conclusions are often necessarily subjective, based on the overall impression received by reading report after report.

However, because of the broad scope of activities covered by the reports, and because they came from 26 CEPH-accredited schools of public health, the public health practice coordinators project represents the largest and most comprehensive pool of data to be collected from schools of public health on practice activities to date. As such, it is a valuable tool for gleaning a general "feel" for the state of schools' achievements in developing a practice-orientation in their programs.

SCHOOLS OF PUBLIC HEALTH IN SERVICE TO THE WORLD (A LIST OF COUNTRIES WITH RESEARCH OR INTERNSHIP AFFILIATIONS TAKEN FROM THE REPORTS)				
- Australia	- Belize	- Bolivia	- Canada	- Caribbean
- Chile- China	- Costa Rica	- Dominican Republic	-Egypt	
- Fiji	- Guam	- Guatemala	-Guyana	- Haiti
- Honduras	- India	- Indonesia	-Israel	- Japan
- Kenya	- Mali	- Mexico	- Mozambique	- Nepal
- Pakistan	- Peru	- Philippines	- Russia	- Rwanda
- Samoa	- Senegal	- Sudan	- Taiwan	- Tanzania
- Thailand	- Uganda	- U.S. Virgin Islands	- Vietnam	- West Africa
- West Java	- Zaire	- Zambia		

Finally, while this report looks closely at certain areas - practica, curricular changes, etc. - other very real contributions are being made by faculty and students in other public health activities. Faculties have lent their expertise to boards of community-based organizations, non-profit associations, professional public health organizations and hospitals. They have served on governmental and legislative task forces, organized and given testimony, and spent countless hours serving the community as "experts" in a variety of areas. MPH students also demonstrate a strong commitment to serving the public's health needs. Atop heavy courseloads and research demands,

they have managed to design and carry out community programs that have made a real difference in the lives of communities otherwise unable to receive adequate services. Their innovative approaches have won awards and national recognition. They remain a resource ready to be “tapped”, and agencies should rush to enlist their talents and fresh approaches.

Thus, although it is not the intent of this report to substitute as a “state of the art” update on faculty practice activities, when measured against the four general recommendations set forth in the Forum report: to provide practica opportunities, to increase collaboration and communication between agencies and schools, to bring practitioners in as faculty, and to back up programs with government dollars of support - *clearly it is evident that much progress has been made*. It is hoped that this document will stimulate a great deal of discussion about the roles, progress and capacities of academic/agency linkages, and that future reports of this kind will present even greater measures of progress.

# PRACTICA

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“In our 1985 and 1991 surveys of alumni [we found that] the internship is the single most important variable determining job choice after graduation.”

■ *Yale University*

“ The practicum experience, whether through field training, formal internships or MPH projects, is the primary conduit through which the school maintains linkages with public health agencies, both private and public.”

■ *University of Massachusetts*

Although the reports of the practice coordinators covered many areas of linkages with agencies, the sections of the reports covering student practica were the most complete and detailed. Some schools almost exclusively dealt with practica in their reports. Detailed appendices were attached to show evaluation forms, lists of preceptor agencies, manuals and placement reports. These documents are evidence of a great deal of time, concern and commitment surrounding the state of practica experiences in schools of public health.

Every school of public health, without exception, provides practical opportunities to allow students placement in state health agencies, community-based organizations, clinics and/or federal agencies. These opportunities may be labeled practica, internships, field placements, or a number of other names. Some schools offer courses with a practice component - these are not traditional agency preceptor/student relationships since the work is being supervised by a faculty member, nonetheless they are an integrated way of balancing the theoretical curriculum with actual public health situations. The overriding availability of these programs, whatever they are labeled, indicates that the concept of giving students a “real life” understanding of the world of public health practice is widely incorporated into school programs, and that the schools recognize that these experiences are a necessary counterpart to theoretical understanding.

There is also evidence that schools are beginning to recognize students as “links” to the community. Student practica are frequently a source of job placement after school, and as such represent a strong future research and placement resource for the school. The **UCLA** background report underscored the importance of student placements in the county health department, where they were seen by the health department as a positive way of linking up with the community. Since **UCLA** students represented a resource that was not only trained in public health, but often bilingual, the Los Angeles health department used unassigned funds to hire part-time students to augment the clinical services [of the health department] in south central Los Angeles.

However, practica are not, across the board, *required* of all programs in all schools. The reasons for this are many. A number of schools expressed a hesitation to send students into the field without sufficient faculty to oversee the placements, or without confidence that the placement will truly be a learning experience. Because many schools still handle practica placements and oversee requirements on a department-by-department fashion, building a strong practica program is an added burden that busy faculty are hesitant to undertake. In addition to simply overseeing the practica, there is a time investment in establishing agency contacts, defining relevant work projects, the paperwork of evaluation and many other factors to consider. (See section on “Barriers” below.)

Additionally, a school may consider that MPH program applicants already have considerable experience (some even make professional experience in public health an admission requirement), or that their students are already employed by public health agencies, making an extensive practica unnecessary. Generally, the trend is that practica opportunities are expanding in schools, not diminishing.

Many schools have conducted surveys among students and preceptors to assess the value of practica experiences. These surveys underscored the importance of the practica to the student’s overall learning experience, to their positive impression of their student experience, and to landing a good job after graduation. In a survey of **University of Hawaii** alumni, 13% indicated that “contacts generated during [their field placements] were more instrumental [than any other factor] in getting their first job after graduating.” The **University of Alabama at Birmingham** stated in its background report that “it seems fairly evident that exposure to the practice sector provides a student with important ‘real world’ experience that can help determine his or her subsequent career path. [Further,] that the majority of students completing internships tend to move into practice positions.” And since alumni are an important resource for future practica placements among many schools, these former students, now in agencies, serve as future placement preceptors for new students.

#### ASSESSING PRACTICA IN SCHOOLS OF PUBLIC HEALTH

- Are there practica/internship opportunities
- Is a practicum required
- Does the school have a continuous, funded arrangement with an agency
- Is there an office for field placement
- Tally of federal, state, local, CBO/non-profit, clinical, and private arrangements
- Is there a minimum coursework requirement; a set of competencies
- Are preceptors compensated
- Does report include clear policies giving expectations of all partners
- Is practica evaluated: by students, faculty, agencies
- Is the evaluation form included in the report
- Are there seminars or presentations by students

**SCHOOLS OF PUBLIC  
HEALTH WHICH  
REQUIRE  
A PRACTICA**

University of North Carolina  
University of South Carolina  
University of Hawaii  
Columbia  
University of Washington  
University of Pittsburgh  
UCLA\*  
University of California at  
Berkeley  
University of Puerto Rico  
Saint Louis University  
Loma Linda University\*  
Tulane  
Yale

\*required if student has no previous  
experience

Of the 26 schools of public health studied for this report, 11 reported that practica are required in ALL MPH programs at the school.<sup>1</sup> Additionally, two schools require practica if the student had no previous public health experience. At **Yale**, two courses with a practica component are required in all five core curriculum areas.

The range of a practica experience in terms of hours served is fairly broad. Not every school stated practica requirements in hours, so an average is not possible, but 200-600 hours of work performed was fairly common. In order to make the practica experience as meaningful as possible, a number of schools stated that they avoided

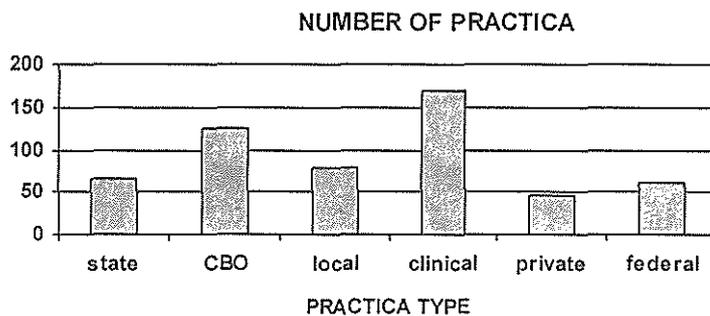
“open ended” assignments; students almost exclusively were assigned to a single preceptor, rather than an agency. One school, however, insisted in its 360 hour requirement that the student be provided a “rotation” through the agency to get a feel for the extent of the agency’s operations.

Obviously, one of the foundations for an ongoing and solid practica placement procedure is a continuous, funded practica arrangement between an agency and the school. Five schools reported such an arrangement, in the form of multicomponent agreements or other contractual vehicles whereby the agency arranges compensation, placement, and supervision of interns. A number of schools arrange general, broad-based meetings to allow agencies, students, and university staff and faculty the chance to interact and exchange ideas. The **University of North Carolina** and the **University of South Florida** have annual conferences or forums of this nature. At the **University of Minnesota**, a Career Action Day brings together over 60 organizations and 160 students to discuss a variety of mutual alliances, including practica, part- and full-time jobs and project work. The Student Career Center there also sponsors field trips into agencies, to allow a better understanding of future service areas. Clearly, the opportunity to bring faculty and agency personnel together during such events can lead to discussions of other areas of collaboration as well.

Schools had varying degrees of difficulty in compiling data regarding practica information. Some schools had centers for public health practice, with a great deal of data gathering ability and centralized authority. Other schools had to obtain data hit-or-miss from individual departments. There is thus an inherently wide range of consistency to the data. For example, in some reports, data represent a “sampling” of practica sites, or are compiled from departments with widely differing systems for recording student placements. Others, like Rollins School of Public Health at **Emory**

<sup>1</sup> The Council on Education in Public Health (CEPH), which is the accrediting body for schools of public

and the **University of South Carolina**, have centralized databases, able to track not only practica, but all practice activities. The Public Health Practice Registry and Database at **University of South Carolina** even has standardized student contracts and practice plans which span all departments of the school, and an electronic bulletin board for identifying and advertising practica openings.



A number of schools reported difficulty in finding staff and faculty time to make preceptor arrangements. Agency resources are limited as well. This is compounded by the difficulty of reaching into the university to match the right person to the job: universities are frequently very decentralized, with few people having an overall picture of what others are doing. Alumni networks, however, are an invaluable resource in finding mentors to serve as intern preceptors. Nine schools had an established office and staff available to serve as field placement coordinators. Unfortunately, two schools - the **University of Massachusetts** and the **University of Illinois at Chicago** - mentioned that cutbacks had curtailed their funding for various practica projects. Three schools - **Yale**, **University of Massachusetts** (department of epidemiology), and **Harvard** - reported that they had more practica slots available than students to fill them.

“Between July '92 and March '95, over 300 MPH students [at the University of Minnesota] participated in practical training at 125 local, national, and international agencies, as well as corporations and Native American nations.”

*-from University of Minnesota,  
final report*

health, has since added to its guidelines that *all schools should require* a culminating practice experience.

## ESTABLISHING MEANINGFUL PRACTICE EXPERIENCES

In building up a solid base of agency contacts upon which to establish practica experiences, many schools expressed the concern that practica not be a “hit-or-miss” arrangement - required for its own sake but not realizing its potential as a valuable learning experience. The **University of North Carolina** staff hold lengthy screening and preceptor meetings to assess potential preceptor’s personal characteristics, professional qualities and skills in facilitating team development and management. The **University of Massachusetts** requires preceptors to hold advanced degrees in public health. Clearly, schools understand that the preceptor/intern relationship is a multi-dimensional one, and that care must go into establishing “ground rules” at the outset of the field experience.

The process of practica placement at **Yale** is an interesting model of a standardized and formal placement procedure. Each fall, the university puts out a request for proposals to solicit ideas for placement projects from agencies, community-based organizations and non-profits. A student/faculty team reviews the proposals and passes the projects that look acceptable on to the first year student intern pool. Students send their choices to faculty, who then choose an advisor for that project among themselves. Agencies have given overwhelmingly good reviews to the students they have placed, showing that mutually beneficial outcomes can arise from this activity.

Interestingly, faculty at **Yale** noticed over the years that less than 10% of their intern placements were in state and local health departments, and discovered that, because of the increasing costs of graduate education, students were steering clear of internships at CBO’s and other organizations offering lower remuneration. An internship fund has been set up to help place students in sectors unable to pay a stipend. **Yale** insists, as part of the philosophy that governs respect for the student’s work contribution, that student practicum be paid.

The Public Health Faculty/Agency Forum report emphasized the importance of formal practica arrangements in advancing not only public health education, but also the concept of academic/practice linkages. The report recommended that practica arrangements be funded, be formalized - with a contract between student, agency and university - and have a minimum criteria, competency or course requirement before the student entered the practica. Such a formalized arrangement exists at **Columbia University**, where student interns are placed in divisions of the

### PRECEPTOR REQUIREMENTS EXCERPTED FROM: University of North Carolina, background report

#### *A preceptor must:*

- hold a responsible position within the organization, with the ability to assign duties
- accept the preceptor’s role as a professional obligation and as an opportunity to teach
- be able to devote sufficient time to field training activities, including planning, supervision and evaluation
- work in an organization which has one or more ongoing programs which can provide the student with learning opportunities, and has adequate staff and necessary support to assure guidance and assistance to the student
- be professionally qualified to meet the needs of the student

New York City Health Department. This arrangement has been cemented through an agreement called the Health Research and Training Program.

'Most faculty do not have a practice background, their careers have largely been spent in academia. [They] are not confident with helping advisees find field experience, nor do they have community contacts in place. It has therefore been necessary to 'sell' the advantages of fieldwork when many students pattern their study to match the career objectives they see in their advisors and other faculty. There are few faculty role models for a career in practice.'

The forum report further stated that individual practica should be formally evaluated by the parties involved. Not only did every school require some form of practica evaluation, many had gone further and surveyed or otherwise evaluated the placement concept as a whole. For example, an evaluation of faculty, student and preceptor response to practica experiences at **Yale University** showed that practica experiences increase a student's understanding of group process and dynamics, as well as improving research and methodological skills. Faculty, asked to evaluate student projects in terms of *how well* they increased student understanding, noted high degrees of improvement (i.e., greater than 60% said students improved a lot) of student knowledge of content area, appreciation of agency problems, ability to collect information and awareness of the difficulty of working in the community. Similar high scores were given on students' improved ability to work with each other and to design a research project after the practicum experience.

Nearly all the reports attached field placement materials as appendices. The expectations made of the students, agencies and (in some, but fewer, cases) faculty for the practicum were clearly described and well specified. An assortment of field manuals, internship handbooks and other materials demonstrated that the student is governed by a well-thought out and equitable system in which the requirements and expectations for all the players involved are given. Grievance procedures, expectations of student from preceptor and preceptor from student, even guidance for going on interviews were typically included.

Evaluation forms often asked detailed questions, such as "describe the specific product you will have completed by the end of the field placement," forcing the student to look critically at his or her internship experience and to analyze both the work prepared for the agency and the student's role in carrying out that work. This critical analysis is in itself a valuable life skill, and could be especially meaningful when the student further presents a seminar or oral presentation on the "results" of their practica, since this provides an opportunity for critical thought among one's peers. At the **University of Hawaii**, for example, students take an "integration" seminar designed to synthesize experience with theory. At the **University of Puerto Rico**, *clients* in certain programs are given the opportunity to evaluate the intern, and at **Harvard**, preceptors are expected to attend the evaluation session. The practica program at **Saint Louis University** requires second year students to "debrief" first year interns on their work with agencies, thereby letting the interns know what to expect and lending continuity to the internship placement, since the intern gains first-hand information about the agency from their peers.

Most schools listed a number of actual titles of the practica project, or the names of sponsoring agencies. While this was informative, it was often difficult to tell whether the practica experience was an actual agency placement where substantive work was involved, or whether it was an informal placement wherein the student was doing research on a paper. Tallies of practica arrangements were definitely conservative as a consequence, and yet the numbers remain impressive (see page 21 -Number of Practica Arrangements.)

For practical and financial reasons, many schools limited their arrangements of practica placements to within their own states, some to within the geographic area of the school. The problems of supervising a field placement in another state, or even another city nearby, are many, and yet most every school mentioned a practica site list that included areas outside the school's immediate vicinity. *Practica experiences occurred in no fewer than 40 of the 50 states in the country*, extending the reach of public health experience into areas without schools of public health. Distance learning, continuing education and research collaborations among the schools and state and federal agencies further extend this reach.

## STUDENT EXPECTATIONS

Most of the schools, as has been noted, included a set of field manuals detailing reasonable expectations of all the parties involved in the placement. Internships generally carried a set of objectives, or outcomes, that the school feels the student should meet by the end of the internship experience. One stated objective from a student placement manual was to give the student a capacity for "tolerating ambiguity, uncertainty and change within a research or service organization." Certainly this is a valuable skill to master if one wants to enter the public sector, and what better way to do it than while still a student?

"Over 62% [of the students surveyed] said that the school's involvement in public/community service was [important] in their decision to choose this school."  
- from Loma Linda University, background report

A number of reports gave the results of student satisfaction surveys. Overwhelmingly, the response in these surveys was positive both as to the internship experience itself, and to the importance of the internship in establishing skills and contacts for later use as a professional. Only one anecdotal instance of a negative practice experience was included, this being from a student who was part of a focus group studying the university's role in promoting practice opportunities. The report told how the student (who was already a public health professional) felt that he should not be forced to add a practica to his already extensive experience.

Often, students can use the internship as a sort of course-correction, allowing them to be exposed to areas they might be interested in without having to make the commitment of a full-time job in that area. They may decide that their tolerance for bureaucracy is limited, or that they like the excitement of working in a clinical setting, or among the community. Some students occasionally

get the opportunity to see the result of their work make a real difference in people's lives - especially in placements such as with rural health departments and urban clinics.

## BARRIERS TO SUCCESSFUL PRACTICA

Although it sometimes seems like a minor point, a number of very real mobility obstacles govern student internship placements. Many graduate students are without their own transportation, and find it difficult to be temporarily placed at a location far from the school: The **University of Pittsburgh** was hindered in developing a program with interns at the state capital because of the distance from the school. In a survey taken in 1994 by the **University of Michigan** to assess barriers to student participation in practice activities, 38% were very affected by costs associated with transportation to community sites. Many schools noted that they were limited in placement sites to agencies near the university.

Similarly, supervising an internship in a student's home state (or even country) can be difficult to impossible. Few, if any, reports mentioned that faculty had a budget for internship travel expenses, and it was largely up to the student to make contacts for placements in cities other than the home base for their school.

Compensation for student interns was frequently a problem. There was little consistency governing whether or not interns were compensated; some reports mentioned that stipends were given, some mentioned they were not; most did not bring up the issue at all. At the **University of Alabama**, interns are compensated under a formal, multicomponent agreement with the county board of health, with funding provided by both the school and the health department. **Yale University** attacked the problem head-on: after discovering that students were, due to high tuition costs, increasingly forced to take higher-paying internships (which, largely, were *not* offered in CBOs and local health agencies), a fund was set aside to supplement student internship stipends and thus encourage students to take placements in agencies where they really *wanted* to work.

In addition to compensating interns, agencies face the tremendous overall financial pressures of being constantly threatened by cutbacks. Not only understaffing and the lack of time available to supervise students, but the routine research-related expenses of office space, phoning, faxing, postage, computing and photocopying can sometimes present real barriers in a practica experience. Agencies must also contend with bureaucratic controls governing the work of external contractors; similarly, programs in occupational safety and environment that have practica placements in industry must deal with legal liability issues that can often preclude partnerships.

Finding faculty mentors with public health practice experience and contacts is another obstacle. Similarly, the barrier of inadequate faculty supervisory time, lack of understanding of different placement agencies and knowledge of funding sources poses barriers just as it does in other capacity building relationships. The **University of Hawaii** added the point that finding faculty

(who are usually on 9-month appointments) available to supervise students in the summer, when internships are typically done, is difficult.

Time is a crucial element in other ways as well. Students at the **University of Texas** mentioned that the three months they are given for internships are often not long enough to identify and address a problem adequately. Also, time is a factor in setting up the internship (often there is not a central placement office to do this), fitting together preceptor and project availability with student schedules, and fitting in time for a practicum when the student already has part- or full-time employment.

A few schools noted that students do not receive course credit for practica experience. This tends to diminish the practica in importance, even if it is a requirement. Additional barriers to success include: negative student attitudes in working with the agency (either the students already see themselves as "experts," or they are inappropriately placed in a position that does not use their talents); difficulty in accessing proper agency databases; poor or unestablished relationships with preceptors; and a feeling of "being used" - that the agency has a free labor pool at the student's expense.

## OUTCOMES

An indication of the seriousness with which faculty and administration view the student placement process is the prevalence of an outcomes-based review of the practica.

Practica which were not part of an ongoing class project generally included an element of finality to allow the student to evaluate his/her experience and tie the practical understanding to the theoretical. Usually, this was a written report or an oral seminar. A number of programs mentioned that the practica must have an "outcome" orientation, i.e., that a deliverable product must be given to the agency to complete the internship. At the **University of Massachusetts**, for example, successful completion of a project means the student typically deliver some "product" (e.g., educational materials, report on data analysis, an evaluation plan, etc.) to the agency. They must also write a separate report to their academic advisors analyzing their experience based on a tie-in with their coursework, and give an oral presentation to faculty and students describing their practica.

Seminars are a common vehicle for student evaluation. At the **University at Albany**, students must schedule a seminar presentation for the results of their placement; all students, faculty and department of health employees are invited to attend. This is an invaluable tool not only from the intern's perspective, but as a way for other students to make contacts, to hear about other intern experiences, and to gather information for both their own practica and the experience they would like to have.

Although there is the sense that schools take their practical placement of students very seriously, an outcomes approach, whereby the student is expected to make some influential mark on

the organization in which they are placed, is by no means universally adopted by all schools of public health. Obviously, this kind of influence is in part a product of time - as lasting relationships are built and strengthened, the reliance of organizations on intern assistance will grow, as will the intern's experience itself.

## A SAMPLER OF PRACTICA EXPERIENCES

- *COLUMBIA UNIVERSITY*
  - Assess the role of cervical factors in heterosexual transmission of HIV
  - Monitoring TB trends in Harlem to identify risk factors and establish a model TB clinic
  - Development of Project Lean-Low Fat Eating Campaign
- *HARVARD UNIVERSITY*
  - Define and recommend a set of indicators for the Massachusetts comprehensive, primary care system's pediatric population
  - Design and conduct a pilot project to explore the quality of depression treatment at several HMOs in New England
  - Increasing dentists' participation in the treatment of HIV-positive infected patients
- *UNIVERSITY OF HAWAII*
  - Analyzing the mercury concentration in marlin caught off the coast of Hawaii
  - Collect, tabulate and analyze data on child abuse and neglect in selected areas of Alaska and develop a new data collection instrument
- *UNIVERSITY OF MINNESOTA*
  - Develop a neighborhood-based social support system for the elderly
  - Street Kids in Brazil: an exploratory study of medical status, health knowledge and the self
  - Alcohol use and safe driving strategy: a community needs assessment of establishments serving alcohol in Bemidji, Minnesota
- *UNIVERSITY OF TEXAS*
  - Collaboration with two independent school districts and the local health department to determine the prevalence of asthma in school children in Laredo, Texas
  - Survey of prenatal care patients at a public health clinic regarding the use of infant car seats
  - Analysis on the prevalence of diarrhea among AIDS patients at an ambulatory care clinic. The results were presented at an infectious disease conference

## ADMINISTRATION

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“ The increase in the number of schools of public health that are instituting or maintaining centers directed at public health practice... is a strong indicator of the need to facilitate [this model.] These centers...help in translating to the public both the *vision* and the *vitality* of public health.”

*-from University of Pittsburgh, final report*

Administrative changes are the most far-reaching and permanent marker of change in the attitudes of schools of public health toward incorporating a “practice” orientation. Each report embraced the idea that the goal and concept of encouraging practice activities had been espoused by their school, even if actual changes had been slow in coming. Most schools gave clear statements about a practice “outlook” in their service policy or mission statement (see page XX); many also had an implementation plan to carry out that policy.

The changes described in the practice coordinator’s reports included the development and funding of offices (or centers) for public health practice that potentially affect policy for the whole school, changes in promotion and tenure policies guiding faculty activities in practice, and the initiation of channels within the school whereby permanent exchange mechanisms are in place to allow practitioner input.

A surprising number of schools of public health have undergone review of their service records during the time covered in the reports. Whether these reviews were undertaken as a result of accreditation requirements, as a normal policy of self-study or updating of the school’s mission statement, or as a true response to the outcry for more meaningful public health education is uncertain; nonetheless, a number of changes were reported. Nearly half the schools have, on a formal and school-wide basis, reviewed their curricula to incorporate the input of practitioners, or to bring a more practical focus to many courses (see Curriculum section.) Also important is the fact that schools have given a critical look at the service component of their mission statements, to incorporate in a practical and meaningful way how their institution could work to improve their policies toward public health practice.

### ASSESSING ADMINISTRATIVE CHANGES

- have appointment, promotion or tenure policies changed to reflect practice activities among faculty
- has there been a curriculum review to determine the relevance of practice in school
- do faculty exchange arrangements exist
- are practitioners on school committees
- are there joint appointments
- has a clinical practice track been established
- are there practice sabbaticals
- are practitioner faculty remunerated
- are there formal recruitment arrangements to bring practitioners in as faculty
- has a practice steering or advisory committee been established
- is there a formal office of public health practice, or a director of public health practice

## OFFICES OF PUBLIC HEALTH PRACTICE

Eighteen of the 26 schools of public health completing the reports stated having a formal office or center for public health practice in their schools. Since ASPH instituted the establishment of the Council of Public Health Practice Coordinators, most of the offices are headed by individuals in these positions.

Offices of public health practice could have a number of names and a wide variety of responsibilities and authority. One report debated the “center” versus “office” title, feeling that an “office of public health practice” would carry less weight than a “center.” At **Johns Hopkins**, the practice entity is titled the Health Program Alliance, and had its origins before 1988. These offices could assume an “umbrella” function, filtering practice opportunities to the departments and overseeing continuing education and student practica, or they can serve to supplement research efforts of the individual departments, as a “resource” for the university. It was often difficult to tell from the reports which model the practice office or center assumed.

The funding for these offices also took many forms. Eight schools reported that their public health practice office was financially supported in part by the state health department; a few even exchanged or coordinated the directorate of their practice departments with the state. The Center for Public Health Policy at the **University of Pittsburgh** was established by the Pennsylvania legislature. At the **University of Washington**, the state health officer is also the assistant dean for practice. Other schools have mentioned funding from general support funds from their dean’s offices, from grants, contracts and salary support (largely HRSA, CDC and ASPH, or from foundation grants) and, interestingly, from continuing education programs and even by proceeds from a well-established newsletter.

Typically, the office of public health practice coordinator was given to an associate dean, and as funding and administrative mechanisms moved into place, this became an office or center for public health practice, very often with a new director or the dean also assuming the directorate. Responsibilities which had been scattered in different departments - continuing education, grant development, student placements, community outreach - may or may not then become centrally located under this office.

Only four schools did not mention a formal office for public health practice activities in their reports. In each case practice activities, and the responsibilities as public health practice coordinator, were handled by the dean or a faculty member. This is not the same as the many instances in which practice activities were placed under the aegis of the dean’s office, but also staffed and coordinated to the extent that they constituted a public health practice entity within the university. Obviously, the issue of having public health practice activities centralized within one office or dispersed between departments is more appropriately discussed on a case-by-case basis. There is not, nor perhaps should there be, one formula that applies to all. One disadvantage, however, to each individual department handling and keeping records of their own practice activities is that it is extremely difficult to measure and track progress. Conceivably, it is also more difficult for public health agencies to establish contacts with a university when roles are not clearly identified or centralized. The presence of an “Office (or Center) of Public Health Practice” is a visible identity for agency contact.

One step many schools have made toward incorporating more practice relevancy in their programs has been the establishment of a practice steering or advisory committee. These committees are often made up of the state and local health officers, members of community-based organizations, and the dean of the school of public health. Many schools reported that their committees met on a regular basis and had established a set of goals by which to move the school forward in terms of increasing practice relevance and setting research, training and internship agendas. These groups also offer the opportunity for the school to bring together a wide range of public health professionals. At the **University of Washington**, for example, the public health practice steering committee contains members from Alaska, Montana, Idaho and Oregon health departments (none of those states had schools of public health at the time of these reports.) Some reports implied that their committees were not standing committees, that they had met, accomplished their purpose, and disbanded. Often their purpose included preparing memoranda of understanding, cooperative agreements or other such documents that formalized relationships. At the very least, players were brought together to engage in a discussion that would not otherwise have occurred, thus given an opportunity to further their mutual knowledge of each other's activities.

## POLICIES AFFECTING FACULTY

The Public Health Faculty/Agency Forum report emphasizes the importance of incorporating lasting changes in the infrastructure of universities to give added emphasis to practice. One especially significant way this can be accomplished is through the development of a clinical faculty model to both give weight to practice experience and to allow practice professionals to more meaningfully enter the academic arena. At least ten of the schools mentioned in their reports that changes had been made to appointment, tenure or promotion policies to reflect practice activities among their faculty. These changes include factoring in service and/or scholarship in public health practice as a promotion criteria. As far back as 1991, **Loma Linda University** established service activity as one of six criteria to determine academic rank.

A further point of the forum report was that agency practitioners and SPH faculty should more actively "trade places" - that is, that formal arrangements should be made for faculty exchanges. Eight schools have this in their policy. Each arrangement is evidence of a strong working relationship based on mutual interest and shared respect. The **University of Massachusetts** has an arrangement with departments of health which extend beyond the borders of Massachusetts and encompass six other states, none of which have schools of public health. Through seed money from a HRSA cooperative agreement program, the **University of North Carolina** established a program to promote visiting professorships at the school. At the **University at Albany**, many of the faculty actually *are* department of health employees. The

Louisiana Office of Public Health jointly funded two clinical faculty at **Tulane University**, one to coordinate practice and one to teach in the health communication/education program. **Emory** reported that over 70% of their adjunct faculty were from CDC, and also that a sabbatical program was underway which would bring faculty and department of health practitioners into an exchange program.

Nine schools had clinical practice tracks for their faculty as of 1995. One additional school was in the process of revising its criteria to develop a track, and has a non-tenure, research faculty slot. The **University of South Carolina** and **Emory University** reported substantial increases in the number of faculty (adjunct and clinical) after revising tenure procedures. Many schools use adjunct faculty in teaching continuing education courses, and for interdisciplinary courses that are team-taught. At **Tulane**, all departments had a clinical faculty appointment by 1994. However, less than 10 examples were given of formal recruitment arrangements to bring practitioners in as faculty. It is likely (although not certain) that the interactions between academics and practitioners are much more informal, and that much recruitment goes on without formal processes being instituted.

Eleven schools have changed their appointment, promotion or tenure policies in some way to reflect a formal recognition of service by faculty. Service, of course, has many definitions. At the **University of North Carolina**, faculty were given the option of research or practice as a means of promotion. Service (which is undefined in the report) is required of all faculty, regardless of track.

One last arrangement suggested by the Public Health Faculty/Agency Forum report was the establishment of "practice sabbaticals" for faculty. Only three schools - **University of Illinois at Chicago**, **University of California at Berkeley** and **Emory University** mentioned that these arrangements were possible. At **Berkeley**, a Kellogg foundation grant supports these sabbaticals.

**EXCERPTS FROM MISSION STATEMENTS CONTAINING PRACTICE  
OR SERVICE RESPONSIBILITIES:**

- Loma Linda University: *"... to integrate teaching and research with public health practice in the careers of faculty and the training of students."*
- Tulane University: *"... to advance public health knowledge accomplished through education of public health professionals [and] partnerships with the community to advance the practice of public health; and service to local, national and international communities."*
- University of Illinois at Chicago: *"...as with research and education, service is an important and integral part of the school of public health's mission and goals -- as a way to enhance quality of life through improved health."*
- Columbia University: *"... to encourage collaborative preventive health efforts with local community groups [in] northern Manhattan neighborhoods, to assist health departments in the evaluation of programs, to encourage faculty to serve ...organizations involved in the*

*improvement of the public's health, and...to hasten the transfer of state-of-the-art skills and knowledge to practicing public health professionals."*

University of Pittsburgh:

*"...to promote health and prevent disease in communities by: 1. Anticipating and responding to public health needs through research, teaching and service; and 2. enhancing public health initiatives through interaction and collaboration with other health care disciplines and organizations."*

Saint Louis University:

*"...to assure that each student completes a program of study with appropriate academic and experiential knowledge, skills and competencies and a set of values that lay the foundation for effective public health leadership; [to] increase the capacity of communities with which the school interacts to improve health through the implementation of equitable, effective and efficient policies and programs."*

University of South Carolina:

*"... to enhance learning opportunities and methodologies which bridge classroom experiences with occupational settings, opportunities for collaborative research between practitioners and academicians through the development of a communications network, and to develop systems by which academic expertise of public health can be accessed by community organizations making decisions relating to the public's health."*

Harvard University:

*"...to inform debate and constructively influence decision-making on key public health issues of our time; and to strengthen capacities and services that meet the health needs of the community."*

## CURRICULUM

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“Recognizing the need to evaluate the MPH core curriculum and to provide an objective means for delineating core options, [has resulted in] a gradual expansion of the opportunities available, and a shift from a course-based to an outcome-based view of assessing our educational programs.”

- *from Johns Hopkins University,  
final report*

Schools of public health have been criticized for offering curricula that were too theoretical and out of touch with the realities of public health as practiced by agencies and community organizations. This is not to say that there is no place for theoretical learning - that is a major reason why people attend graduate programs in the first place. The problem lies in offering a balance.

Twenty-three of the schools mentioned in their reports that they had made real changes in their curriculum to incorporate more of a “practice” orientation into their program. That this occurred may in part be due to changes made to accommodate recommendations of the forum and other reports, but also may have occurred as a response to student surveys asking for this approach, and to accreditation and self-study reviews. Many schools - **University of Illinois at Chicago, Harvard and Berkeley**, for example, undertook a review of their entire curriculum in response to the need to have a greater practice focus.

Curriculum changes were many and varied. Eight programs reported that new courses specifically related to practice had been added. At the **University of Illinois at Chicago (UIC)** alone, 13 new courses were added during the timeframe covered in the reports. After the school reviewed its entire curriculum in the early ‘90s, courses were added to increase team-based problem solving, to give an overview of documents relating to practice issues, and to introduce (in a core course for all MPH programs at **UIC**) the concept of community health science, making the **University of Illinois at Chicago** one of the most comprehensive academic programs in public

health practice in the country. **UCLA**, the **University of North Carolina** and **Harvard** also mentioned offering a large number of practice courses.

Many schools (the above included) already had a number of practice-related courses (case-based seminars, introduction to public health practice courses, etc.), but changed the syllabi to shift the emphasis or to incorporate ideas brought in by adjunct or practice faculty. Other areas of change included the introduction of case-base or case-studies into courses (mentioned in particular at the **University of Pittsburgh**, **Johns Hopkins University** and the **University of South Carolina**) and the adding of competencies or skill-based concepts into courses. At the **University of Pittsburgh**, students working on rotations in a clinical public health project at the Terrace Village Health Cooperative have actually seen case studies of their experiences incorporated into the curriculum.

A few schools included the goal of adding competencies in their mission statement or self-study reports, but it was unclear how far this idea had actually reached into the curriculum. At the **University of Texas** School of Public Health, a course entitled "Current Public Health Practice" was developed to teach the core functions of public health. Agency leaders were brought in to show how these core functions relate to their programs.

In addition to changes in individual course curricula, many schools are changing or adding entire programs to more directly reflect student demand for more practical education. An Executive Option program in Health Services Administration at **San Diego State University** is designed to meet the need for experienced public health professionals to work on an MPH with a professional emphasis. **Harvard** has changed its program to offer five degree concentrations and over 20 practice-oriented applied courses. The **Universities of Minnesota** and **South Florida** are also working practice degree options into their MPH curriculum.

While many curriculum changes were due to self-study and accreditation review proceedings, having a solid base of practicing faculty advisors was the guiding factor in their success. Half of the schools mentioned in their reports that there was some level of agency involvement in curricular development and/or review. This involvement comes in many ways. First, increases in the number of adjunct, or practicing faculty, has given "new blood" to the teaching ranks. Faculty from state and local health departments obviously carry a different emphasis to their teaching, and (especially in team-taught courses with regular faculty) the interaction can be stimulating for both faculty and students - an "everyone learns" situation.

### ASSESSING CURRICULUM CHANGES

- have curriculum changes been made
- are agencies involved in curricular development/review
- are interdisciplinary or "team learning" concepts incorporated into the curriculum
- does the school have continuing education programs to provide agency training
- are there part-time programs for employed students
- is academic credit toward the MPH program given for practice experience
- is public health practice experience factored in admission criteria
- have MPH requirements been made more stringent

Public health practitioners also affect curriculum development and content as members of school advisory committees. **Loma Linda University** reported that advisory councils for its various MPH programs include representatives from the public health community, who serve to guide the academic programs and assure relevance to current practice issues. Schools such as the **University at Albany** and **South Carolina**, which have close ties to the state departments of health, frequently bring practitioners into various committees.

Even continuing education programs for agency training can have an effect on curriculum. At the **University of Oklahoma**, for example, the Health Agency Training (HAT) program in the department of biostatistics and epidemiology holds classes for professionals from a seven state region who work in public and mental health agencies and for the Indian Health Service. In its final report, the school mentions that this program has had an impact on several levels, one of which is the "revision of the biostatistics and epidemiology core curricula [as a result of the] input from practitioners receiving the training." Incidentally, as a result in part of the success of the HAT program, the University of Kansas has begun an MPH degree program at Wichita State University.

Practitioners who serve as preceptors to internship programs, or as sponsors of research projects, offer a final, albeit more subtle, way that curriculum has been changed to reflect practice. When students establish a working relationship in a practice agency, they return to the class with a different outlook, a different set of experiences and (occasionally) a more questioning attitude. When faculty are challenged to see things through the eyes of their new agency contacts, or to see the results of their research projects on community populations, they are likely to bring this experience to their teaching. It is a subtle, yet potentially powerful, change.

## INTERDISCIPLINARY LEARNING AND INTERDEPARTMENTAL RESEARCH CENTERS

Schools of public health have been criticized for a narrowness of focus in research and teaching. Indeed, in large research universities, it is easy to fall into the model of specialized learning and research. However, these same resources that make schools of public health specialized are also their strength, a strength they have translated into a vast array of interdepartmental "research centers."<sup>\*</sup> These centers cut across departments and offer schools a mechanism to address problems from a number of different perspectives and disciplines, making research "teams" and often sponsoring interdisciplinary courses and seminars. Centers such as the

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<sup>\*</sup> The term 'interdepartmental research center' is not actually used in all of the reports. It is used in this document to refer to university entities that are grouped around a certain public health concern, such as AIDS,

Center for Health Policy Research at **UCLA** cut across schools as well as disciplines in promoting the exchange of ideas and the creative application of theoretical perspectives and research methods to the analysis and development of public policy. Interdepartmental research centers cover areas as broad as injury prevention, family health, fertility issues, AIDS, occupational and environmental health and safety, and violence prevention. Some schools have as many as 5 or 10 research centers, providing not only a chance to do research and interact with colleagues from different fields, but also an opportunity for students to learn in an environment which deals head-on with some of the most pressing and timely public health concerns. A total of 63 of these centers were mentioned in the reports, and represent a major vehicle for addressing capacity building relationships, interdisciplinary learning and continuing education, and (often) the clinical provision of public health services.

Interdisciplinary learning can also occur at the very foundation of a school's program. At the **University of Texas**, for example, the school of public health is organized into disciplines (management/policy, biometry, epidemiology, behavioral sciences, environmental health sciences and biological sciences) and modules (community health practice, health services organization, disease control, occupational health and aerospace medicine, international health, and health promotion research and development). Each faculty member is assigned to both a module and a discipline; students in the MPH program are admitted into modules, which are interdisciplinary. Among other advantages, this program offers flexibility as public health changes in focus.

## CONTINUING EDUCATION AND AGENCY TRAINING

One of the major concerns in the IOM report, the forum report and other documents regarding the state of public health, is the need for a well-trained public health workforce. This encompasses a huge number of people, many of whom, particularly at the local and community level, do not have degrees in public health. The need for training is enormous, as is the potential impact that schools of public health can make in meeting this need.

Twenty-one of the 26 schools of public health submitting reports mentioned a total of almost 2,000 continuing education programs and classes in their schools. Because continuing education is often given its own separate status within the school, it represents one area of the report with fairly consistent, quantitative information.

### CONTINUING EDUCATION PROGRAMS AT SELECTED SCHOOLS

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maternal and child health, etc. They generally tend to have a large funding source, making them a fairly constant presence in the university and the community.

San Diego State University	An inventory of continuing education offerings identified 10 ongoing courses offered at locations from Chicago to Las Vegas.
University of California at Los Angeles	Office of Public Health Practice works with the Los Angeles County department of human services to offer 20 training courses to over 500 employees.
University of Illinois at Chicago	Worked with at least 13 government agencies and public health organizations to provide continuing education services. Enrollment in 1990 for non-credit and certificate program courses was 3,050 students.
University of Minnesota	Midwest Center for Occupational Health and Safety alone sponsors 90 short courses per year for approximately 2,500 students.
University of Oklahoma	Health Agency Training program has conducted over 80 two-day classes, training over 1,700 middle- to upper-level public health administrators in biostatistics and epidemiology.
University of Pittsburgh	Over 2,000 workers have been certified in the Asbestos Workers Training Program. 100 social workers each year attend a training program in maternal and child health.

Recognizing the extent of the demand for quality continuing education and the obligations of schools of public health to fulfill that demand, many schools have conducted extensive needs assessments to assess their capacity for providing continuing education courses and programs, and to determine areas where agencies and other practitioners need advanced training. These needs assessments frequently extend beyond agencies (especially in occupational and environmental programs) to include training in the private sector. Once the need had been identified, schools not only had a base of knowledge on which to build programs, they had a ready group of attendees.

Often, courses will be offered to meet a specific need. The **University of Minnesota**, for example, developed the course "Cross-cultural Health Issues in Minnesota" over 25 years ago to focus community agencies, physicians, therapists, public health students and professionals and people in the social sciences on the cultural factors that influence health and health services among the Hmong, Hispanic, and African American communities in Minnesota.

Certificates in specialized areas are another facet of continuing education programs offered by many schools. These programs typically cover a specific public health area, such as the certificate for community health outreach at **University of California at Berkeley**, or are designed to provide overall leadership training to a certain category of professionals (for example, mid-career agency directors of maternal and child health programs). Whatever the content, certificate programs provide a more extensive treatment of issues than a conference or seminar, and yet are still tailored to the schedules and special needs of working professionals. They are often the

most effective way to bring state-of-the-art approaches to public health problems out of the lab and into the hands of the people who need them.

One obstacle frequently mentioned when discussions of continuing education offerings arise is the problem of finding faculty with the time (and incentives) to teach them. All too frequently it's a hard sell - especially when offices of continuing education are located outside of departmental offices and there are no channels for interaction between the two offices. At **UCLA**, the Office for Public Health Practice offers faculty "minigrants" as an incentive for continuing education course development. Other successful mechanisms need to be established to ensure that schools have the resources to offer up-to-date course offerings.

A more focused and slightly longer-term approach to agency training has resulted from the development of a number of *leadership institutes* across the country. These institutes, whether regional, statewide or national, have been an overwhelming success in bringing the need for agency training and professional development together with the theoretical understanding gained from academic programs.

Leadership institutes began through a series of federally-funded initiatives to provide professional training to agencies and academics. Institutes typically offer training in a curriculum integrated in the core functions of public health. At the time the reports were written, the states of Arkansas, Louisiana, Mississippi, Oklahoma, Florida, Illinois, California, Missouri and Connecticut were served by these institutes, although few were exclusively limited to participants in those states. A national institute, sponsored by the Western Consortium for Public Health and the CDC, offers leadership training for professionals nationwide.

Many schools of public health also offer their own variations on the idea of leadership institutes. At the **University of Minnesota**, for example, a 5-year continuing education program in maternal and child health leadership offers interdisciplinary training in this field. The public health leadership certificate program at the **Saint Louis University** School of Public Health provides 75 contact-hours of training for state and local health administrators in a two-year program.

In addition to leadership institutes, which are funded typically by CDC and are formally named

"leadership institutes", a number of schools offer their own leadership programs to serve agencies in their vicinity. At **Columbia**, for example, the Public Health Scholars Program is a collaborative effort of the school of public health and the New York City Department of Health. Scholars chosen for this program obtain a scholarship for formal academic public health training, which they receive while still holding positions in state, local and federal health agencies. The **University of South Carolina**, in response to an urgent need for training in the state health department, established the Public Health Education Practice Fellows Project. The goals of this program are to give

"Perhaps the greatest barrier to improving practice-oriented relationships and activities between the academic setting, the practice setting and the public is the lack of a clear conceptual model of what constitutes public health practice."

- from *University of Pittsburgh final report*

practitioners a theoretical background and to provide an understanding of how theory-driven approaches can enhance their efforts. In return, the school plans to incorporate the “real life” field experiences of fellows into the courses offered by the department of health promotion and education, and to develop a “model” practice seminar from this experience.

Part-time MPH programs allow practitioners to receive often much-needed public health training and still keep their agency jobs. Eleven schools reported part-time programs, although this number may underestimate the actual number of programs because schools were not requested to specifically list their part-time programs in the reports. From the numbers of programs mentioned, the predominant offering was in the field of public health management; there was a wide range, however, in areas as diverse as international health (**Tulane University**) to a DrPH program in public health leadership designed to foster interdisciplinary learning for mid-career professionals (**University of North Carolina**). Programs are often held off-campus, such as the satellite programs offered by **Saint Louis University** near the Missouri Department of Health headquarters in Jefferson City. An innovative idea in making graduate programs flexible to accommodate the needs of part-time students is the Credit, Non-Degree program at **University of Illinois at Chicago**, whereby students can take courses without entering a degree program, “banking” their course credit if they later wish to apply. Around 400 students per year take this option.

Satellite distance learning arrangements and conferences are another way the schools of public health reach across the world, and around the country. Frequently these programs offered epidemiology training, but management and other issues were also addressed. The “epidemiology by satellite” course was originally offered to almost 600 public health workers in Alabama, and was so successful that **the University of Alabama at Birmingham**, the Alabama Department of Public Health, and the CDC revised it and made it available nationally. Over 1200 practitioners had registered at the time the reports were written, and the three collaborating partners were developing a second course on the fundamentals of tuberculosis control, also for a national audience.

Eleven schools mentioned offering satellite distance learning programs. States not having schools of public health have increasing opportunities to arrange training courses by satellite. **Saint Louis University** has a coordinator for distance learning programs, funded jointly with the state health office. Efforts by ASPH, state health departments and other organizations to enhance distance learning programs has greatly increased their capacity since the time the reports were filed.

Conferences, arranged by schools of public health and often cutting across disciplines to address a specific public health problem, are an enormous resource to the public health practice community. Over 70 conferences were identified in the reports, many of which were regional or national, providing thousands of public health professionals not only a state-of-the-art update on academic research in the field, but the often underestimated ability to establish contacts which may result in new alliances.

These conferences often lead to additional impacts on curriculum, and on the practice of public health itself. In Oklahoma, for example, a statewide DOH/SPH sponsored conference on violence had spin-off effects on research, community coalition building, and the curriculum of the school. As a result of this successful conference, the Oklahoma legislature established a state-wide, ongoing violence prevention council to develop strategies for the reduction of violence.

A one-day conference sponsored by **San Diego State University** on community nutrition strategies for improving health of ethnic mothers and children led to a graduate maternal and child health course and, ultimately, to training opportunities for child care providers. Conferences such as these typically are issue-driven (health care reform, environmental justice, fetal and infant mortality) and cut across different schools of the university, different public agencies and a spectrum of community-based organizations to form a potentially creative synergy aimed at problem resolution. Their impact, or at least their potential, makes a strong statement about the ability of public health institutions to overcome "parochialism."

Another area in which universities and agencies come together is in the provision of Public Health Grand Rounds. Modeled on the grand rounds concept of medical training, these programs were mentioned in only two schools, although it is possible that other schools had similar programs, but failed to mention them in their reports. The **University of Alabama at Birmingham** surveyed over 5,000 practitioners in four states to develop a list of topics or themes, which they narrowed down to a well-subscribed series of 10 grand rounds topics on areas as varied as hepatitis and stress reduction.

One additional program worthy of mention is the visiting scholars program at **Saint Louis University**, whereby major national figures in health services research are invited for a two-day campus visit, giving feedback on research, curriculum and the relevance of the program to the practice of current public health topics. The visiting scholar's comments are part of the school's self-study conducted at the annual retreat.

## **RESEARCH, TECHNICAL ASSISTANCE AND SERVICE ACTIVITIES**

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“...the time has come to move beyond the tired old teaching debate and give [the] term scholarship a broader, more capacious meaning, one that brings legitimacy to the full scope of academic work. [The] work of a scholar means stepping back from one’s investigations, looking for connections, building bridges between theory and practice, and communicating one’s knowledge effectively to students.”

- from *Scholarship Reconsidered: Priorities of the Professoriate* by Carnegie Foundation for the Advancement of Teaching, as quoted by Emory University

Amid criticisms that schools of public health were too “ivory tower” in their research focus, a surprising number of schools were able to point to research efforts indicating the opposite. Although the listings of research contracts from the reports were not as extensive and detailed as internship listings, this may be in part because schools assumed that the report should emphasize student initiatives, rather than faculty research. Indeed, many schools made a strong case that progress has been shown in the amount of research being conducted with or for public health agencies.

Two points need to be understood at the outset. First, it is often difficult for schools to keep centralized research records dealing with public health practice activities, even where there is a central practice office. Academic departments tend to act as independent research entities, and a number of the reports commented on the subsequent difficulty this presented in compiling information.

Second, public health practice research suffers from the lack of a consistent, consensus definition. It was difficult (in many cases impossible) to determine from the reports whether a faculty research activity, a technical assistance project, a “gratis” service or even a student placement was being described, and, if so, whether or not that activity would qualify as practice-oriented research. For the purposes of this section, activities were counted as a research project in public health practice only if: 1. It was a public health (that is population-based) activity; 2. An agency was formally identified as a sponsor of the research; and 3. It was clear that the focus of the research addressed a community-based public health need. Sitting on boards or in an advisory capacity is clearly a service activity, but it is not research, and was not included in this section whenever the term “research” is used. Within this narrow definition, it is surprising to find as many instances of collaborative research as there were (see sidebar, page XX.)

It should be mentioned, however, as stated in the background report of the **University of Michigan**, that the familiar separations of [a university’s mission] into

“the familiar triad of research, teaching and service is less applicable to public health than to most fields. A more accurate model is a continuum of activities ranging at one end from pure research, whose service to society is indirect and delayed in effect, and pure teaching - educating full-time.

students pursuing graduate degrees, to the other extreme...[of] solving an immediate public health problem. Much of the work of our faculty falls somewhere between these extremes, combining research with service or teaching with service."

The Michigan report gives the example of a faculty member spending a summer in Latin America to work on population control policies, which is obviously serving the people of that country, and yet also advancing the knowledge base of public health. The fact that the lines are blurry, however, brings up an important point: that perhaps a broader definition is needed of activities which constitute the "practice" of public health.

CDC-funded prevention research centers are perfect examples of organizations where public health research becomes integrated into community, curriculum and service activities. This population-based research in public health often works in tandem with community needs and in community-based settings. At **Saint Louis University** School of Public Health, for example, applied research to reduce cardiovascular disease is being carried out in a rural, 12-county area of Missouri. The focus of the center at the **University of Alabama at Birmingham** is "bridging the gap between public health *science* and *practice* in risk reduction across the lifespan of African Americans." Other centers at **Johns Hopkins**,

**Berkeley**, **South Carolina**, **Michigan** and **Columbia** universities also offer schools unique opportunities for engaging in research as well as clinical interventions. These centers often cross boundaries both between academic disciplines and within the community. The prevention research center at **University of Illinois at Chicago** has been involved in researching behaviors on topics as varied as an AIDS education program for 7<sup>th</sup> graders, a smoking cessation program, and the environmental and psychosocial behaviors predicting success in recycling programs.

The advent of offices of public health practice within schools has facilitated systematic calculations of the extent to which schools do research with a practice focus. In addition, practice coordinators and other faculty working with the practice office often open up new possibilities for research, just by being there to intercept agency inquiries and to "spread the word" among faculty. Without this presence, it is less likely that faculty, tied to pursuing the same research channels they have always pursued, would have the resources, time, and perhaps inclination, to do things differently.

Many schools with a formal office or center for public health practice activities were able to calculate research dollars, time, or other activities of the school on public health practice activities.

#### ASSESSING RESEARCH AND OTHER TECHNICAL ASSISTANCE

- has a joint research arrangement occurred before 1992; after 1992
- has the school provided technical assistance to: state or federal agencies; CBOs
- describe the geographic range of programs
- does a distance learning arrangement exist
- does the school provide public health grand rounds
- is there a formal, multicomponent contractual arrangement between the school and an agency

The Rollins School of Public Health at **Emory**, for example, noted almost half a million dollars in public health practice research grants and contracts during the 1994 - 95 school year alone. Faculty at the **University of Illinois at Chicago** are required to turn in reports of service areas (including research for public health agencies) as part of their annual academic division reports.

Nearly two-thirds of the schools had a formal, multicomponent contractual arrangement\* in place with an agency. State-supported schools were especially likely to maintain these arrangements. These came with many different names - multicomponent agreement, cooperative agreements, memoranda of understanding, affiliation agreements - but all represented a formal vehicle whereby schools and agencies could pursue research, provide continuing education or training, exchange staff and faculty, and arrange student placements.

The **University of Hawaii**, for example, has an arrangement that reaches back to 1991. This memorandum of understanding with the department of health recognizes the school as a research, consulting and learning resource to the department, and further established an office within the health department for coordinating student placement and joint research. It was supplemented the following year by an agreement to establish a similar office in the school, thus allowing a channel of communication between the two. **The University of Puerto Rico** graduate school of public health has an agreement with the U.S. Bureau of the Census and the Puerto Rico Planning Board to operate a Census Data Center, thus tracking and disseminating census and health data for Puerto Rico. **Columbia University** and the New York City health department collaborated to create a model strategic plan for DOH/SPH collaborations in major urban multi-ethnic settings. The goal of this agreement is, in part, to establish a model strategic plan for permanent DOH/SPH collaborations that will not deteriorate in an ever-changing environment or from fluctuations in leadership. At **Saint Louis University**, the multicomponent agreement with the state department of health covers faculty/agency exchanges, internship and practica arrangements, appointment procedures, joint research arrangements and guidelines, technical assistance opportunities and guidelines for publishing the results of shared research.

Multicomponent agreements are an effective way of solidifying linkages, since they often initiate longer term relationships. Additionally, arrangements made between two partners often establish the school as an authority in a certain area, and additional funding (usually federal) mechanisms carry a project even further after it has been proven. But they remain only as effective as the impetus to carry them out. Indeed, it is sometimes misleading to look only at what is on paper to measure a school's success in working with governmental, private and community agencies. One agreement attached to a report spelled out the need for research collaboration, joint training and

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\* The definition of multicomponent agreement used in this document is a contractual agreement between an agency and school of public health which includes two or more practice activities and establishes relationships of benefit to both parties.

other activities, but then stated that the agreement carried no financial responsibilities or commitment to any specific project. Clearly, its use as the “umbrella” vehicle it appeared to be would have been strengthened by a commitment of resources.

Over 200 research efforts were accomplished during the period covered by the reports; these are strictly research efforts with an identified agency or community partner. (Consulting, sitting on boards and panels, doing training sessions and other types of assistance were not counted in these numbers.) There is every reason to believe, due to the difficulty in getting faculty to report and keep track of these numbers, that 200 may be only a small part of the research accomplished. Efforts such as the research support network at the **University of South Carolina** should make collecting this data easier, but also could potentially facilitate linkages between agencies and schools through electronic communication. (Incidentally, the impetus behind this electronic network linking schools and agencies with similar research interests, skills and knowledge has been to furnish a link for disease prevention activities to African American communities across South Carolina.)

Research and technical assistance projects cited in reports	
230	- public health practice research activities
92	- technical assistance arrangements with state agencies
56	- technical assistance arrangements with community-based organizations
53	- technical assistance arrangements with federal agencies
23	- technical assistance arrangements with local jurisdictions

Technical assistance - projects without a research agenda and often not covered by a contract - also made up a large part of schools’ interactions with the practice community. Hundreds of projects with federal, state and local health agencies and projects with community-based organizations were listed. Technical assistance numbers are conservative, since they were tallied from only a brief description of the activity and the name of the sponsoring agency.

Often, schools have developed a format for offering technical assistance on a formal, structural and semi-permanent arrangement. The Minnesota Technical Assistance Program provides “knowledge on tap” and technical assistance to Minnesota manufacturing and service industries. Since this program is school-administered, rather than regulatory, it encourages clients with industrial and solid waste management and pollution prevention concerns to ask difficult questions regarding their management problems. Staff have fielded over 10,000 requests for technical assistance from industry and government representatives. A technical assistance group project at **UCLA** school of public health offers a match-up function to bring together client needs and the technical expertise of the school’s faculty. And at **Tulane**, the Technical Resources Group produced a comprehensive database of faculty involved in community service, available to help apply expertise to community needs.

## CLINICAL ACTIVITIES AND THE PROVISION OF PUBLIC HEALTH

One of the essential public health services defined by the Public Health Functions Steering Committee of the U.S. Public Health Service is the provision of health care to individuals otherwise unable to obtain care. The past few years' debate over health care reform has underscored how large, and how vulnerable, a population this has proven to be.

A significant number of schools of public health have gone beyond their theoretical research-orientation and joined forces with other schools within their universities and with state and local health departments to establish clinical facilities that directly serve community needs. A system of social action community clinics sponsored by **Loma Linda University**, for example, has become so successful that, with foundation assistance, it was expanded to become an entire networked health system. The system maintains close affiliation with the community (50% of the board of directors are from the community), the San Bernardino county health department and local schools and churches. The center also exists to provide interdisciplinary training for students entering the health professions; all six schools of the university include a rotation in the clinics as part of their curriculum.

In at least one school, clinical/service arrangements can come about from a core of faculty deciding to make a commitment to community service. The Venice Comprehensive Family Health Clinic began when a group of **UCLA** faculty from the schools of public health, medicine and dentistry volunteered to develop a preventive medicine and public health practice site which could be used to train students as well as offer effective community service (a faculty requirement). From this beginning over a decade ago, the center now serves as a model for other community health centers and free clinics.

The most extensively reported system of direct service clinics were those operated through collaborative arrangements between **Columbia University** school of public health and state and local health agencies in New York. Clinics and clinical programs not only reach deep into Manhattan's neighborhoods, but also into upstate New York and beyond. Faculty have worked with the Ugandan ministry of health to provide medical care for HIV/AIDS patients and develop community education programs designed to curtail the spread of HIV.

The scope of involvement in clinical care at **Columbia** is unique. As the school stated in its final report, however, as traditional clinical activities play a crucial role in medical and nursing education, and as clinical research is an accepted activity among faculty in medical and nursing schools, then *service delivery programs are similarly crucial for teaching in schools of public health and for faculty research. School-sponsored public health practice or service programs provide a potentially valuable setting for health services-related research that can be carried out by school*

faculty. As its report states, the extent to which **Columbia** is involved in sponsoring service delivery programs represents a considerable strength.

## BARRIERS AND STRENGTHS

Schools were asked by HRSA to describe the problems that practice coordinators encountered (on an institutional level) in facilitating capacity-building relationships, as well as to recount their successes and strengths of their programs. Research strengths are discussed above; the barriers, however, deserve separate and careful consideration.

Without question, the most prevalent barrier to facilitating practice relationships within schools of public health was the lack of faculty time and resources for practice activities (the **University of Oklahoma** titled this the "universal barrier"). Faculty seemed stretched to the limits in terms of publishing, teaching and advising students; adding additional responsibilities of service, going into the community to establish new ties and linkages, and adding additional student practica advising to this schedule often seemed insupportable. This was especially a problem in schools with medical center affiliations, like **Harvard**, where many faculty have dual appointments.

### BARRIERS TO SUCCESS IN ADVANCING PRACTICE-ORIENTED RESEARCH

- lack of time/resources to devote to developing ties
- practice activities not rewarded in promotion/tenure packages
- lack of staff to develop proposals, thus limiting funding
- little time to respond to requests from practice community
- no shared vision in school governing need for practice and re-orientation of priorities
- state institution means tight budget for school
- practice community has few resources for funding research
- difficult to maintain funding to support center staff and activities

Coupled with these time constraints was the second "universal" barrier - the lack of support, recognition and reward for practice activities. Schools which placed little value on practice research were not likely to reflect this value in promotion and tenure criteria, although considerable progress has been made (see section on *Administrative Changes*.) Schools which convened faculty in self-study efforts or curriculum or tenure review committees, reported the need to address this issue first and foremost.

Agencies likewise presented administrative barriers to successful research linkages. Often, the bureaucracy of a health department was perceived as overwhelming; finding out "where to go" would alone be a time-consuming process. A few schools mentioned special efforts directed at getting agencies and school bureaucracies together in sessions or through documents designed to allow each an expanded knowledge of the other.

Additionally, many schools mentioned the very real problem that most public health

“Perhaps the greatest barrier to improving practice-oriented relationships and activities between the academic setting, the practice setting and the public is the lack of a clear conceptual model of what constitutes public health practice.”

- from *University of Pittsburgh final report*

agencies (especially on a community level) do not have the financial resources to support extensive research contracts. In a related problem, state schools experienced tight budgets for practice activities; a double problem when states not only fund the research but also the agency sponsoring the research.

Commitment from the school to supporting linkages and building teams which can sustain practice research was frequently cited as an important barrier. Many schools without offices of public health practice (or with offices that were underfunded or inadequately staffed) mentioned their inability to develop proposals or carry out adequate follow-up to research leads. The lack of faculty with degrees in public health, even, or the inability to team with colleagues from a broad spectrum of disciplines makes putting together research teams difficult in some cases.

## A “SAMPLER” of RESEARCH PROJECTS

- The graduate school of public health at the **University of Pittsburgh** partners with the Allegheny County health department to implement a federally-funded demonstration project: the Greater Pittsburgh Community Care Corporation. One of only three federally-funded demonstration projects in the nation that partners with a local health department, the corporation addresses primary care, public health and outreach needs of specific high-risk communities in Allegheny County and parts of Pittsburgh. One of the additional goals of the program is to instill an 'ethic of service' in public health students.
- The Assessment Protocol for Excellence in Public Health (APEX) project at **Columbia University** began an effort with the New York City department of health to utilize this national organizational assessment tool for small area planning in two New York City neighborhoods. After pilot-testing the model, many difficulties were associated with applying it to a decentralized organization like the department of health. The scope of the project was then tailored to fit the structure of the department, and encompassed two distinct elements: investigating the general utility of an organizational self-assessment and of community-oriented health planning at large metropolitan health departments nationwide; and, compiling a community chart-book for one New York City neighborhood for use by DOH planners and community interest groups.
- The Violence Prevention and Control Initiative at the **University of Minnesota** fosters interdisciplinary research to affect the prevention and control of violence. At least six disciplines and five colleges are represented in this initiative, which seeks not only to establish a research agenda to serve as basis for collaborative efforts, but also to inform graduate education in violence prevention and control.

- At the **University of North Carolina** School of Public Health, the Department of Environmental Sciences and Engineering has six projects underway to develop more accurate measures of the risks that chemicals in hazardous waste dump sites present to humans. Three of these are designed to determine effects of exposure levels; two programs investigate bacterial and microbial substances that may dissolve or mitigate the hazardous substance and determine ways these substances may permeate soil and water. The last project is the active modeling of a waste site.
- The Honduras 'Street Kids' program at **Tulane** is a collaboration with the departments of sociology and psychiatry to give primary care and health education to street children in Tegucigalpa, Honduras. The project is equally relevant to understanding and dealing with the health problems of homeless children in New Orleans.
- Several of the environmental health sciences faculty at **Harvard** are consulting with community residents who are concerned about the potential adverse health effects associated with electrical transformer stations in their neighborhoods. Involvement is likely to increase on this project, as very little research has been done as yet examining possible dangers of long-term exposure to electro-magnetic fields.

## SCHOOLS OF PUBLIC HEALTH IN THE NEXT CENTURY

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The changes brought about in schools of public health represent only the beginning of a process. While still operating within their capacities to provide solid research in the public health sciences - epidemiology, environmental health, biostatistics, behavioral sciences, administration and policy - schools are increasingly finding new constructs, new ways of tapping the dynamic potential that remains public health's greatest strength.

Organizations such as ASPH and its Council of Public Health Practice Coordinators,

the Council on Linkages Between Academia and Public Health Practice and the Council on Education for Public Health have already made huge strides toward giving a more practical orientation to education in schools of public health, and toward increasing the alliances that will ensure that schools are enabled and ready for the next century. The ongoing work of these groups and others has legitimized the area of public health academic/agency linkages; there is no going back.

A task force convened by ASPH is considering various ways in which schools can develop and expand distance education in public health. The group meets on a regular basis to share, among other things, information and ideas on the development of individual courses, entire degree programs and remote continuing education offerings. Each dean has named an individual to serve in this capacity in this ever-growing area of academic public health.

What remains to be seen is the level of ongoing involvement from the federal government in supporting schools of public health. While a few agencies of the Public Health Service - notably HRSA and the CDC - have made extraordinary contributions toward funding public health practice activities, their leadership has been sorely unmatched by other governmental agencies. Similarly, the degree to which state and local public health agencies can enter into various alliances for research and training is threatened by lack of support, budgetary constraints and the lack of a clear vision of the worthiness of these efforts on the part of agency leadership.

This is a crucial turning point for public health; the decisions made in the next decade will determine, to a large extent, the capacities for protecting the public's health for a long time to come.

## PRACTICE "BIOGRAPHIES" FROM 27 SCHOOLS OF PUBLIC HEALTH

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Each report contained a wealth of information about practice activities, and to condense all of this into a few short paragraphs about each school would have been impossible. What follows, therefore, is not a summary of practice activities for each school of public health, but rather a short description of what a particular school is doing in a single area of public health practice. The examples were chosen in the hope of painting a broad stroke across the canvas of public health practice, rather than to give a summary attempt at describing one school's activities against another. They are therefore a way of putting together ideas, and to show what has been

done with the hope of expanding the possibility that sharing this information will generate discussion among the schools and public health agencies.

The representations below are not meant to imply that one school surpasses another in any area portrayed. It is possible that other examples could be taken from a school's activities that would have painted a much more complete picture; however, only the reported information from the background, final and progress reports could be included. That each school's activities are frozen in the time limited in the reports is misleading; many of these programs still continue, and in fact are much stronger and more successful today than they were at the time of the reports. Some of the activities, conversely, may have been discontinued, or shifted into other programs.

### BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH

The Boston University School of Public Health received a major Robert Wood Johnson Foundation grant to create "Join Together", a national resource to assist communities across American in developing comprehensive strategies to effectively fight substance abuse. Each year the Join Together National Leadership Fellows Program recognizes outstanding grass-root community leaders and fosters needed collaboration across disciplines and sectors.

The school enjoys a reciprocally beneficial relationship with the Massachusetts health department. The DPH HIV prevention evaluation study, conducted by Boston University faculty and graduate students, has enabled the state agency to identify and prioritize which prevention strategies are most effective. MPH students have been afforded invaluable academic research experience in the field.

### COLUMBIA UNIVERSITY SCHOOL OF PUBLIC HEALTH

Columbia faculty are involved in providing public health services directly to populations in need. Beyond the traditional measurement of 'service' as the aggregate of individual faculty and student service contributions, the Columbia system of research centers, academic health centers

and hospitals provide a unique opportunity for the school to focus on topics directly applicable to the delivery of public health services. Such services have included establishing a model TB clinic, surveying pre-school immunizations in underserved Hispanic neighborhoods, and, with the New York State Department of Health, comprehensive HIV/AIDS education and care programs.

The school's extensive involvement in direct service-delivery programs is unique. If one of the goals of public health education is training students who will assume positions as managers of service delivery programs, then this system of clinics and neighborhood services can play an essential role in this training, much the same way clinical activities play a crucial role in medical and nursing education.

### EMORY UNIVERSITY, ROLLINS SCHOOL OF PUBLIC HEALTH

If you were to hire a graduate from the Rollins School of Public Health, what basic knowledge and skills would you expect that person to have? This fundamental question is the starting point for building a competency-based curriculum in SPH core courses.

After a formal task force was convened to promote and expedite the school's involvement with public health practice, it was decided (among other things) that the MPH program would be strengthened by the addition of competencies - defined by practitioners and by sources such as the forum report - in the curriculum.

Modifications were made to incorporate some of the competencies suggested by practitioners, and a two-credit required course was developed to incorporate competencies not addressed.

One benefit of extensive curriculum review is the opening of new channels for discussion among faculty and practitioners, involving each party in new ways of accomplishing effective public health delivery.

### HARVARD UNIVERSITY SCHOOL OF PUBLIC HEALTH

A field practicum requirement was introduced at Harvard in 1991. Its aim is to provide already accomplished MPH professionals (an admission requirement is an advanced degree and previous medical or public health training) with an experience to both integrate their didactic training and pursue other career paths while still a student.

Additional practica have given the school opportunities to work with and assist local health agencies. Students have made valuable contributions to local communities through practica. For example, for the past two years, students have worked with the Cambridge health department to gather and analyze data supporting a city-wide Healthy Children Task Force. The project's success was evident not only in its value to the citizens of Cambridge: the Cambridge department of health was awarded first prize from NACCHO for an abstract summarizing the program.

At the conclusion of each student's practica project, a written report and oral presentation are required. Representatives from the respective agencies are requested to attend these presentations, and in several instances agencies have asked students to again present their findings in a public forum. This is testimony not only to the caliber of the MPH students, but to the high degree of importance the school and agencies invest in the practica experience.

### JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH

Johns Hopkins has an extensive set of relationships which span the boundaries of the state of Maryland. The school operates a Training Center for Public Health Research in Hagerstown, MD where preventive medicine residents do field research on a wide range of areas related to public health. Based on the results of these studies, targeted risk behavior interventions are being developed and tested to include school-based, family behavioral and agency-based interventions.

On Maryland's eastern shore, the school has a center for research and training which is a consortium of rural counties and the Maryland health department. This center provides a placement site for students, and, through a partnership with the community to recognize needs and priorities, identified key public health issues on which to focus efforts.

Through the Health Program Alliance, faculty have provided technical, staff and planning support to county health officials statewide through a contract with the Maryland Association of County Health Officials.

## LOMA LINDA UNIVERSITY SCHOOL OF PUBLIC HEALTH

For over 25 years, the university has provided clinical care in underserved areas through a system of Social Action Community Clinics. Recently, the school procured a new, central facility to consolidate these clinics into a Social Action Community Health System (SACHS). These clinics not only provide the underserved with low cost health care, their mission is to provide *interdisciplinary* training for students in health professions through rotations among system's different components. It provides an ideal setting for intimate interaction and cooperation between academic faculty, students, agency practitioners and consumers of public health services.

The development of the Social Action Community Health System has been accomplished in close collaboration with the San Bernardino County health department, whose director sits on major policy-making boards as well as directs SACHS functions. Representatives from many community-based organizations have also been actively involved.

## SAINT LOUIS UNIVERSITY SCHOOL OF PUBLIC HEALTH

Almost a decade ago, the school of public health began a collaborative relationship that would become the Public Health Practice Initiative. Critically needed funds were found to establish and support a practice office to meet its combined mission of teaching, research and service.

The Public Health Practice Initiative is advised by a formal board, composed of directors and high-level representatives from surrounding agencies, health care organizations and the university. While the results of partnerships of this sort are often far-reaching and ongoing, some of the concrete outcomes are:

- the development of a Public Health Leadership Certificate Program and the Midwest Regional Leadership Development Conference - two continuing education initiatives for health professionals.
- establishment of a Prevention Research Center to facilitate collaborative research, leadership and practice training, and the integration of community-based prevention policy promotion into health care reform.
- faculty/practice retreats, bringing together faculty, alumnae, students and practitioners to discuss and open channels for collaboration, to review national and state priorities regarding academic/practice linkages, to draft a multicomponent agreement and to review the school's curriculum relative to practice and competencies.

Ultimately, the goal of the Public Health Practice Initiative is to provide structure and improved organization to naturally-evolving efforts between academics and practitioners to improve knowledge, skills and competencies in public health practice.

## SAN DIEGO STATE UNIVERSITY GRADUATE SCHOOL OF PUBLIC HEALTH

San Diego State University created the Institute for Public Health in 1992 to give an impetus to establishing partnerships and *functional* linkages with public health and community agencies. Since its inception, the institute has been involved in facilitating discussion and establishing an atmosphere of collaboration, and continues to serve as liaison to the community and as a vehicle for assessing the community's health education needs by:

- A continuing education needs assessment, surveying the San Diego Department of Health Services employees and evaluating faculty capacity to teach continuing education courses;
- Increasing continuing education offerings as a result of surveys and discussions between faculty, DHS staff and the institute; and
- Developing a memorandum of understanding with two county health departments to establish field placement procedures for students and to develop a set of expectations for all parties involved.

The Public Health Practice Steering Committee at the school has been an effective vehicle for facilitating communication between the school and the practice community, and for effecting positive outcomes for change.

## TULANE UNIVERSITY SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE

Community-focus has become more than an academic buzzword at Tulane. A task force of more than 60 members of the university, community, non-profits and public agencies came together to make a Community Health Strategic Plan to create partnerships which truly address community needs.

Outcomes of this program include the establishment of a school-based adolescent mental health clinic, expansion of primary care facilities to low-income neighborhoods, school health clinics to promote healthy lifestyles for children, and a five-year study in 24 elementary schools to assess school-based interventions in promoting healthful behaviors.

As an outgrowth of this program, the school formed a faculty advisory committee, and began an academic program in community health. Tulane has also instituted a program in social mobilization, to teach community leaders how to empower their communities for action.

## UNIVERSITY AT ALBANY - SUNY - SCHOOL OF PUBLIC HEALTH

The University at Albany School of Public Health opened in 1985 as a joint venture of the University at Albany and the New York State Department of Health. This partnership richly benefits the diverse student body at the school.

Many of the school's 200+ faculty work on a daily basis within the field of public health, administering major health programs for the state of New York or studying scientific or policy-oriented public health problems. Case studies described in class frequently draw upon the faculty member's own experiences in the field.

It is a central premise of the school that faculty activities, whether research, service or even teaching, serve two missions - those of the Department of Health and the university. Thus, research is often indistinguishable from the kind of scholarship activity expected of a university employee. Conversely, much of the statutory responsibility of a DOH employee is similar to the service activities that a university-paid faculty member might perform. Although this model for interaction is unique to the University at Albany, it inspires much ground for thought among linkage programs in all schools.

## UNIVERSITY OF ALABAMA AT BIRMINGHAM

## SCHOOL OF PUBLIC HEALTH

A major focus of public health practice activities at UAB was provided through the establishment of the Mid-South Program for Public Health Practice. This program, begun in 1991 through a HRSA special projects grant, focuses on the non-degree training of public health practitioners as well as coordinating student placements and providing outreach to communities unserved by schools of public health.

The Mid-South program also sponsored a Public Health Grand Rounds program, with topics identified from a regional training needs assessment. Input from over 5,000 public health practitioners underscored the need for training in a number of areas of public health concern.

Since health agency representatives in a number of southern states have indicated that their staffs need a better appreciation of what public health is, the Mid-South program has a large and important task ahead. Expanding internship opportunities, providing a lecture series for practitioners in the region using distance-based educational technology, and a leadership development package of continuing education courses are some of the outreach efforts expected to have a significant impact on promoting the understanding and goals of public health. A final priority of the Mid-South Program is to increase minority representation in the public health workforce by educational collaborations with 10 historically black colleges and universities in four states.

## UNIVERSITY OF CALIFORNIA AT BERKELEY SCHOOL OF PUBLIC HEALTH

One indicator of change in the outlook of schools of public health toward practice issues has been the growth of university-health agency collaborative research centers. Often funded through private foundations or large grants from the federal government, these centers provide not only necessary community health services, but also a research base for faculty and a placement opportunity for students.

One such center, the Center for Family and Community Health, initially began as a privately-funded consortium of community-based organizations and health departments. The center was created as a research entity to provide clinical or social services to community agencies or contribute to health planning within the community. Health practitioners were involved in grant writing and implementation questions throughout the center's development.

This and other research centers go well beyond the traditional view of 'pure' research, to encompass a new vision for public health - one with ties to academia, but strongly rooted in serving the public's health.

## UNIVERSITY OF CALIFORNIA AT LOS ANGELES SCHOOL OF PUBLIC HEALTH

Leadership and coordination of public health practice activities occurs, in part, through the school's Office of Public Health Practice Activities. Major initiatives include an extended internship program with community-based training sites that allow for year-long student placement opportunities. To encourage faculty involvement in practice activities, the office offers minigrants to faculty for practice project initiatives.

An innovative concept in administration of public health practice/academic activities is the Technical Assistance Group, which directly connects client (community) needs and faculty skills. TAG members sit in on CBO board meetings and practice committee meetings, work with government public health agencies to do needs assessment, and even created a grants calendar for health officers to review requests for proposals from government agencies. And in service to LA's major industry, TAG has developed story lines within major motion pictures, soap operas, and a TV series!

## UNIVERSITY OF ILLINOIS AT CHICAGO SCHOOL OF PUBLIC HEALTH

With the development of the Center for Public Health Practice, the University of Illinois at Chicago assumed a leadership role in advancing the field of public health academic/practice linkages. Through this center, schools of public health across the country have received technical support in advancing their own practice activities.

In the early 1990's, the school reviewed its entire curriculum to determine relevance to issues facing public health practitioners. Courses to increase team-based problem solving, give students an overview of public health practice and enhance community assessment skills were among the 13 new courses added to the curriculum, making the school one of the most comprehensive academic programs emphasizing public health practice in the country.

Additionally, the early 1990's saw the expansion of the school's continuing education offerings. Thousands of students have enrolled annually in non-credit certificate and credit non-degree courses, as well as in conferences and workshops. Around 400 students each year enroll in the Credit, Non-degree Program, taking courses which they can "bank" for later admission to a program.

## UNIVERSITY OF HAWAII SCHOOL OF PUBLIC HEALTH

The MPH program in health education is one academic department of the school with a long-standing tradition of community collaboration. From the first semester of this 16-month program until graduation, students learn in an environment which emphasizes people, their problems and their communities.

To carry out this philosophy the school established a University-Community Partnership in Community-Based Public Health Education (known as the Town and Gown Partnership.) Through this arrangement, 35 "clinical faculty" assist health education faculty in reviewing and revising curriculum, lecturing, mentoring students during a three-month summer field work placement, and supervising students on class field projects dealing with needs assessments, planning, health communication and evaluations.

Since all MPH students are required to have a period of field training, maintaining the availability of qualified sites, preceptors and committed faculty is a constant challenge. Through initiatives like the Town and Gown Partnership, the expansion and formalization of existing relationships is given new impetus, especially important on the "closed system" of an island. And by addressing the general trend of "doing more with less" Town and Gown stands as a model that can be replicated in other schools.

## UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

Developing formal relationships between public health agencies and schools of public health can often have a far-reaching impact. In 1994, the University of Massachusetts SPH initiated a new program with the Massachusetts Department of Public Health to provide training and technical assistance to its staff of prevention centers, 26 community health networks and to local boards of health. Through this DPH Interface Project, faculty have re-examined the relevance of current curriculum relative to the needs of "frontline" department personnel. In addition, they have developed criteria for certification of health promotion specialists.

As part of the DPH Interface Project, two statewide colloquia were convened to unite UMSPH faculty and senior state DPH administrators in a dialogue over the future of public health in Massachusetts. The final report, written by a faculty member, was funded through this project.

Massachusetts is a commonwealth of 351 communities, each having its own local health board or department. Board members (largely *not* trained in public health) must rely on outdated and limited information. Through grants and matching funds, the SPH has a project to update and revise the "Guidebook for Boards of Health" and to implement a training program for its use.

**UNIVERSITY OF MICHIGAN  
SCHOOL OF PUBLIC HEALTH**

The relationships formed between the school of public health and the community over the past 6 years have been especially meaningful in light of the continued funding by the Kellogg Foundation of a grant to develop a Community-Based Public Health Project. Through this grant the school has expanded its relationships with the community, has offered students increased placement opportunities and has allowed faculty the benefit of increased contacts in the practicing public health community.

UMSPH was also the recipient of a major CDC grant to create an Urban Center for Prevention Research by teaming with the Detroit City Health Department, several community-based organizations and the Henry Ford Health System of hospitals, clinics and managed care programs in Detroit. Through this grant, the center is carrying out projects to develop and study interventions to improve community health. The SPH is currently exploring ways in which it can work together with Henry Ford Health System's Managed Care College to develop training and foster team approaches to addressing critical public health problems.

**UNIVERSITY OF MINNESOTA  
SCHOOL OF PUBLIC HEALTH**

Enhancing a student's education by providing opportunities for 'real-life' experiences can occur during an MPH program in many ways. In addition to practica and internships, the division of community health education offers a masters project which involves extensive work and original research using primary data and information collected from local health providers.

Students entering this MPH program must have at least one year of prior public health experience. The goal is to design, develop, implement and evaluate a community-based health education program. Projects can encompass either development - a new program pilot-tested in the community, or evaluation - a needs assessment or evaluation of an existing program.

Past projects have included integrating public health theory and programming for the prevention of HIV infection among Minnesota youth, and a study of refugee appointment compliance for the Saint Paul health department.

These very successful experiences are only one facet of the practical experiences available. In all, over 300 students were placed in more than 125 local, national and international agencies between 1992 and 1995.

**UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL  
SCHOOL OF PUBLIC HEALTH**

UNC boasts one of the most extensive continuing education programs in the country. An ongoing needs identification is being conducted by public health practitioners, academic representatives and continuing education specialists, as part of a committee appointed jointly by the dean and the state health department. Registration fees for continuing education courses are kept low by state offset dollars. Registration figures for 89 - 94 are:

AY	# progs	# participants	# instr'l hours
89 - 90	183	7744	3052
90 - 91	159	6379	2306
91 - 92	179	7837	2678
92 - 93	231	8393	not reported
93 - 94	257	10,139	4000

The school will possibly offer entire MPH programs off-campus in the future.

The UNC School of Public Health has a long history of working with state legislators to advance public health. In 1989 the school coordinated the Legislative Action Network - a coalition working to promote public health legislation. Additionally, a bill creating a Public Health Study Commission to investigate the delivery of public health services in North Carolina was passed in part through the efforts of SPH faculty and staff. In 1992, the School of Public Health and other public health lead organizations sponsored a consensus development conference to prepare a consensus statement on the role of public health in health care reform.

## UNIVERSITY OF OKLAHOMA COLLEGE OF PUBLIC HEALTH

Very often, activities planned between partners from many areas can open the door to a multitude of outcomes beyond the original activity.

Sponsoring conferences, for example, is one way to address public health concerns that demand an interdisciplinary focus. Beyond this, conferences can result in research activities and very often lead to real change. "Addressing Violence in Oklahoma" for example, was a statewide gathering of faculty, agency personnel and community-based organizations. As a result of this conference, faculty - working with the state - began compiling statistics on violence in Oklahoma and a coalition was formed which became an ongoing violence prevention council established by the legislature. Further, faculty research on this issue, led to a course on violence as a public health issue.

Other conferences with spin-off effects on faculty research and community action dealt with issues such as healthcare reform ethics, fetal and infant mortality, strategies for rural hospitals, healthy children and environmental quality.

## UNIVERSITY OF PITTSBURGH GRADUATE SCHOOL OF PUBLIC HEALTH

Internship, practica, field experience...these programs have many names and a broad range of experiences leading to exposure to the 'real world' of public health practice.

Two departments at the University of Pittsburgh are unique in the practica experiences they offer students. The biostatistics department has a formal consulting laboratory to provide students with direct consulting experience and to expose them to actual consulting topics, including data file construction and management, study design, data analysis and the preparation of publication materials. Students provide clients with solutions to problems presented under a faculty-monitored and supervised setting. Summaries, needs and problems are brought to weekly meetings with other students and faculty advisors.

Another unique student experience is available through the genetics counseling internship program. Students receive the fundamentals of genetics counseling through observation and participation in at least 50 counseling sessions at various clinics. Currently, rotations involve three different hospitals in the Pittsburgh area, attendance at screening procedures and work on a hotline.

## UNIVERSITY OF PUERTO RICO SCHOOL OF PUBLIC HEALTH

Although an evaluative report or oral presentation of their internship is required of all students who complete practica, two certificate programs require something additional.

In the practicum course for the certificate in gerontology, students work with an aged population to develop and implement a plan of action based on the client's needs. Meetings are

held to discuss implementation of the plan, and at the end of the practicum a final report and oral presentation is evaluated by the preceptors. This is also true of the certificate program in developmental disabilities.

What sets the evaluations apart, however, is that the students are further evaluated by *the population they serve* - either the aging clients or the families in the developmental disabilities program. Students receive an added critique of their work, as well as the understanding that public health is a commitment that will affect people's lives.

## UNIVERSITY OF SOUTH CAROLINA SCHOOL OF PUBLIC HEALTH

A frequent barrier to enhancing capacity-building relationships has been the lack of formal communication channels. Whether between departments, between academic departments and public health agencies, or between students and faculty, clearer, established lines of communication are almost always needed.

The University of South Carolina has tackled this problem from many angles. First, a database was developed to consistently track student practica records across academic departments. Second, to further coordination and *encourage* student practica opportunities, the school joined the South Carolina Department of Health and Environmental Control to develop an electronic bulletin board. This enables students to more easily identify practica projects and agencies to advertise placement opportunities. Another program, the Public Health Practice List Server, will use e-mail networks to enhance communication among individuals responsible for public health practice both locally and nationally, and within schools of public health.

## UNIVERSITY OF SOUTH FLORIDA COLLEGE OF PUBLIC HEALTH

The communities served by the University of South Florida are racially and ethnically diverse, and the school is committed to seeing that diversity reflected in the emphasis and makeup of its activities. Through his involvement with historically black colleges and universities (HBCUs), the Public Health Practice Coordinator was able to include representation from these institutions on the practice advisory committee for the school. Faculty have visited various HBCUs to increase students' general knowledge of the field of public health.

The college has also developed forums and seminars to identify public health issues relevant to minority communities and to increase community involvement in addressing these issues. Recently, a seminar on environmental justice addressed the disproportionate share of environmental contamination burdening minority communities. As a result of networking accomplished through this and other outreach programs, the school has come together with a number of minority communities to do environmental risk assessments and other public health activities.

## UNIVERSITY OF TEXAS SCHOOL OF PUBLIC HEALTH

Practice-related student experiences can take a variety of forms at the University of Texas. Students may earn academic credit for an *individual studies project*. This may involve, for example, a clinical observation of supervised TB therapy for the City of Houston Health Department, or the observation and analysis of food safety procedures for a large food processing company.

*Classroom studies* are typically courses with practice objectives, drawing heavily from experiences with practice agencies and often utilizing agency staff as faculty. The course "Epidemiology of Infectious Disease" for example, pulls the student into designing an exercise and a plan for dealing with real world epidemiological problems.

*MPH thesis research* areas have included topics related to life sustaining procedures and end-of-life decisions in a county indigent care agency, developing a manual for reporting child abuse

and an inventory of planning capabilities of every local health department in Texas using the model standards concept.

## UNIVERSITY OF WASHINGTON SCHOOL OF PUBLIC HEALTH AND COMMUNITY MEDICINE

Adding a 'real-life' orientation can be a difficult adjustment for an institution with a strong research emphasis. Often, change can be spearheaded by introducing an outside player.

Assignment of a CDC liaison officer in 1987 energized relationships with state and local health departments and presented examples of how field work can yield publishable results in academic journals. This assignment was so mutually productive that it was extended to include institutional responsibility as Assistant Dean for Public Health Practice. During this tenure, the Northwest Center for Public Health Policy was also created.

A core of center affiliates and faculty members serve joint appointments as local and state health officers. A Summer Institute of Public Health Policy at the school serves a vital continuing education vehicle for public health practitioners, and greatly adds to the school's capacity for building relationships with the community.

## YALE UNIVERSITY SCHOOL OF MEDICINE, DEPARTMENT OF EPIDEMIOLOGY AND PUBLIC HEALTH

Experiential learning is basic to the mission of the MPH program at Yale, and two practica courses are required in all five core areas. Practica, which can average over 700 hours of work with an agency, allow students not only a 'grounded' foundation to their coursework, but also, often, a way of assessing interest in an area while still a student - a sort of 'mid-course correction.'

Yale has a unique process for student placements. In the fall, the school puts out a request for proposals to solicit project ideas from agencies. (This further ensures that projects are timely, relevant and meaningful to the agency and the student.) A committee of faculty and students then review the project proposals, sending appropriate ones on to the students and faculty advisors. Students then choose and interview for the projects they would like to work on.

One of the biggest public health problems confronting the state of Connecticut is lack of access to local public health services by almost a quarter of the population. To address this, the practice director is on a steering committee of agencies and local health institutions to ensure access by the year 2000. With help from the Kellogg Foundation, the school is putting together the partnerships to make this happen.

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*University of Massachusetts School of Public Health and Health Sciences* Final report “Public Health Practice Activities”, May 1995; Background report “Office of Practice Coordinator”, May 1994; Progress reports November 1994, April 1995.

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*University of North Carolina School of Public Health* Final monograph “Public Health Practice Activities 1989 - 1994” (undated); Background report “Public Health Practice Activities 1989 - 1992” (undated); “Public Health Practice Activities Updates - 1992 - 1994” and “July - December 1994.”

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*University of Pittsburgh Graduate School of Public Health* Monograph: “Practice Activities from 1992 - present”, October 1995; Background report “Public Health Practice Activities 1989 - 1992”, March 1995; Progress report - March 1995.

*University of Puerto Rico Graduate School of Public Health* Final monograph "Public Health Practice Activities 1992 - 1996", June 1996; Background report "Public Health Practice Activities 1989 - 1992", December 1995;

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*Yale University School of Medicine Department of Epidemiology and Public Health* Final monograph "Practice Activities 1992 - present", February 1995; Background report "Practice Office Background Report", (undated); Two undated progress reports.

# LIST OF PUBLIC HEALTH PRACTICE COORDINATORS

Below is a reference guide of practice coordinators in schools of public health. This list is being provided with the hope that coordinators will be called upon to generate discussions, new contacts with professionals outside their schools, and possibly new research, distance learning, technical assistance and service alliances.

*Please note: this list is current as of February, 1998. The practice coordinators on this list may or may not have been in that position at the time the HRSA purchase order reports were written.*

## ASPH Council of Public Health Practice Coordinators

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