May 31, 2006

MEMORANDUM

TO: Robert Gold
    Dean, College of Health and Human Performance

FROM: Phyllis Peres
    Associate Provost for Academic Planning and Programs

SUBJECT: Proposals to create a Department of Health Services Administration, a Department of Epidemiology and Biostatistics, and the Maryland Institute for Applied Environmental Health (PCC log nos. 05057, 05058, and 05059)

On April 27, President Mote gave final approval to your proposals to create a Department of Health Services Administration and a Department of Epidemiology and Biostatistics. As you know, the proposals were recommended for acceptance by the University Senate on April 24, 2006. Please accept my apologies for the delay in formal notification.

Additionally, the proposal to establish the Maryland Institute for Applied Environmental Health was approved on April 7 by the Senate Committee on Programs, Curricula and Courses.

The changes are formally effective July 1, 2006.

CWR/

Enclosure

cc: William Destler, Provost
    Ellin Scholnick, Associate Provost for Faculty Affairs
    James Baeder, Chair, Senate PCC
    Sarah Bauder, Office of Student Financial Aid
    Mary Giles, University Senate
    Barbara Hope, Data Administration
    Anne Turkos, Archives
MEMORANDUM

April 25, 2006

To: C.D. Mote, Jr., President

From: Adele Berlin
Chair of the University Senate

Subject: Proposal to Create a Department of Epidemiology and Biostatistics, Senate Document Number 05-06-41

I am pleased to forward for your consideration the attached report entitled, “Proposal to Create a Department of Epidemiology and Biostatistics, Senate Document Number 05-06-41.” The proposal was presented by James Baeder, Chair of the Senate Programs, Curricula, and Courses Committee. The University Senate approved the proposal at its April 24, 2006 meeting.

We appreciate your consideration of the proposal and request that you inform the Senate Office of your decision as well as any subsequent action related to your conclusion.

Enclosure: Senate Document 05-06-41

AP/MG/am

cc: William Destler, Senior Vice President for Academic Affairs & Provost
James Baeder, Chair, Senate Programs, Curricula and Courses Committee
Mary Giles, Executive Secretary and Director, University Senate
Robert Gold, College of Health and Human Performance
Phyllis Peres, Associate Provost, Academic Planning and Programs
Ellin Scholnick, Associate Provost for Faculty Affairs
Ann Wylie, President’s Chief of Staff

Approved: C.D. Mote, Jr. President

Date: 4-27-06
TRANSMITTAL AND ABSTRACT OF SENATE REPORT

Date Presented to the Senate: April 24, 2006

Presenter: Dr. James Baeder, Chair, Senate Programs, Curricula, and Courses Committee

Subject of Report: Proposal to create a Department of Epidemiology and Biostatistics

Senate Document Number: 05-06-41

Voting: (a) on resolutions or recommendations one by one, or (b) in a single vote (c) to endorse entire report

A. Statement of Issue:

The College of Health and Human Performance (HLHP) proposes to establish a Department of Epidemiology and Biostatistics as part of an overall plan to reorganize HLHP into a School of Public Health. The development of a School of Public Health will expand the College’s strengths to meet the strong need for affordable public health education and position the unit to take advantage of significant external funding opportunities. Schools of public health seeking accreditation are required by the Council on Education for Public Health (CEPH) to offer master’s of public health degree programs or concentrations in the five core areas of public health: health services administration; behavioral science/health education; biostatistics, epidemiology; and environmental health.

The proposed Department of Epidemiology and Biostatistics would build upon the existing expertise and resources of the College. The Department will require 10 FTE tenured/tenure-track faculty, at least four affiliate faculty, and one staff member. Searches for new tenure-track faculty are already underway and during the 2006-07 year, the Department will recruit additional faculty for a total of 10 FTE positions. Plans for addressing physical resource needs are also included in the full proposal.

The proposed Department would house two new concentrations in Epidemiology and Biostatistics within a revised Master of Public Health (MPH). The proposals to modify the existing accredited MPH degree are in development for consideration in early Fall 2006.
This proposal was submitted to the Senate by the Office of Academic Affairs following a favorable recommendation by the Academic Planning Advisory Committee on March 27, 2006.

B. Recommendation:

The Senate Committee on Programs, Curricula, and Courses recommends that the Senate approve the proposal to establish a Department of Epidemiology and Biostatistics.

C. Committee Work:

The Committee considered the proposal at its meeting on April 7, 2006. After discussion, the Committee approved the proposal.

D. Alternatives:

The Senate could decline to approve the creation of the department.

E. Risks:

There are no obvious risks associated with this proposal.

F. Financial Implications:

Funding sources for the proposed Department of Epidemiology and Biostatistics include funds reallocated from the College of Health and Human Performance, campus funds already committed through regular processes, and the University request for funds associated with the development of a School of Public Health. The new Department will actively seek additional funds through external funding, entrepreneurial activities, tuition resources, and donors.
THE UNIVERSITY OF MARYLAND, COLLEGE PARK
PROGRAM/CURRICULUM PROPOSAL

DIRECTIONS:
- Provide one form with original approval signatures in lines 1 - 4 for each proposed action. Keep this form to one page in length.
- Early consultation with the Office of the Associate Provost for Academic Planning & Programs is strongly recommended if there are questions or concerns, particularly with new programs.
- Please submit the signed form to Claudia Rector, Office of the Associate Provost for Academic Planning and Programs, 1119 Main Administration Building, Campus.
- Please email the rest of the proposal as an MSWord attachment to pcc-submissions@umd.edu.

DATE SUBMITTED __March 17, 2006__

COLLEGE/SCHOOL ___College of Health and Human Performance___

DEPARTMENT/PROGRAM _proposed Department of Epidemiology and Biostatistics_

PROPOSED ACTION (A separate form for each) ADD ___X___ DELETE ______ CHANGE_____

DESCRIPTION (Provide a succinct account of the proposed action. Details should be provided in an attachment. Provide old and new sample programs for curriculum changes.)

Please see attached document.

JUSTIFICATION/REASONS/RESOURCES (Briefly explain the reason for the proposed action. Identify the source of new resources that may be required. Details should be provided in an attachment.)

Please see attached document.

APPROVAL SIGNATURES

1. Department Committee Chair

2. Department Chair

3. College/School PCC Chair

4. Dean

5. Dean of the Graduate School (if required)

6. Chair, Senate PCC

7. Chair of Senate

8. Vice President for Academic Affairs & Provost
PROPOSAL TO CREATE

THE DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS
COLLEGE OF HEALTH AND HUMAN PERFORMANCE
UNIVERSITY OF MARYLAND, COLLEGE PARK

ROBERT S. GOLD, DEAN

Effective July 1, 2006
Preface

Public Health is the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention.

-Association of Schools of Public Health

In September 2004, Dr. Robert S. Gold, Dean of the College of Health and Human Performance (HLHP), proposed to the University of Maryland, College Park (UMCP) that this College be converted to a School of Public Health (SPH). Building on its existing accredited Masters of Public Health (MPH) program in Community Health – ranked 12th in the nation by U.S. News and World Report – this school would create benefits for the entire campus, including the opportunity to apply for up to $50 million dollars annually in set-aside funding from NIH and the Centers for Disease Control and Prevention. The University and System have provided support for this plan, and we will ultimately create a collaborative effort with the University of Maryland, Baltimore (UMB). Two critical building blocks for developing our SPH are creation of this department, and under separate cover, a second department of Health Services Administration.

For the last 15 months we have been completing the background work necessary to build a strong program in epidemiology and biostatistics. Dean Gold has held three HLHP retreats and college faculty and staff have provided unanimous support for this program. A committee of HLHP faculty, staff, and students has drafted a new Strategic Plan for the College. We have also crafted a Memorandum of Understanding with UMB to foster collaboration on public health initiatives. Faculty committees have carefully examined all issues relating to the creation of MPH concentrations in the two disciplines covered by this new department within the context of programs at the University System of Maryland (USM), other leading universities, and our vision for the future of public health training at the University of Maryland. During the committees’ deliberations, Drs. Gold (UMCP) and Morris (UMB) consulted with the Council on Education for Public Health (CEPH, the accrediting body for public health), three recently accredited schools of public health (Texas A & M School of Rural Public Health, University of Medicine and Dentistry of New Jersey School of Public Health, and University of Arizona Mel and Enid Zuckerman College of Public Health), and schools using the model of combined departments of epidemiology and biostatistics (e.g., Tulane University School of Public Health and Tropical Medicine). Drs. Gold and Morris made a site visit to the University of Medicine and Dentistry of New Jersey School of Public Health. Finally, Dean Gold visited and briefed all UMCP Deans about the proposed SPH and the importance of these efforts.

This document proposes to create the Department of Epidemiology and Biostatistics as a critical foundational step in developing a School of Public Health at UMCP. Subsequent proposals will propose and outline graduate programs of the highest caliber to educate Maryland students and meet the demands for public health practitioners in the State and the nation.

The University of Maryland: The State of Maryland currently lacks a public institution School of Public Health. There are excellent private Schools of Public Health at the Johns Hopkins University and in Washington, D.C. at George Washington University, but tuition costs exclude many prospective students. The state is fortunate to have two very strong potential schools, one in Baltimore and one in College Park. Both have graduate MPH programs in place. Response to these programs has been overwhelmingly positive. It is very clear that there is a strong need (and market) for affordable public health education; it is also clear that the interest in such training extends well beyond our current students. This interest includes persons considering a career in public health, as well as those who are already dealing with public health issues on a day-to-day basis and who recognize the need for additional public health training to optimize their job performance and advance their careers.

The longstanding tradition in public health has been built on the strength of clinicians who turn their attention to population based health problems. That strength is core to what the program at UMB contributes to the public health mission. More recently, public health has focused as well on the behavioral and social determinants of the health of populations – the principal strength found in the current graduate program in public health and the behavioral and social sciences strengths at UMCP. One additional strength which warrants attention is the land grant mission of the UMCP and its...
Proposal To Create The Department of Epidemiology and Biostatistics

Cooperative Extension program - which provide access to a microcosm of public health and environmental issues stretching from urban to rural settings. And, the capacity to focus on rural settings represents a significant strength, not only for the state but for our ability to train practitioners as well.

Purpose of the Proposal

The purpose of this proposal is to create the Department of Epidemiology and Biostatistics in the College of Health and Human Performance, UMCP by July 1, 2006. Under separate cover are proposals to establish Masters of Public Health concentrations in each of these two disciplines that meet the requirements for public health accreditation.

The creation of this new department is integral to efforts to establish a University of Maryland School of Public Health, now being undertaken by the Dean and faculty of the College of Health and Human Performance. The proposed School of Public Health is being developed to meet accreditation standards of the major accrediting body for schools of public health, the CEPH. CEPH requires that schools seeking accreditation offer master's degree programs in the five core areas of public health: health services administration, behavioral science/health education, biostatistics, epidemiology, and environmental health. Creation of this new department is one of the essential building blocks for meeting accreditation requirements for a School of Public Health.

Epidemiology and biostatistics are among the five foundation disciplines of public health.

What is Epidemiology?

Epidemiology is a discipline concerned with the distribution, determinants, and control of disease and health-related states across time and space in human populations. Epidemiology involves the scientific study of inherent, acquired, social, and environmental factors affecting the health and illness of individuals and populations, and the application of this knowledge to the promotion of health and the reduction of disease burden. The discipline of epidemiology provides the foundation and logic for interventions made in the interest of the public’s health.

What is Biostatistics?

Biostatistics is a discipline concerned with the theory and techniques for describing, analyzing, and interpreting health data. Although biostatistics draws on quantitative methods from fields such as statistics, operations research, economics, and mathematics, the discipline is primarily focused on their application to problems in the medical, biological, and health sciences. Because research questions in these sciences are various and complex, biostatistics has expanded its domain to include any quantitative models (not only statistical) that may be used to answer critical questions.

Overview and Rationale

Public health is concerned with protecting the health of entire populations. The field of public health draws on and applies knowledge from many different disciplines in its research, teaching, practice, and service. A 2003 Institute of Medicine (IOM) report, “Who Will Keep the Public Healthy?” identified several issues facing all cities and states, including uncertainties about the impact of environmental change on disease occurrence and an increasing recognition of the impact of lifestyle choices on health status and wellness. The IOM committee emphasized the need for health professionals to understand public health issues. The report also underscored the need for broad, interdisciplinary public health training.

The IOM report estimates that there are approximately 450,000 people employed in salaried positions in public health in the United States, with an additional 2,850,000 who volunteer their services. Nationally, it has been estimated that 80% of public health workers lack specific public health training, and only 22% of chief executives of local health departments have graduate degrees in public health. Data from the American Public Health Association (APHA) indicate that 50% of the federal public health workforce and
25% of the state public health workforce will retire in the next five years. The APHA concludes that “this massive attrition in personnel will create a critical shortage of workers that clearly can not be remedied through existing training programs and recruitment efforts.” These factors present a tremendous opportunity for a Maryland public institution to provide high quality public health training in anticipation of future public health workforce needs in Maryland and the nation.

Occupational Outlook

The impending retirements of middle and executive level health practitioners, combined with the growing demand for professionals to address public health problems, have produced a very promising occupational outlook for graduates of epidemiology and biostatistics programs. Occupational employment data from the U.S. Department of Labor, Bureau of Labor Statistics, indicates that there will be a strong demand for graduates of the new department. Specifically, these disciplines provide support for public health surveillance, research, assessment, and evaluation.


The BLS also reports the following state-by-state comparisons for the highest paying positions in biostatistics-related professions (Table 1). The 5 top paying states/areas for these positions are presented below:

Table 1: Location of Highest Paying Positions in Biostatistics-related Professions

<table>
<thead>
<tr>
<th>State</th>
<th>Hourly mean wage</th>
<th>Annual mean wage</th>
<th>% of State employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>District of Columbia</td>
<td>$41.49</td>
<td>$86,290</td>
<td>0.123%</td>
</tr>
<tr>
<td>Maryland</td>
<td>$37.18</td>
<td>$77,340</td>
<td>0.098%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$36.38</td>
<td>$75,660</td>
<td>0.023%</td>
</tr>
<tr>
<td>California</td>
<td>$35.82</td>
<td>$74,510</td>
<td>0.013%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$35.40</td>
<td>$73,620</td>
<td>0.019%</td>
</tr>
</tbody>
</table>

Demand for Public Health Degrees

At the national level, there has been a significant growth in applications for admission to schools of public health. In 2004, applications reached almost 27,000, up from approximately 18,000 in 1994 (see Figures 1 & 2).
Proposal To Create The Department of Epidemiology and Biostatistics

Figure 1: Number of Applications For Admission To Schools of Public Health 1994-2004

Source: Association of Schools of Public Health, Annual Program Survey

Figure 2: Percentage Growth In Applications To Schools of Public Health 1994-2004, By Discipline

Source: Association of Schools of Public Health, Annual Program Survey
Among the key disciplines in public health are epidemiology and biostatistics. Figure 2 illustrates the growth in applications to schools of public health by discipline. As can be seen in this figure, each of these representative disciplines has enjoyed increases over the ten year period from 1994 to 2004. However, the largest growth in demand is in the area of epidemiology (increase of 209%) and the third highest increase in demand is in biostatistics (increase of 188%).

There are two accredited schools of public health in the region that provide training in the area of epidemiology and biostatistics – The Johns Hopkins Bloomberg School of Public Health and The George Washington University School of Public Health. Table 2 presents a summary of the total number of applications to these two institutions, including the number of admissions slots offered and the yield. It is clear from these data that the current enrollment slots in these institutions do not adequately satisfy the demand.

### Table 2: Application Figures for Two Local Schools of Public Health

<table>
<thead>
<tr>
<th>School</th>
<th>Applications</th>
<th>Accepted</th>
<th>% Accepted</th>
<th>Total Enrolled</th>
<th>As % of Acceptances</th>
<th>As % of Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The George Washington University</td>
<td>991</td>
<td>738</td>
<td>74.5%</td>
<td>390</td>
<td>52.8%</td>
<td>39.4%</td>
</tr>
<tr>
<td>The Johns Hopkins University</td>
<td>2632</td>
<td>1412</td>
<td>53.6%</td>
<td>640</td>
<td>45.3%</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

Source: Association of Schools of Public Health, Annual Program Survey

### Review of Comparable Departments/Divisions at Other Institutions

**a) Peer Institutions**

The data summarized below in Table 3 provide an overview of the comparable units in our peer institutions: University of California, Berkeley; University of California, Los Angeles; University of Illinois, Chicago; University of Michigan, Ann Arbor; and University of North Carolina, Chapel Hill. This table also presents a short term projection of degree options and faculty for the proposed Department of Epidemiology and Biostatistics at UMCP.

Our peer institutions all have units that offer degrees in the areas of epidemiology and biostatistics – three as departments and two as divisions within a school of public health. The University of Illinois, Chicago has a combined division. All of our peers offer multiple graduate degree programs at both the masters and doctoral levels (MA, MS, MPH, PhD, or DrPH) in these two critical public health disciplines.

- The University of California, Berkeley offers BSPH, MPH, and PhD degrees in both epidemiology and biostatistics through separate Divisions of Biostatistics and Epidemiology in the School of Public Health.
### Table 3: Comparable Departments / Divisions At Peer Institutions

<table>
<thead>
<tr>
<th>Program</th>
<th>Unit</th>
<th>Degree Offerings</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California, Berkeley</td>
<td>Division of Biostatistics</td>
<td>BSPH Biostatistics Track, MA Biostatistics, PhD Biostatistics</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Division of Epidemiology</td>
<td>BSPH Epidemiology Track, MPH Epidemiology and Biostatistics, MS Epidemiologic Methods, PhD Epidemiology</td>
<td>8</td>
</tr>
<tr>
<td>University of California, Los Angeles</td>
<td>Department of Biostatistics</td>
<td>MPH Biostatistics, MS Biostatistics, PhD Biostatistics</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Department of Epidemiology</td>
<td>MPH Epidemiology, MS Epidemiology, DRPH Epidemiology</td>
<td>12</td>
</tr>
<tr>
<td>University of Illinois, Chicago</td>
<td>Division of Epidemiology and Biostatistics</td>
<td>MPH Epidemiology, Quantitative Methods/Biostatistics, MS Biostatistics and Epidemiology</td>
<td>26</td>
</tr>
<tr>
<td>University of Michigan, Ann Arbor</td>
<td>Department of Biostatistics</td>
<td>MS Biostatistics, Clinical Research Design and Statistical Analysis, MPH Biostatistics, PhD Biostatistics</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Department of Epidemiology</td>
<td>MPH General Epidemiology, Hospital and Molecular Epidemiology, International Health, Dental Public Health tracks, PhD Epidemiologic Science, DrPH Epidemiology</td>
<td>20</td>
</tr>
<tr>
<td>University of North Carolina, Chapel Hill</td>
<td>Department of Biostatistics</td>
<td>BSPH Public Health, MPH Biostatistics, MS Biostatistics, DrPH Biostatistics, PhD Biostatistics</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Department of Epidemiology</td>
<td>MPH Epidemiology, MSPH Epidemiology, PhD Epidemiology</td>
<td>28</td>
</tr>
<tr>
<td>University of Maryland, College Park</td>
<td>Department of Epidemiology and Biostatistics</td>
<td>Degree programs to be proposed: MPH Biostatistics (concentration), MPH Epidemiology (concentration), PhD Concentration in Behavioral Epidemiology</td>
<td>10 by 7/1/07: Up to 6 being recruited currently^1, 4 current^3</td>
</tr>
</tbody>
</table>

1. Total commitment 10 FTE T/Tk required for accreditation. Combination of support from Provost and restructuring of current college positions.
2. New Associate Dean for Research, academic appointment in proposed Department; Current search nearing completion for up to 6 Assistant, Associate, Full Professors. Depending upon applicant qualifications, faculty will be assigned to either Department of Epidemiology and Biostatistics or Program in Environmental Health.
3. Existing T/Tk faculty in current College who qualify for affiliate appointments. Over next two years, we will explore additional affiliation and adjunct appointments inside and outside UMCP.

- The University of California, Los Angeles offers an MS, MPH, DrPH, and a PhD in both disciplines through separate Departments of Biostatistics and Epidemiology located in the School of Public Health.
The University of Illinois, Chicago offers an MS in Biostatistics, and MPH and PhD degrees in both disciplines through its combined Division of Epidemiology and Biostatistics in the School of Public Health.

The University of Michigan, Ann Arbor offers MS degrees in Biostatistics in several tracks, an MPH in biostatistics and in several tracks in epidemiology, a DrPH in epidemiology, and PhD degrees in both disciplines through its separate Departments of Biostatistics and Epidemiology located in the School of Public Health.

The University of North Carolina, Chapel Hill offers BSPH, MPH, DrPH, and PhD degrees in both epidemiology and biostatistics through separate Departments of Biostatistics and Epidemiology in the School of Public Health.

b) The University System of Maryland

The UMB offers MPH concentrations in Epidemiology and Biostatistics, an MS in Epidemiology and Preventive Medicine, an MS in applied mathematics/biostatistics (jointly with UMBC), and a PhD in Epidemiology with an emphasis on research to determine causal relationships in biomedical settings. None of these programs is currently accredited by CEPH.

No other stand-alone MA, MS, or PhD degree programs exist in our system in biostatistics, although there are several graduate degrees in other related fields of statistics, including measurement, mathematical statistics, and program evaluation in College Park and Baltimore County.

University of Maryland University College offers a MS degree in health care administration through its Department of Health Care Administration. There are no public health degrees in either epidemiology or biostatistics.

c) State of Maryland

Two universities have biostatistics and epidemiology programs:

The Johns Hopkins University has a Department of Biostatistics that offers doctoral (PhD) and master of science (ScM) degrees, as well as a master of health science (MHS) in biostatistics for students earning a PhD in another department of the School. The University also offers the following degree programs: master of health science (MHS), doctor of science (ScD), master of science (ScM), doctor of public health (DrPH), and doctor of philosophy (PhD) in diverse disciplines within epidemiology. This school of public health is accredited by CEPH.

Morgan State University offers a CEPH accredited Master of Public Health degree and has recently announced a School of Public Health and Policy, but the University has neither a department nor a degree in epidemiology or biostatistics at this time.

d) Washington, D.C. and Virginia

There are 6 universities in this geographic area that have related departments with degrees at the master’s level.

The George Washington University School of Public Health and Health Sciences is accredited by CEPH, and the School’s Department of Epidemiology and Biostatistics offers a master of public health degree (MPH) in Epidemiology and Biostatistics.
Proposal To Create The Department of Epidemiology and Biostatistics

- Georgetown University has a School of Nursing and Health Studies but the School has no comparable departments or degree programs in epidemiology or biostatistics.

- James Madison University Department of Health Science, in the College of Integrated Science and Technology, offers both BS and MS concentrations in public health. The program is not accredited by CEPH and there are no accredited MPH programs in either epidemiology or biostatistics.

- Virginia Commonwealth University in Richmond has a Department of Epidemiology and Community Health that offers 4 tracks in a CEPH accredited MPH Program. These tracks include epidemiology, environmental health, addiction studies, and a generalist option.

- Marymount University in Arlington, Virginia has a School of Health Professions that does not offer any graduate degrees in these two disciplines.

- George Mason University College of Nursing and Health Science (soon to be the College of Health and Human Services) offers a graduate degree with a concentration in epidemiology and biostatistics. It is not a CEPH accredited MPH program.

Impact on the State of Maryland

A Department of Epidemiology and Biostatistics at UMCP would produce specific benefits for the State of Maryland:

- Research on existing and emerging health needs in the State of Maryland would be conducted.

- A cadre of practitioners would be trained in epidemiology and biostatistics to address key public health needs in Maryland and the nation, as expressed in an attached letter of support from the National Center for Health Statistics of the U.S. Centers for Disease Control and Prevention.

- Continuing education and research partnerships would be created with the Community Health Practice Division of the Maryland Department of Health and Mental Hygiene, as expressed in an attached letter of support from its Director.

- New, cutting-edge, interdisciplinary collaborations addressing broad public health issues could be created on our campus through joint research, education, and outreach programs. For example, the proposed Department of Epidemiology and Biostatistics might link with the Fischell Department of Bioengineering to collaborate on resolving problems that impact our capacity for monitoring and surveillance of health problems in Maryland. The Department might also link with the Department of Educational Measurement and Statistics and/or the joint Program in Survey Methodology to create collaborative research and service initiatives directly benefiting the state.

Public health and health services now comprise the largest industry in the United States, producing nearly one seventh of our gross national product. The Department of Epidemiology and Biostatistics is designed to provide research, education, and service for the broader good of its students, the State of Maryland, and the nation.

The Department of Epidemiology and Biostatistics

The Department of Epidemiology and Biostatistics is one of two new departments needed to complete the requirements for an accredited School of Public Health at the UMCP. The expertise in this new department will make it a focal point for support of interdisciplinary research and outreach in health areas involving departments/programs within the college and University.
Proposal To Create The Department of Epidemiology and Biostatistics

The primary mission of the Department of Epidemiology and Biostatistics will be:

**to prepare students for the expert application of biostatistical, epidemiological, and health services research methods and to improve population health.**

Graduate students will complete rigorous, multi-disciplinary foundational coursework in the core public health areas and in the specialized areas of epidemiology, biostatistics, research design and methods, information systems, health technology assessment, and translational research in public health. Their education will be enhanced through an internship and a capstone experience. Students will have the opportunity for significant involvement with the extensive network of public health and health services organizations in Maryland, many of which are already linked to the College and the University.

**Human Resource Requirements**

The new department will build upon faculty, resources, and capabilities in the existing College, as well as add additional resources over time. The College now has 6 full-time tenured/tenure track faculty members who will contribute to the new department as affiliate faculty (Drs. Gold, Hofferth, Howard, Hsu, Wang, and Young). As described earlier, they will continue to serve in their current departments but will become affiliate faculty who support the new department. Dean Gold has already obtained up to 7 new tenure track lines that will be assigned to this department and/or a related research institute in environmental health. He will also change his own academic affiliation to the new department based on his post-doctoral training and work. Searches for these new faculty positions are now underway and will be completed by July 1, 2006. New faculty hired with appropriate credentials on T/Tk lines as a result of these searches will have their full-time academic affiliation in the new department. During the next academic year (2006-2007) the new department will recruit an additional set of faculty to bring the FTE count up to 10 full-time tenured/tenure track appointments. One of the initial appointments will be designated Interim Chair for the new department. Building on our existing resource base ensures that the new department will be able to operate efficiently and effectively, with adequate infrastructure, human resources, physical resources, and financial resources.

The total human resource requirements of the new department will be a chair and 9 other FTE tenured/tenure track faculty (the minimum required by the accrediting body), at least 4 affiliate faculty members, and an administrative assistant provided by the College. The chair will report to the Dean of HLHP. The chair will have academic and administrative oversight of the department, its programs and its centers. Table 4 presents an initial view of the faculty for this unit, including their rank and specialization.

All faculty will have degrees and backgrounds in epidemiology, biostatistics, demography, quantitative statistics, or related fields. It is anticipated that the department faculty will continue to grow through fundraising for endowed chairs, entrepreneurial activities (e.g., teaching at Shady Grove), and externally funded grants and contracts. Additional College Park Professors, professors of practice, and adjunct professors will provide valuable real world experience in the classroom and in internship placements.

Faculty in place during the Fall 2006 semester will be responsible for setting up and finalizing the operational structure of the department, including governance, committee structures, and long-term strategic planning that supports the plans of the college and the University. The faculty will also develop their department’s catalog of courses and begin participating in college and University committees. It is also an expectation that, in return for no initial teaching assignments, each faculty member will submit at least two NIH or CDC investigator-initiated proposals during his/her first year on campus. The new chair will be selected from among the new hires and will hold a 12-month appointment. The College Dean’s Office will provide standard support services for the new faculty members. Web, IT, grants management, and fundraising/development assistance will be handled in this manner.
### Table 4: Initial Proposed Faculty Members for Department of Epidemiology and Biostatistics

<table>
<thead>
<tr>
<th>Name</th>
<th>Rank</th>
<th>Current Unit</th>
<th>Specialization</th>
<th>Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold, Robert S., PhD, DrPH</td>
<td>Professor and Dean</td>
<td>Public and Community Health</td>
<td>Epidemiology: public health informatics, surveillance systems in public health</td>
<td>Full-time academic appointment</td>
</tr>
<tr>
<td>Hofferth, Sandra, PhD</td>
<td>Professor</td>
<td>Family Studies</td>
<td>Family demography: child care, childhood obesity, and public policy</td>
<td>Affiliate appointment</td>
</tr>
<tr>
<td>Howard, Donna, DrPH, MPH</td>
<td>Associate Professor</td>
<td>Public and Community Health</td>
<td>Epidemiology: adolescent engagement in risk and protective behaviors</td>
<td>Affiliate appointment</td>
</tr>
<tr>
<td>Hsu, Chiehwen Ed, PhD, MS, MPH</td>
<td>Assistant Professor</td>
<td>Public and Community Health</td>
<td>Epidemiology: application of information technology, particularly the use of geographic information systems (GIS) in the improvement of health surveillance and public health preparedness</td>
<td>Affiliate appointment</td>
</tr>
<tr>
<td>Wang, Min Qi, PhD</td>
<td>Professor</td>
<td>Public and Community Health</td>
<td>Biostatistics: public health surveillance systems, health risk behavior reductions, drug use and HIV risk-related behaviors, secondary data analyses</td>
<td>Affiliate appointment</td>
</tr>
<tr>
<td>Young, Deborah, PhD, MBA</td>
<td>Associate Professor</td>
<td>Kinesiology</td>
<td>Epidemiology: community-based physical activity interventions, determinants of physical activity</td>
<td>Affiliate appointment</td>
</tr>
<tr>
<td>TBN (7/06)</td>
<td>Associate Dean for Research</td>
<td>Epidemiology or biostatistics: depending upon results of the search</td>
<td>Full-time academic appointment</td>
<td></td>
</tr>
<tr>
<td>TBN (7/06)</td>
<td>Professor</td>
<td>Epidemiology: Chair of the Department, specialization dependent upon search results</td>
<td>Full-time academic appointment</td>
<td></td>
</tr>
<tr>
<td>TBN (7/06)</td>
<td>Assistant Professor</td>
<td>Biostatistics: specialization dependent upon search results</td>
<td>Full-time academic appointment</td>
<td></td>
</tr>
<tr>
<td>TBN (7/07)</td>
<td>Assistant Professor</td>
<td>Biostatistics: specialization dependent upon search results</td>
<td>Full-time academic appointment</td>
<td></td>
</tr>
<tr>
<td>TBN (7/07)</td>
<td>Assistant Professor</td>
<td>Biostatistics: specialization dependent upon search results</td>
<td>Full-time academic appointment</td>
<td></td>
</tr>
<tr>
<td>TBN (7/07)</td>
<td>Assistant Professor</td>
<td>Biostatistics: specialization dependent upon search results</td>
<td>Full-time academic appointment</td>
<td></td>
</tr>
</tbody>
</table>

During the second year of the department, 5 teaching assistants will be employed. These TAs will support faculty instructional activities by providing support for the core biostatistics and epidemiology courses required of all MPH students in the school.

Figure 3, located at the end of this document, contains a proposed organizational chart for the Department of Epidemiology and Biostatistics.
Physical Resource Requirements

As a result of an efficiency and effectiveness review, the Dean of HLHP has reclaimed space in the HHP Building (#255) that will provide sufficient administrative and faculty office space for the new department. This space is also adequate to cover projected faculty research needs. Minor renovations to the space will be required but will be handled by the College Dean.

Financial Resource Requirements

The financial requirements of the proposed Department of Epidemiology and Biostatistics are realistic and limited in nature. These requirements will be largely met through reallocation within the existing College budget and the University request for operating dollars necessary for a new School of Public Health. The new Department will plan an aggressive campaign for additional funds, to be secured through external funding, entrepreneurial activities, tuition resources, and gifts stemming from donor support of the new department and School of Public Health.

Anticipated Student Load

The Department of Epidemiology and Biostatistics will support two MPH concentrations in the new School of Public Health – one in each of the two disciplines. We anticipate growth in student numbers until we reach a steady state in year 3. Steady state will be achieved at 25 full-time and 10 part-time students in each of the two disciplines.

Letters of Support

Letters of support for the new Department of Epidemiology and Biostatistics are provided from relevant UMCP Deans and Chairs, and from the Maryland Department of Health and Mental Hygiene.
Figure 3: Proposed Organizational Chart for the Department of Epidemiology and Biostatistics
February 24, 2006

Dr. William Destler  
Senior VP Academic Affairs and Provost  
University of Maryland College Park  
1119 Main Administration  
College Park, MD 20742-5031

Dear Dr. Destler

I am writing this letter in support of two new departments in the College of Health and Human Performance (HLHP): The Department of Public Health Services Administration, and The Department of Epidemiology and Biostatistics. I recognize that these are essential steps towards the reshaping of HLHP into a School of Public Health on the University of Maryland, College Park Campus. This is an opportune time for the creation of a public institution school of public health in the State of Maryland.

I recognize the importance of these departments and the subsequent degree programs that will be proposed both to the new school and to our campus. Masters degrees in Health Services Administration (MHSA) and Public Health (mph) degrees will represent exciting new opportunities for our campus and are likely to draw talented students to the campus from the State and beyond. We look forward to collaborating with these departments within the new School of Public Health and anticipate high levels of collaboration between our faculties and students. We anticipate students from their newly proposed programs taking critical courses in our college and our students to benefit from the specialized training that will be offered in these new departments.

Finally, we look forward to broader collaboration with new faculty from these departments on National Institutes of Health and Centers for Disease Control and Prevention grant opportunities that will be available to schools of public health.

I enthusiastically support the new Departments of Public Health Services Administration and Epidemiology and Biostatistics.

Sincerely,

Edna Mora Szymanski  
Dean
February 27, 2006

Dr. William Destler  
Senior Vice President for Academic Affairs and Provost  
University of Maryland College Park  
1119 Main Administration  
College Park, Maryland 20742-5031

Dear Dr. Destler:

I am writing this letter to indicate my support for the creation of two new departments in the College of Health and Human Performance (HLHP): The Department of Public Health Services Administration, and The Department of Epidemiology and Biostatistics. I recognize that the creation of these departments is an essential step towards the reshaping of HLHP into a School of Public Health on the University of Maryland, College Park Campus. This is an opportune time for the creation of a school of public health at a public university in the State of Maryland.

The research and educational offerings that will be provided by the faculty in these departments will help the campus move forward on its march to excellence. The subsequent degree programs that will be proposed will provide exciting opportunities for our students and critical training for health professionals in the State. Masters degrees in Health Services Administration (MHSA) and Public Health (MPH) will allow us to move ever closer to our goal of establishing UMCP as the institution of choice for high quality students from the State and beyond. Given our broad interest in many aspects of health, we look forward to collaborating with these departments within the new School of Public Health. This cross fertilization will undoubtedly enhance the research and graduate level teaching programs both in BSOS and the new School of Public Health.

While the pedagogical benefits from the creation of these departments are large, the creation of this school will also open the door to new funding sources for our research programs. We look forward to broader collaboration with new faculty from these departments on National Institutes of Health and Centers for Disease Control and Prevention grant opportunities that will be available to schools of public health.

I enthusiastically support the new Departments of Public Health Services Administration and Epidemiology and Biostatistics.

Sincerely,

Edward Montgomery  
Professor and Dean
14 March 2006

TO: William Destler, Provost
FROM: Steve Fetter
SUBJECT: New Department of Public Health Services Administration

I support the creation of the proposed new Department of Public Health Services Administration in the College of Health and Human Performance. Establishing such a department is an essential step in transforming the College into an accredited School of Public Health—a goal that is supported by the entire faculty of the School of Public Policy.

You are no doubt aware of the many advantages an accredited School of Public Health could bring to the broader university. I would like to emphasize the potential advantages for the School of Public Policy. Health care accounts for large and growing fraction of the U.S. economy. Debates about health policy are sure to be a major feature of U.S. domestic politics for the foreseeable future. "Health policy and management" is one of the 10 public affairs specialties ranked by U.S. News and World Report; most of the universities ranked in the top 10 overall—Syracuse, Harvard, Berkeley, Carnegie Mellon, Michigan, Duke—are also ranked in the top 10 in health policy. Visitors to the Maryland School of Public Policy have often noted with surprise our lack of a health policy specialization.

A Department of Health Services Administration within a School of Public Health would create opportunities for collaboration with School of Public Policy. Students from their proposed programs could take courses in our School, and our students could benefit from the specialized training that would be offered in the new department. We could use this opportunity to expand our offerings in health policy, create a health policy specialization, and perhaps even create joint degree programs. There would also be opportunities for faculty collaboration, particularly in pursuing grants—from the National Institutes of Health and Centers for Disease Control and Prevention—that are available only to schools of public health.
### TABLE 1: RESOURCES

<table>
<thead>
<tr>
<th>Resources Categories</th>
<th>Fall 2006</th>
<th>Fall 2007</th>
<th>Fall 2008</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Allocated funds (base budget)</td>
<td>$683,602</td>
<td>$1,056,085</td>
<td>$1,098,328</td>
<td>$1,142,262</td>
<td>$1,187,952</td>
<td>$1,235,470</td>
<td>$1,284,889</td>
</tr>
<tr>
<td>1a. One time funds</td>
<td>$40,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>2. Tuition/Fee Revenue Subject to Approval (= 75% of [c + g] below)</td>
<td>$0</td>
<td>$59,931</td>
<td>$109,101</td>
<td>$122,132</td>
<td>$127,421</td>
<td>$132,940</td>
<td>$138,698</td>
</tr>
<tr>
<td>a. #FT Students</td>
<td>0</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>b. Annual Tuition/Fee Rate Per Credit Hour</td>
<td>$4,716</td>
<td>$4,928</td>
<td>$5,150</td>
<td>$5,382</td>
<td>$5,624</td>
<td>$5,677</td>
<td>$6,141</td>
</tr>
<tr>
<td>c. Annual Full Time Revenue (a x b)</td>
<td>$0</td>
<td>$49,282</td>
<td>$103,000</td>
<td>$107,635</td>
<td>$112,478</td>
<td>$117,540</td>
<td>$122,829</td>
</tr>
<tr>
<td>d. # Part Time Students</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>e. Credit Hour Rate Per Credit Hour</td>
<td>$409</td>
<td>$425</td>
<td>$442</td>
<td>$460</td>
<td>$478</td>
<td>$498</td>
<td>$518</td>
</tr>
<tr>
<td>f. Annual Credit Hours</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>g. Annual Part Time Revenue (d x e x f)</td>
<td>$0</td>
<td>$30,626</td>
<td>$42,468</td>
<td>$55,208</td>
<td>$57,417</td>
<td>$59,713</td>
<td>$62,102</td>
</tr>
<tr>
<td>3. 5 Graduate Assistantships (@$13,820)</td>
<td>$74,739</td>
<td>$77,728</td>
<td>$80,837</td>
<td>$84,071</td>
<td>$87,434</td>
<td>$90,931</td>
<td></td>
</tr>
<tr>
<td>4. Other Sources</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total (Add 1 - 4)</td>
<td>$723,602</td>
<td>$1,116,016</td>
<td>$1,207,429</td>
<td>$1,264,394</td>
<td>$1,315,373</td>
<td>$1,368,410</td>
<td>$1,423,587</td>
</tr>
</tbody>
</table>
### TABLE 2: EXPENDITURES

<table>
<thead>
<tr>
<th>Expenditure Categories</th>
<th>Fall 2006</th>
<th>Fall 2007</th>
<th>Fall 2008</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Faculty Expenses (b + c below)</td>
<td>$643,602</td>
<td>$939,746</td>
<td>$977,336</td>
<td>$1,016,430</td>
<td>$1,057,087</td>
<td>$1,099,370</td>
<td>$1,143,345</td>
</tr>
<tr>
<td>a. # FTE</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>b. Total Salary</td>
<td>$643,602</td>
<td>$939,746</td>
<td>$977,336</td>
<td>$1,016,430</td>
<td>$1,057,087</td>
<td>$1,099,370</td>
<td>$1,143,345</td>
</tr>
<tr>
<td>c. Total Benefits</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2. Total Administrative Staff Expenses (b + c below)</td>
<td>$40,000</td>
<td>$41,600</td>
<td>$43,264</td>
<td>$44,995</td>
<td>$46,794</td>
<td>$48,666</td>
<td>$50,613</td>
</tr>
<tr>
<td>a. # FTE</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b. Total Salary</td>
<td>$40,000</td>
<td>$41,600</td>
<td>$43,264</td>
<td>$44,995</td>
<td>$46,794</td>
<td>$48,666</td>
<td>$50,613</td>
</tr>
<tr>
<td>c. Total Benefits</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>3. Total Student Support Staff Expenses (b + c below)</td>
<td>$0</td>
<td>$72,370</td>
<td>$75,265</td>
<td>$78,275</td>
<td>$81,406</td>
<td>$84,662</td>
<td>$88,049</td>
</tr>
<tr>
<td>a. # FTE</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>b. Total Salary</td>
<td>$0</td>
<td>$72,370</td>
<td>$75,265</td>
<td>$78,275</td>
<td>$81,406</td>
<td>$84,662</td>
<td>$88,049</td>
</tr>
<tr>
<td>c. Total Benefits</td>
<td>$0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>4. Equipment (computers and printers)</td>
<td>$7,500</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>5. Library</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>6. New or Renovated Space</td>
<td>$25,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>7. Other expenses</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>Total Expenditures (Add 1 - 7)</strong></td>
<td>$726,102</td>
<td>$1,068,716</td>
<td>$1,110,865</td>
<td>$1,154,700</td>
<td>$1,200,288</td>
<td>$1,247,699</td>
<td>$1,297,007</td>
</tr>
<tr>
<td><strong>Total Resources</strong></td>
<td>$723,602</td>
<td>$1,116,016</td>
<td>$1,207,429</td>
<td>$1,264,394</td>
<td>$1,315,373</td>
<td>$1,368,410</td>
<td>$1,423,587</td>
</tr>
<tr>
<td><strong>Net (Resources - Expenditures)</strong></td>
<td>-$2,500</td>
<td>$47,300</td>
<td>$96,564</td>
<td>$109,694</td>
<td>$115,086</td>
<td>$120,711</td>
<td>$126,580</td>
</tr>
</tbody>
</table>
Notes:

1. Allocated funds based on current College designated funds. The listing below contains the raw data for these initial resources. This information is for the Provost’s office.
2. From the raw material listed below, we began with an assumption that existing dollars would be escalated by COLA and merit dollars (average annual escalation 4.0%).
3. Fall 2006 we expect to add new faculty – three Assistant Professorial Appointments at $60,000 each added to the faculty pool that the Dean will take from the Provost’s allocation (April 2005).
4. Fall 2007 we expect to add four new faculty – three Assistant Professorial Appointments at $60,000 each, and one Associate Professorial appointment at $80,000 to the faculty pool that the Dean will take from the Provost’s allocation (April 2006).
5. For Fall 2007 we will request University support for the addition of five new graduate assistant lines (@ $13,820 appropriately escalated).
6. With Provostial and APAC approval, we will request 75% return on tuition revenues back to Department until department reaches steady state in year 6 (Fall 2011).

<table>
<thead>
<tr>
<th>Department of Epidemiology and Biostatistics</th>
<th>FTE</th>
<th>Salary</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert S. Gold, academic appointment moved to new department</td>
<td>1.00</td>
<td>$196,153</td>
<td>$196,153</td>
</tr>
<tr>
<td>Professor Min Qi Wang</td>
<td>1.00</td>
<td>$84,232</td>
<td>$84,232</td>
</tr>
<tr>
<td>Associate Professor Deborah Young</td>
<td>0.20</td>
<td>$75,843</td>
<td>$15,169</td>
</tr>
<tr>
<td>Associate Professor Donna Howard</td>
<td>0.20</td>
<td>$66,474</td>
<td>$13,295</td>
</tr>
<tr>
<td>Associate Dean for Research (Academic appointment in new department)</td>
<td>1.00</td>
<td>$130,000</td>
<td>$130,000</td>
</tr>
<tr>
<td>Three Assistant Professorial Appointments in Epidemiology TBN (Fall 2006)</td>
<td>3.00</td>
<td>$60,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>Three Assistant Professorial Appointments in Biostatistics TBN (Fall 2007)</td>
<td>3.00</td>
<td>$60,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>Associate Professor Appointment in Biostatistics TBN (Fall 2007)</td>
<td>1.00</td>
<td>$80,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Administrative Assistant Appointment TBN (Fall 2006)</td>
<td>1.00</td>
<td>$40,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>Total Salaries for Faculty and Staff</td>
<td>11.40</td>
<td></td>
<td>$918,848</td>
</tr>
<tr>
<td>Total Existing Salaries Fall 2006</td>
<td></td>
<td></td>
<td>$308,848</td>
</tr>
<tr>
<td>Total New Salaries Fall 2006</td>
<td></td>
<td></td>
<td>$350,000</td>
</tr>
<tr>
<td>Total New Salaries Fall 2007</td>
<td></td>
<td></td>
<td>$260,000</td>
</tr>
</tbody>
</table>