

UNIVERSITY OF MINNESOTA  
Graduate School

Minutes, Graduate School Executive Committee  
Meeting of Thursday, February 27, 1986  
2:15 p.m., 303 Johnston Hall

Present: Faculty representatives--Professors Ellis S. Benson, Kendall W. Corbin, Timothy Nantell, Stephen Prager, Clark Starr, Gerhard Weiss; administrative representatives--Deans Robert T. Holt (Chair), Judson D. Sheridan, Kenneth Zimmerman; Duluth representative--Professor Stephen C. Hedman; student representatives--Stefano Romagnoli, Robert Myers; Graduate School Fellowship Committee representative--Professor Mark Snyder; Civil Service representative--Karen Starry; guests--Professors Charles E. Daniels, Robert P. Elde, Anne I. Goldman; staff--John T. Hatten, Andrew J. Hein, Myrna Smith; secretary--Vicki Field

I. FOR ACTION

A. Approval of the Minutes of the November 19 and 26, 1985 Meetings

The minutes were approved as submitted.

B. Proposal for a Ph.D. Degree Program in Neuroscience

Dean Holt reported that the proposal for a Ph.D. degree program in Neuroscience had been reviewed by both the Health Sciences, and the Plant and Animal Sciences, Policy and Review Councils. Professor Corbin stated that the Plant and Animal Sciences group had voted unanimously to recommend approval of the proposal, with the understanding that points raised in the Council's discussion would be taken into consideration. He noted that while the proposal mentions the possible loss of high quality faculty and students if a Ph.D. program is not implemented in this field, such losses have in fact already occurred. Professor Benson reported that the Health Sciences Council had also voted unanimously in favor of the proposal.

Professor Elde summarized the principal reasons for proposing a doctoral program in Neuroscience, as described on pp. 2-3 and 8-9 of the proposal. He said that over the last 15 years, Neuroscience has evolved into a major discipline in the biomedical area, and membership in the national professional society (the Society for Neuroscience) currently exceeds 10,000 individuals. More federal research funding is also being devoted to this area. Interest in Neuroscience has developed at Minnesota, although faculty and students with a Neuroscience focus are scattered around the University. This lack of coherence and visibility has led to a failure to attract students who wish to do doctoral work in Neuroscience, Professor Elde stated. He added that the Committee on Neuroscience, which developed the proposal, consulted with many bio-medical departments, and these expressed broad support for the program.

Dean Holt pointed to the changing nature of the biological sciences and said both the Graduate School and University will need to make adjustments to accommodate these changes. The proposed Neuroscience program is an example of such an adjustment, he noted. Much support

exists within the University for the development of the biological sciences, and two joint Graduate School/Medical School endowed chairs have already been designated for Neuroscience. This and other biology-based, interdisciplinary graduate programs raise questions concerning the Graduate School's governance structure and organization, Dean Holt stated; for instance, on which Policy and Review Council would Neuroscience be appropriately represented? It was mentioned incidentally that the University of Wisconsin has awarded over 60 Ph.D. degrees in Neuroscience in less than a decade.

A motion to approve the proposal for a Ph.D. degree program in Neuroscience was unanimously approved.

C. Request to Change the Name of the Graduate Degree Program in Biometry and Health Information Systems to Biometry

Dean Holt reported that the Health Sciences Policy and Review Council had voted unanimously to recommend approval of the proposed name change. The Executive Committee also voted without dissent to approve the requested change. (There was no discussion.)

D. Request to Change the Name of the Graduate Degree Program in Hospital Pharmacy to Hospital and Institutional Pharmacy

Dean Holt reported that the Health Sciences Council had voted unanimously to recommend approval of the proposed name change. Executive Committee members also voted without dissent to approve the requested change. (There was no discussion.) (Proposal was not approved by Academic Affairs.)

E. Request to Terminate the Master of Social Work (M.S.W.) Degree Program at Duluth

Dean Holt reported that this item had been taken off the Committee's agenda, since the Social Sciences Policy and Review Council had voted to table action on the request. Professor Nantell explained that a new M.S.W. degree program was planned at Duluth, for which a proposal will be submitted at a later date. In view of this, the Council saw no need to act on the request to discontinue the degree. (Memo of 12/18/85 attached.)

## II. FOR DISCUSSION

Dean Holt called attention to Professor Michael Hancher's letters of October 28, 1985 to Dean Zimmerman and of December 4, 1985 to Professor Frank Braun, which had been distributed with the agenda. At issue was a policy change enacted by the College of Education Student Affairs Office concerning contents of student placement files and effects of the change on doctoral students in other areas of the University. ("The following items are no longer permitted in placement files: transcripts, resumés or vitas, personal statements, professional licenses, publications lists, dissertation abstracts and copies of diplomas or certificates.") The College of Education Placement Office has agreed to delay implementation of this change for doctoral candidates in the English graduate program

until after the current academic year, Professor Weiss reported. The program would like the Graduate School to consider what central facilities might be provided for collecting dossier materials and mailing student placement files for 1987 and beyond, however. Professor Weiss added that the Language, Literature and Arts Policy and Review Council had not been able to resolve the issue and agreed that the matter should be raised with the Executive Committee.

A lengthy discussion ensued. Professor Prager asked if confidentiality of student records was of concern to programs that preferred a centralized placement service. Professor Weiss said this was not the primary issue; rather, many departments are not adequately staffed to assume this responsibility. The College of Liberal Arts Career Development Office was also mentioned, and some uncertainty was expressed regarding the nature of the services provided by this office. Dean Holt said he was reluctant to involve the Graduate School in student placement activities, since it does not have the manpower required to offer this service to all graduate students. Dean Sheridan observed that a centralized placement service tends to promote use of the same materials--including the same letters of recommendation--for different positions, as well as for different kinds of positions. This may have disadvantages, he pointed out. Dean Holt noted that some programs (for example, those in the Institute of Technology) view placement as the responsibility of the student's adviser. Mr. Myers believed the abbreviated placement service offered by the College of Education would be sufficient, and he noted that the shortened file would nevertheless contain the most important elements. Professor Prager favored having individual departments provide placement services, since departments know their own students best and are therefore best able to assist them in finding employment. Dean Holt suggested that if staffing and budget constraints would not prevent departments from undertaking this responsibility, the Graduate School could sponsor workshops for programs that felt they needed assistance in setting up a departmental placement service. He mentioned the ease in maintaining placement files introduced by word-processing equipment. Professor Snyder pointed out, however, that the clerical staff of many departments are already overburdened and could not easily take on this additional task unless the service was fee-supported.

No consensus was reached. Dean Holt agreed that the issue must be resolved and said that he and Dean Zimmerman would further explore the matter with the English graduate program and attempt to identify a solution.

### III. FOR INFORMATION

#### A. Combined B.L.A./M.L.A. Degree Program

Dean Holt reported that the proposal for a combined B.L.A./M.L.A. degree program had been presented for information to both the Physical Sciences, and the Plant and Animal Sciences, Councils. He noted that the proposal

primarily affects the B.L.A. degree, the professional degree in the field of Landscape Architecture. (Copy of document attached.)

B. Proposal for a 69 Credit Advanced Standing Program for the Master of Social Work (M.S.W.) Degree, Twin Cities Campus

Dean Holt reported that the proposal had been presented to the Social Sciences Council as a point of information. Professor Nantell added that there was no discussion. Dean Holt briefly described the rationale underlying the proposal, as stated in Professor Burton Galaway's letter of December 10, 1985 to Dean Holt, which accompanied the agenda. (Copy of correspondence attached with these minutes.)

C. Dean's Report

Dean Holt reported that this quarter he had addressed all six Policy and Review Councils regarding the reorganization of several key Graduate School offices, largely as a result of a recent, sizable increase in the number of international students applying to and enrolling in Graduate School programs, and the growing number of formal exchange agreements between the University of Minnesota and foreign institutions. Dean Holt said he has asked Dean Hein, the Graduate School's expert on international student affairs, to oversee policy and administrative issues relating to international education at the graduate level and to serve as the Graduate School's liaison with the new Assistant Vice President for International Education, Professor Robert Kvavik. Other items included in his recent report to the Councils were the status of the Graduate School's capital fund drive and tuition scholarships for graduate assistants. Dean Holt mentioned that the taxability of tuition scholarships and TA/RA salaries is still unresolved. He expects Congress to pass legislation sometime yet this year that will make all TA/RA stipends taxable, except for the portion that is used to pay tuition, Dean Holt said.

Dean Holt spoke briefly to the State revenue shortfall and the University's strategy for dealing with the proposed \$17.5 million reduction in its budget. It appeared initially that the University would not be able to borrow to cover the cuts, thereby spreading these out over several years and protecting the Commitment to Focus plan. Although the House Appropriations Committee recommended that one-half of the total cut must come from the base budget in the second year, this recommendation has now been amended to permit State higher educational institutions to absorb all of the cuts in the first year and to borrow money to cover these. Graduate School fellowship funds, including funding for tuition scholarships for graduate assistants, will not be affected by the budget reduction, Dean Holt emphasized.

Professor Weiss reported that the Language, Literature and Arts Council had expressed concern over departments' inability to guarantee Graduate School fellowship recipients support in their second and third years due to severely limited funding for TA's and RA's in humanities programs. The Graduate School's expectation that departments will provide this support subsequent to the initial fellowship year may need to change with

respect to programs in the language, literature and arts area, Professor Weiss stated. Dean Holt said the issue of TA/RA support also affects emerging, non-budgeted interdisciplinary programs, where the source of graduate student support is in other, budgeted departments and programs. Dean Holt reported that he is urging the University's central administration to seek an additional 1,000 TA lines (at a cost of about \$10 million), which would not only provide support and professional training for graduate assistants, but would also enrich the undergraduate student experience. He believed the administration is strongly committed to increased support for graduate students, however he acknowledged that an argument for increased funding is difficult to make in view of the anticipated decline in undergraduate enrollment. In response to a question from Professor Starr, Dean Holt elaborated on the problems experienced by interdisciplinary graduate programs and said additional, centrally held funds are also needed for these programs (for clerical assistance, and graduate student recruitment and support, for example). Dean Holt mentioned incidentally that Agricultural Experiment Station funds will be used to support graduate students for the first time next fall. Use of the funds will not be restricted to agriculture programs. Committee members were reminded that fellowship funds in the form of block grants to departments will also continue next year, and that the Graduate School's capital fund drive includes additional funding for high-stipend, multi-year graduate student fellowships.

D. Report from the Graduate School Fellowship Committee

Professor Snyder called attention to a handout that showed departmental (block grant) fellowship allocations for the years 1983-84 through 1986-87. He stated that the program is very popular, and all funding available in a particular year has been awarded. Dean Holt noted that the total amount awarded for 1986-87 is less than that awarded for 1985-86. This is due to a misunderstanding between the Graduate School and the University's central administration that resulted in the permanent loss of \$220,000 per biennium, he explained. (These funds will be used to support non-Graduate School students in professional degree programs in the health sciences.) Professor Benson asked why the total amounts awarded vary by Policy and Review Council. Professor Snyder said this is in part due to the number and size of graduate programs within a particular Council area, and also to the number and size of the funding requests submitted.

E. Report from the General Research Advisory Committee

For Committee members' information, Dean Sheridan handed out a summary of Graduate School research awards for 1984-85. He noted that the data primarily concerned the Graduate School's General Research Fund and said similar statistics for the Medical/Cancer Research Fund were not yet complete. Over the past two years, the Graduate School has computerized much of its data on graduate faculty research funds, so that more staff time can be spent answering questions from faculty and providing feedback, Dean Sheridan said. He reported that accounting and bookkeeping responsibilities associated with Graduate School research

awards have been shifted to departments; response to this change has been favorable, and the change has only slightly increased departmental workloads. New faculty are given priority in the selection process for both health sciences and non-health sciences-related awards, however senior faculty also receive grants.

Dean Sheridan cited funding cutbacks at the federal level and said he was not certain what effect these will have on overall research support at the University. He pointed out that 20% of the Graduate School's total research budget is derived from indirect cost funding, which will be affected to some extent by activities at the federal level. He indicated that the Biomedical Research Support Grant, funded in the amount of about \$200,000 annually, may also be jeopardized by the federal cutbacks. Professor Corbin suggested using royalty income as a means of increasing available faculty research funding, and he noted that this is done at the University of Wisconsin. Dean Holt indicated that the University of Minnesota annually sets aside approximately \$50,000 in royalty income for faculty research; this yearly amount is comparable to that at Wisconsin, however Wisconsin places its annual intake from royalties into an endowment fund, which substantially increases these funds. He reported that total Graduate School faculty research funding at Minnesota stands at \$1.8 million, while at Wisconsin this figure is about \$6 million.

F. Report from the Council of Graduate Students

Mr. Myers reported briefly on the present status of several issues on which COGS is working. These include development of a TA training program; establishment of clear procedures to be used by graduate students pursuing grievances; and codification of responsibilities of directors of graduate studies, and of graduate students and their advisers.

G. Board of Regents Action Regarding Graduate Degree Program Additions, Deletions and Modifications

Dean Zimmerman reported on the current status of the following degree program proposals:

- \*--M.A. degree in the History of Medicine and Biological Sciences, given final Regents' approval in January 1986;
- \*--M.S. degree in Clinical Laboratory Science (and the simultaneous disestablishment of the M.S. degrees in Laboratory Medicine and Medical Technology), given final Regents' approval in January 1986;
- \*--disestablishment of the M.S. degree program in Family Planning Administration, approved by the Regents in February 1986;
- Minor in Feminist Studies, given a second reading by the Regents in February 1986 and forwarded to HECB;
- M.S. degree in Technical Communication, given an initial reading by the Regents in February 1986; and
- M.S. degree in Computer Science at Duluth, not yet presented to the Regents, pending their discussion of the Commitment to Focus plan

(\*Copies of proposals and correspondence attached with these minutes.)

JAN 23 1986



UNIVERSITY OF MINNESOTA  
DULUTH

College of Education and Human Service Professions  
Department of Social Work  
220 Bohannon Hall  
10 University Drive  
Duluth, Minnesota 55812

(218) 726-7245

TO: UMD Graduate Faculty Committee

FROM: Dennis R. Falk <sup>SRT</sup>  
Director of Graduate Studies

DATE: December 18, 1985

RE: Termination of current MSW Program

At its December 16 meeting, the social work faculty voted unanimously (2-0) to terminate our current MSW program effective at the end of June, 1986. The faculty felt that it was important to provide background to this decision, and accordingly I will attempt to briefly describe the events leading to the termination of the current graduate social work program at UMD.

During the spring of 1983, the UMD campus was required to take a significant retrenchment, and an administrative decision was made to cut the budget of the School of Social Development from \$437,000 in 1982-83 to \$175,000 during the 1985-86 academic year. Consistent with these budget cuts, decisions were made to eliminate the School of Social Development as a separate collegiate unit and initially to eliminate the MSW program and to continue the BSW program within a reorganized College of Education and Human Service Professions. The MSW program admitted students for the last time during the winter of 1984 and we have been phasing out the program since then.

After considerable discussion the initial decision to eliminate graduate social work education at UMD was reversed. During the Fall of 1984 the Regents affirmed that the best use of remaining resources for social work programs would be to develop a new MSW program within the Department of Social Work in the College of Education and Human Service Professions. This decision necessitated phasing out the current BSW program as well, with the last students being admitted in the fall of 1985 and the final date for graduation being May, 1987. It is anticipated that the new MSW program will be developed by the fall of 1987 or 1988 and that it will be accredited by the Council on Social Work Education.

During the period of phasing out the social work programs, retrenchment activities have significantly reduced the resources available to the social work programs. In order to achieve \$262,000 in budget cuts, three senior faculty members transferred to the Twin Cities campus, three support staff positions were eliminated, all teaching assistant money was eliminated, other faculty were terminated or left in anticipation of

UMD Graduate Faculty Committee  
December 18, 1985  
Page Two

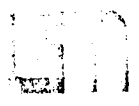
being terminated, and SE&E budgets were cut drastically. Another senior faculty member died during this time. Since the administrative decision to eliminate the graduate program in March of 1983, approximately 110 students have completed the MSW program.

The development of a new MSW program will provide a challenge for the Department of Social Work and the College of Education and Human Service Professions. While two graduate faculty members remain from the original cohort, these two faculty will have limited involvement in the new program because their qualifications do not meet the needs of accreditation for the smaller program which will be developed. A search is currently underway to identify a Director/Department Head for the Department of Social Work. This individual will provide leadership for the development of the new MSW program.

In conclusion, it is necessary to terminate the current MSW program because of initial administrative decisions designed to meet retrenchment goals. We are hopeful that the new MSW program can be developed and begin to admit students within the next two years.

DRF:so

cc: Dean Larry Bright  
Vice Chancellor Don Harriss  
Assistant Dean John Hatten



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of English  
Lind Hall  
207 Church Street S.E.  
Minneapolis, Minnesota 55455  
(612) 373-2595

28 October 1985

Dean Kenneth Zimmerman  
325 Johnston Hall

Dear Dean Zimmerman:

On Friday Professor Lilly Bridwell, one of our two placement officers for the graduate program, showed me a copy of the enclosed memo, issued sometime in September by the Placement Office of the Education Student Affairs Office of the College of Education. That placement office has traditionally maintained files for our graduate students--and, I assume, for students in other CLA graduate programs --although their main clientele are undergraduates in the College of Education.

The new policy announced in their memo drastically curtails the kinds of data allowed in a student's file. "The following items are no longer permitted in placement files: transcripts, resumes or vitas, personal statements, professional licenses, publication lists, dissertation abstracts and copies of diplomas or certificates." These exclusions make the service virtually useless for doctoral students, who normally should include transcripts, a dissertation abstract and a list of publications in their files. (Ideally some provision should be made also to include in the file a representative chapter from the dissertation: many colleges expect to see such a writing sample.)

The new policy creates a sudden emergency for our doctoral students, who are now entering a very competitive market with their credentials thrown into confusion. -We need quick help in the short term: what should our students (and other graduate students) do right now?


The best expedient would be for the Placement Office this year to continue serving doctoral students as in the past.

Some future reorganization might be in order for the long

Zimmerman  
28 October 1985  
Page two

term, but immediate action is urgently required.

Yours truly,



Michael Hancher  
Director of Graduate Studies

cc: Professor Lilly Bridwell  
Professor George T. Wright  
Professor Kent Bales  
Professor George Green  
Dean Jan Kilby  
Assistant Vice President John Wallace  
Vice President Frank Wilderson

# EDUCATION STUDENT AFFAIRS

September, 1985

NOTICE OF POLICY CHANGES  
CONCERNING THE CONTENTS OF THE PLACEMENT FILE

On October 1, 1985, the following policy change will be in effect.

1. The contents of the placement file will be limited to letters of recommendation and the ESAO basic information forms. The following items are no longer permitted in placement files: transcripts, resumes or vitas, personal statements, professional licenses, publications lists, dissertation abstracts and copies of diplomas or certificates. If these materials are currently a part of your file, they will be returned to you at the time of renewal of registration. It is recommended that these materials be sent directly to the employing official by the applicant. Transcripts may be secured by writing to Transcripts Office, 155 Williams on Hall, 231 Pillsbury Drive S.E., University of Minnesota, Minneapolis, MN 55455. Cost is \$2.00 per transcript. Unofficial copies are available on a walk-in basis during Transcript Office working hours. For more information call (612) 376-1680.

Ideally, the placement file contains up to 6 or 10 recommendations. Including more letters of recommendations leads to redundancy and a minimizing of the influence of individual letters. If the number of recommendations in the file exceeds ten, the registrant must inform the Placement Office staff which of the recommendations are to be sent with the placement file.

3. Federal law requires that registrants be given the option of having a confidential file. To do so, registrants must sign the Waiver of Right to Inspect Recommendation form. If a registrant chooses to sign the Waiver, the form will be retained in the folder of original materials in ESAO. The Waiver will not be sent to the employing officials as a part of the placement file.



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of English  
Lind Hall  
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4 December 1985

Mr. Frank Braun  
Coordinator of Placement  
Education Student Affairs Office  
Placement Section  
College of Education  
1425 University Ave S.E.  
Minneapolis, Mn 55414

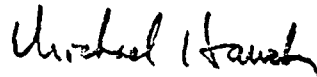
Dear Mr. Braun:

Thank you for your letter of 3 December 1985 confirming that the Education Student Affairs Office will delay implementation of its new files policy for doctoral students in English and American Studies.

You say that the new policy "will be delayed until January 1, 1986," but do not say for which students the new policy will then take effect. I hope that you will not impose the new policy on doctoral students who will have already opened files by that date.

In the long run--that is, for 1986-87 and years following--I think that the Graduate School should assume responsibility for maintaining graduate student placement files. But in the short run--that is, throughout the current academic year--the only equitable arrangement is to preserve the status quo.

Yours truly,



Michael Hancher  
Director of Graduate Studies

cc: Kenneth Zimmerman ✓  
Jan Kilby  
Lillian Bridwell  
G.T. Wright  
Kent Bales

MH/mbh



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Landscape Architecture Program  
205 North Hall  
2005 North Buford Avenue  
St. Paul, Minnesota 55108

(612) 376-7537

December 19, 1985

Dean Robert Holt  
Graduate School  
321 Johnston Hall

Dear Dean Holt:

The College of Agriculture recently approved the Landscape Architecture Program's proposal for a new Bachelor of Landscape Architecture track in a combined BLA/MLA program (appendix 1). This proposal to the College of Agriculture stemmed from my May 17 letter to you (appendix 2), which described our proposed BLA/MLA program. Having received approval of the BLA portion of the combined program, we now seek approval of the MLA portion.

The primary purpose of the combined degree program is to broaden the applicant base for the Master of Landscape Architecture (MLA) program. Currently, all applicants are required to have a BLA or BSLA. The BLA/MLA program will invite application by people who have earned a baccalaureate in another discipline.

Key aspects of the BLA/MLA program are:

- 1) It would allow a student with a previous degree to complete a professionally-oriented BLA and a research-oriented MLA in 3-4 years (appendix 3). This compares with 5-6 years for a person with a previous degree to earn the BLA and MLA sequentially. It compares with 3 years for a student with a previous degree to complete a professionally-oriented MLA (but not BLA) in most other MLA programs.
- 2) The student would be concurrently enrolled in the College of Agriculture and the Graduate School. The College of Agriculture would grant the BLA and the Graduate School the MLA.
- 3) The student would pay graduate fees from the date of admission, even while working on courses necessary for the BLA degree. However, with assistantships, most students will have tuition bills comparable to or less than their undergraduate counterparts. Out-of-state students who do not have assistantships will be the one group paying considerably more for BLA credits than the undergraduates. At the same time, these students will enjoy a graduate advising relationship from the date of their entry.
- 4) BLA/MLA candidates will not be required to complete the College of Agriculture general education (A-E) requirements.\* Their previous degree is seen as a valid substitute for these requirements. Any conceptual holes in the BLA/MLA candidate's coursework can be identified by his/her advisor and addressed in his/her degree program.
- 5) The total undergraduate landscape architecture core curriculum credits will be 24 fewer in the BLA/MLA program than in the BLA only program.\* The mature students who will be accepted into the combined

\* This is a refinement in our proposal made since the initial May 17 letter.

degree program could be expected to become competent in these key areas with 88 credits of course work rather than the 112 credits currently required.

5) Importantly, students who choose the combined program will earn their BLA only upon completion of the MLA program. BLA/MLA candidates who choose not to complete their MLA will be required to complete all traditional course requirements for the BLA.

We are confident that this combined degree program will be attractive to students for several reasons:

1) We will offer local potential students a time and money savings. Each year 3-6 of our BLA entry-level students have previous degrees. Often these are people who have expressed an interest in graduate study. Typically, they want to stay in Minnesota for personal reasons, but are reluctant to spend 5-6 years getting a graduate degree.

2) We will offer all potential students flexibility in career planning. Because the BLA is generally recognized among practitioners as the "practice-oriented" degree, having both a BLA and MLA offers clear career advantages to potential students. More typically, students with previous degrees are awarded "practice-oriented" MLA's, which are regarded with some skepticism by practitioners.

3) BLA/MLA students will have graduate status from the date of admission. This will include highly individualized advising, and eligibility for assistantships and fellowships. We see these elements as key to the sense of belonging and exchange we want to foster among our graduate students.

Our combined BLA/MLA approach has several advantages for us: First, it allows us to maintain a clear research focus in our graduate program. The purpose of graduate landscape architecture education continues to be controversial within the profession. The American Society of Landscape Architects' (ASLA) policy of only accrediting first professional degrees, and providing no accreditation procedure for research degrees has helped to fuel this controversy. While some graduate programs see their mission as providing advanced professional practice experience, others are strongly committed to research. We place ourselves in the latter group.

Second, our approach allows us to teach the first professional degree curriculum with greater efficiency. Universities with both MLA and BLA first professional degree programs must offer graduate courses and undergraduate courses which differ only in very subtle ways. We wish to avoid this kind of duplication of effort.

Last, since only first professional degrees are accredited by the ASLA and the University of Minnesota does have an accredited BLA program, we see no reason to develop a second program (an accredited

3-year MLA) which repeats that function. Since no ASLA accreditation procedure exists for research programs, accreditation is not relevant to our MLA.

However, attracting students who want a first professional degree is essential to the quality of our MLA program. To allow application by these students, we propose the following changed admission and graduation requirements:

Points d) and e) of the current admission requirements (appendix 4) would be changed to read:

d) Demonstrated undergraduate excellence as illustrated by high scholastic achievement. Applicants with an earned BLA must also demonstrate excellence in a portfolio or design work.

e) The completion of a BLA degree, or an earned baccalaureate in any discipline and concurrent enrollment in the University of Minnesota BLA program.


Graduation requirements (Appendix 4) would be changed to require completion of the BLA. Point e.4) would be added to read:

4) Candidates for the MLA must have completed an accredited BLA program or be concurrently awarded the BLA at the University of Minnesota.

We are happy that several potential BLA/MLA applicants for 1986 have been corresponding with me for several months. We would very much like to notify them early in the new year that they can apply to the program.

Thank you for your consideration. Particular thanks to Dean Hein for his advice in revising our proposal.

Sincerely,



Joan Nassauer  
Director of Graduate Studies

## APPENDIX 1

### PROPOSAL FOR A BLA TRACK IN THE COMBINED MLA/BLA PROGRAM

Landscape Architecture Program  
November 1985

The Landscape Architecture faculty wish to broaden the applicant base for the Master of Landscape Architecture (MLA) program by allowing application by people who have earned a baccalaureate in another discipline. Currently, all applicants are required to have a BLA or BSLA.

The proposed combined MLA/BLA program would allow a student with a previous degree to complete a professionally-oriented BLA and a research-oriented MLA in 3-4 years. The student would be concurrently enrolled in the College of Agriculture and the Graduate School, and would pay graduate fees from the date of admission.

Of the 43 graduate landscape architecture programs in the United States, only two (University of California at Davis and the University of Minnesota) require the BLA for admission. In nearly all the remaining programs, non-BLA applicants are accepted into a 3-year program toward the MLA, while BLA applicants are accepted into a 2-year program toward the same degree.

The BLA is a professional practice degree. Relatively few BLA's go on to obtain an MLA and those who do are much sought after for the professional skills they can bring as teaching or research assistants. Since the Davis program was initiated in 1973, only 8 students have received MLA's there.

When the Graduate School Deans reviewed the proposed combined degree program in May of 1985, they generally reacted favorably. They also recognized the need for the BLA-granting college to allow proposed changes in the BLA portion of the program. The Graduate School will make a final decision after review by the College of Agriculture.

Essentially, the proposed program would allow concurrent enrollment in the BLA and MLA programs by students who have an earned baccalaureate in any discipline. Importantly, students who chose the combined programs would earn their BLA only upon completion of the MLA program.

An important secondary effect of the proposed combined BLA/MLA is that it would assist in continued recruitment of top flight students to our BLA program. This will be particularly helpful in the next decade, as the number of new high school graduates continues to drop.

Students in the proposed BLA/MLA program would pass through a modified BLA curriculum (Appendix I attached). The curriculum for the student who has an undergraduate architecture or environmental design degree would be slightly different from the curriculum for the student with the non-design baccalaureate. Given the experience and maturity of the student who has earned a baccalaureate degree, the Landscape Architecture faculty believes that this modified curriculum would provide professional education which equals that of the existing BLA curriculum (Appendix II). However, some crucial differences exist in form:

- 1) The total undergraduate landscape architecture core curriculum credits would be 24 fewer in the BLA/MLA program than in the BLA only program. However, all the key content areas necessary for program accreditation would be thoroughly covered. The mature students who would be accepted into the combined degree program could be expected to become competent in these key areas with 88 credits of course work rather than the 112 credits currently required.
- 2) Because only applicants with earned baccalaureates would be accepted into the program, it would be reasonable to assume that the intent of the general education requirements had been met. Consequently, none of the undergraduate general education requirements or electives supporting the professional degree would be required.\* Any conceptual holes could be determined on an individual basis by the student's graduate advisor and required as part of the MLA program filed by the individual student.

We are convinced that our pool of MLA applicants without an earned BLA would be relatively large. Many of our current BLA applicants have previous baccalaureates in other disciplines. Frequently they express interest in graduate work, but are reluctant to invest the five years that sequential enrollment in Minnesota's BLA and MLA programs requires. Occasionally we have lost these students to graduate programs in other states. More frequently, geography and personal necessity have led them to give up aspirations for graduate study and receive only the BLA degree at Minnesota.

These students with undergraduate degrees in other disciplines would enhance our graduate program in landscape architecture as they have enhanced our undergraduate program. The experience of other graduate programs is that they bring diverse outlooks from their undergraduate studies and they often have research and writing skills that exceed those of their BLA colleagues.

Our combined BLA/MLA approach has several advantages for us: First, it allows us to maintain a clear research focus in our graduate program. The purpose of graduate landscape architecture education continues to be controversial within the profession. The American

\*The only exception is Soil Science 1122, a supporting course in the major which is directly required for core courses in landscape architecture.

Society of Landscape Architects' (ASLA) policy of only accrediting first professional degrees, and providing no accreditation procedure for research degrees has helped to fuel this controversy. While some graduate programs see their mission as providing advanced professional practice experience, others are strongly committed to research. We place ourselves in the latter group.

Second, our approach allows us to teach the first professional degree curriculum with greater efficiency. Universities with both MLA and BLA first professional degree programs must offer graduate courses and undergraduate courses which differ only in very subtle ways. We wish to avoid this kind of duplication of effort.

Last, since only first professional degrees are accredited by the ASLA and the University of Minnesota does have an accredited BLA program, we see no reason to develop a second program (an accredited 3-year MLA) which repeats that function. Since no ASLA accreditation procedure exists for research programs, accreditation is not relevant to our MLA.

However, attracting students who want a first professional degree is essential to the quality of our MLA program. For the reasons below we propose the changed admission and graduation requirements:

- o We wish to expand the quality and quantity of our MLA applicant pool to include people who have not yet earned the BLA.
- o We wish to maintain and expand upon the research focus of our MLA program.
- o We wish to maintain the quality and quantity of our BLA applicant pool.
- o We wish to avoid replication of curriculum and accreditation activities--both necessary if we go the traditional route of a 3-year first professional MLA degree for non-BLA applicants.



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Landscape Architecture Program  
205 North Hall  
2005 North Buford Avenue  
St. Paul, Minnesota 55108  
(612) 376-7537

May 17, 1985

Dean Robert Holt  
Graduate School  
321 Johnston Hall

Dear Dean Holt:

The Landscape Architecture graduate faculty proposes to change the admission and graduation requirements for our MLA program. I am writing to ask that you review and approve the proposed change.

Current admission requirements (Appendix I) require completion of a B.L.A. degree and submission of a portfolio of design work. This requirement severely limits both the quantity and quality of our applicant pool. Our proposal is to allow concurrent admission in the MLA and BLA degree programs if applicants have an earned baccalaureate in another discipline. Points d) and e) would be changed to read:

d) Demonstrated undergraduate excellence as illustrated by high scholastic achievement. Applicants with an earned BLA must also demonstrate excellence in a portfolio or design work.

e) The completion of a BLA degree, or an earned baccalaureate in any discipline and concurrent enrollment in the University of Minnesota BLA program.

Graduation requirements (Appendix I) would be changed to require completion of the BLA. Point e.4) would be added to read:

4) Candidates for the MLA must have completed an accredited BLA program or equivalent.

These changes would allow us to consider persons without BLA degrees as applicants to our MLA program. Typically, a student who enters our BLA program with a previous baccalaureate can complete his or her work in 3 years. An additional two years of work are required for a student who completes the BLA and MLA degrees sequentially. Our proposal would allow a student with a previous degree to complete a professionally-oriented BLA and a research-oriented MLA in 3-4 years. The student would pay graduate fees from the date of admission.

Two model degree programs are attached (Appendix II). A sequence of design courses fixes the length of the BLA program but creates time for students to choose electives most quarters. However, our BLA students with previous degrees generally have completed their elective and group requirements as part of their previous coursework. These students would take our required sequence of graduate research seminars and topics courses in the transition year between the years of intensive BLA-focussed professional education and the final year of MLA-focussed research.

Of the 43 graduate landscape architecture programs in the United States, only two (University of California at Davis and the University of Minnesota) require the BLA for admission. In nearly all the remaining programs, non-BLA applicants are accepted into a 3-year program toward the MLA, while BLA applicants are accepted into a 2-year program toward the same degree.

The BLA is a professional practice degree. Relatively few BLA's go on to obtain an MLA and those who do are much sought after for the professional skills they can bring as teaching or research assistants. Since the Davis program was initiated in 1973, only 8 students have received MLA's there.

Our proposed change in admission requirements would not swell our graduate enrollment beyond that planned in our original program proposal; it would allow us to meet those original enrollment goals.

We are convinced that our pool of MLA applicants without an earned BLA would be relatively large. Many of our current BLA applicants have previous baccalaureates in other disciplines. Frequently they express interest in graduate work, but are reluctant to invest the five years that sequential enrollment in Minnesota's BLA and MLA programs requires. Occasionally we have lost these students to graduate programs in other states. More frequently, geography and personal necessity have led them to give up aspirations for graduate study and receive only the BLA degree at Minnesota.

These students with undergraduate degrees in other disciplines would enhance our graduate program in landscape architecture. The experience of other graduate programs is that they bring diverse outlooks from their undergraduate studies and they often have research and writing skills that exceed those of their BLA colleagues.

Along with Minnesota, three other Big Ten universities offer the MLA degree: University of Illinois, Ohio State, and the University of Michigan. These are among the most highly respected MLA programs in the nation; they all offer a 3-year degree to applicants without BLA's.

Our approach to enrolling applicants without BLA's would be somewhat different from the other Big Ten programs, yet it would make us competitive with these and the other 41 graduate programs in the nation. Rather than developing a 3-year first professional degree, we plan to maintain the separate identities of our 2-year research-oriented MLA and our accredited first professional BLA degree. By enrolling in both programs simultaneously, a student with a previous baccalaureate would be able to complete both the professional practice and research-oriented degrees in 3-4 years.

Our approach has several advantages for us: First, it allows us to maintain a clear research focus in our graduate program. The purpose of graduate landscape architecture education continues to be controversial within the profession. The American Society of Landscape Architect's (ASLA) policy of only accrediting first professional degrees, and providing no accreditation procedure for research degrees has helped to fuel this controversy. While some graduate programs see their mission as providing advanced professional practice experience, others are strongly committed to research. We place ourselves in the latter group.

Second, our approach allows us to teach the first professional degree curriculum with greater efficiency. Universities with both MLA and BLA first professional degree programs must offer graduate courses and undergraduate courses which differ only in very subtle ways. We wish to avoid this kind of duplication of effort.

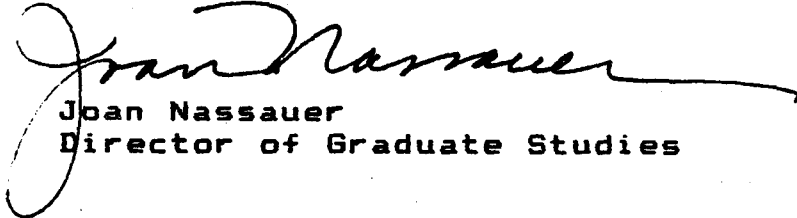
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However, attracting students who want a first professional degree is essential to the quality of our MLA program. For these reasons, we propose the changed admission and graduation requirements described above:

- We wish to expand the quality and quantity of our MLA applicant pool to include people who have not yet earned the BLA.
- We wish to maintain and expand upon the research focus of our MLA program.
- We want to avoid replication of curriculum and accreditation activities--both necessary if we go the traditional route of a 3-year first professional MLA degree for non-BLA applicants.

We could begin to implement our proposed admission requirements in fall of 1985 and are anxious for your review and approval.

Sincerely,



Joan Nassauer  
Director of Graduate Studies

APPENDIX

NON-DESIGN BACKGROUND - MLA TRACK - PROPOSED CURRICULUM AND MODEL SCHEDULE  
Model Schedule

Course Areas	Year 1			Year 2			Year 3			Year 4	
Design	3081 (6)	3082 (6)	3083 (6)	3091 (6)	3092 (6)	3093 (6)	5XXX Design (6)				
Tech		Soil 1122 (4)	3071 (4)	3072 (4)				5226 (4)			
Plant Des.				5119 (4)		5117 (4)					
Hort	1021 (5)		1022 (5)								
Graph	1025 (4)	1026 (4)									
History		1022 (4)							5XXX History (4)		
Electives											
Grad courses	-	-	-	8281 (2)	8282 (2) Topic (4)	8283 (2)	Stat(4) Topic(3)	Topic(8)	Thesis(4) Topic(4)		Thesis (11)
<b>Total credits</b>	<b>15</b>	<b>18</b>	<b>15</b>	<b>16</b>	<b>12</b>	<b>12</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>Total 136</b>
<b>Total undergrad credits</b>	<b>15</b>	<b>18</b>	<b>15</b>	<b>14</b>	<b>6</b>	<b>10</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>92</b>
<b>Total grad credits</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>11</b>	<b>44</b>

**DESIGN (ARCHITECTURE OR ENVIRONMENTAL DESIGN) BACKGROUND - MLA TRACK  
PROPOSED CURRICULUM AND MODEL SCHEDULE**

Course Areas	Year 1			Year 2			Year 3		
Design	3091 (6)	3092 (6)	3093 (6)	5xxx Design (6)					
Tech	Soils								
		1122 (4)	3071 (4)	3072 (4)	5226 (4)				
Plant Des.				5119 (4)		5117 (4)			
Hort	1021 (5)		1022 (4)						
Graph		1026 (4)							
History		1022 (4)				5XXX History (4)			
Grad courses	Topic (4)		Topic (4)	8281 (2) Stat (4)	8282 (2)	8283 (2) Topics(6)	Thesis (5) Topics (5)	Thesis (10)	
<b>Total credits</b>	15	18	18	14	12	16	10	10	<u>113</u>
<b>Total undergrad credits</b>	11	18	14	8	10	8	0	0	69
<b>Total grad credits</b>	4	0	4	6	2	8	10	10	44

### 3. Admission Requirements.

The following criteria will be used in determining an eligible pool of candidates:

The ability to meet all Graduate School standards, requirements and procedures for admission.

Further, the following Landscape Architecture Program requirements must be met:

a) The availability of Landscape Architecture Graduate Faculty to act as a candidate's advisor.

b) The assessed ability of the candidate to accomplish tasks of significant difficulty.

c) The candidate's proposal to accomplish a course of study in a specialized area of landscape architecture (either Plan A or Plan B) which must:

1) have relevance to the unique needs of the State of Minnesota; (as explained in Section D.1. of this proposal);

2) illustrate a careful review of related current knowledge;

3) illustrate a format for communication of study results which will allow for broad exposure of the knowledge.

4) demonstrate that the course of study can be completed within a reasonable amount of time (preferably two years).

d) Demonstrated undergraduate excellence as illustrated by a portfolio of design work and high scholastic achievement.

e) The completion of a B.L.A. degree or equal training.

### 4. Graduation Requirements.

a) Language requirement: None.

b) Residency. Sixty percent of the required course work for the MLA must be completed in the Graduate School of the University of Minnesota.

c) Minor. There are no requirements for a 'minor' in the MLA program. In lieu of this, the candidate is expected to take courses in a variety of related disciplines to meet the objectives of his/her area of landscape architecture specialization.

d) Official Program for the Degree. After completing 15 credits of graduate courses or by the third quarter of registration, candidates must file an official proposed program with the Graduate School. To meet Graduate School requirements this program must include:

- 1) a list of all course work completed and proposed, including the required Landscape Architecture courses;
- 2) a detailed proposal for a specialized, original research study for the Plan A thesis or, a detailed proposal for three Plan B papers;

In addition, the following requirements must also be met:

- 1) a definition of the area of landscape architecture specialization;
- 2) a clear set of goals and objectives which demonstrate relevance to the State of Minnesota;
- 3) a bibliography of current research in the area of specialization;
- 4) a determination of resources needed to achieve stated goals and objectives, listed in priority. How and where resources are to be obtained should also be listed;
- 5) a schedule to include: progress reviews with the candidates examining committee, reviews with the Landscape Architecture Graduate Faculty (once per quarter), final examination date and a list of work 'products' to be submitted at each review and the final exam. Acceptable work 'products' would include:
  - presentation of papers prepared in other classes
  - written summary of work completed toward degree
  - summary of thesis progress
  - design projects completed
  - annotated bibliographies and;
- 6) A method of evaluating the results of the program for the degree in terms of the stated goals and objectives.

e) Degree Credit Requirements.

1) All candidates. A minimum of 12 quarter credits and a maximum of 16 quarter credits of graduate level Landscape Architecture courses, including LA 8281, 8282, 8283 (2 credits each) and either LA 8500 (6 credits) or LA 8600 (6 credits).

2) Plan A: MLA with thesis. A minimum of 30 quarter credits of graduate course work, including the minimum 12 credits listed above plus thesis.

3) Plan B: MLA without thesis. A minimum of 45 quarter credits of graduate course work, including the minimum 12 credits listed above plus three Plan B papers. (Plan B papers may be landscape architecture design projects).

5. Advisor and Examining Committee.

a) Candidate's Advisor. It is required that the candidate work closely with his/her advisor in organizing and carrying out the proposed degree study program including the determination of appropriate courses to meet credit requirements and specialization objectives. The advisor will be the chairperson of the candidate's examining committee. It is the advisors responsibility to assemble the examining committee in consultation with the candidate and recommend such committee to the Graduate School for appointment. The advisor shall also work with the candidate to develop an appropriate schedule of completion and to maximize the use of University resources.

b) Candidates Examining Committee. The candidate's examining committee must include two members of the Landscape Architecture Graduate Faculty and one Graduate Faculty from a discipline related to the student's area of landscape architecture specialization.

6. Course Descriptions.

a) Proposed Courses

1) LA 8281, 8282, 8283. Research Topics in Landscape Architecture. 2 credits each. F, W, S. Prerequisite M.L.A. Student, or #.

These quarterly seminars will focus on current problems in the Landscape Architecture profession and also expose students to the work being undertaken in the other areas of design specialization. Students will make their progress presentations in this course with discussion of major problems in their specialized study.



UNIVERSITY OF MINNESOTA  
TWIN CITIES

School of Social Work  
400 Ford Hall  
224 Church Street S.E.  
Minneapolis, Minnesota 55455

December 10, 1985

Dr. Robert Holt, Dean  
Graduate School  
University of Minnesota  
321 Johnston Hall  
Minneapolis, CAMPUS

Dear Dr. Holt:

I am forwarding a proposal for a 69 credit advanced standing M.S.W. program which has been approved, after extensive discussion, by the graduate faculty of the School of Social Work. An advance standing program is necessary to differentiate two groups of entering students who come with differing educational needs; one group presents an undergraduate social work major from an accredited program and other group presents diverse undergraduate majors although they meet our admission requirement of 39 quarter credits in the social sciences. There is precedent for an advanced standing M.S.W. program; the School of Social Development, Duluth Campus, offered two M.S.W. programs--a ninety credit program and a sixty credit advanced standing program.

Our faculty prefers a sixty-nine credit advanced standing program in order to permit students who come with a B.S.W. to strengthen their background in the social and behavioral sciences by taking courses outside the School of Social Work. We think the advanced standing proposal is a sound proposal although recognize it will place a heavy responsibility upon advisors. In addition to taking the concentration requirements (normally completed in the second year by the student in the 81 credit program), students in the 69 credit advance standing program will be required to complete 24 credits of work taken outside the School of Social Work and 21 credits of additional electives within the School of Social Work. Selecting these courses in consultation with the advisors will assist students to put together a sound, coherent educational plan consistent with their background and future professional objectives. We presently have sufficient faculty to provide sound advising and are continuing to work at strengthening the advising system.

Sincerely,

A handwritten signature in cursive script, appearing to read "Burt Galaway".

BURT GALAWAY  
Director of Graduate Studies

/lh  
LTR4-2

UNIVERSITY OF MINNESOTA  
SCHOOL OF SOCIAL WORK

PROPOSAL FOR A 69-CREDIT ADVANCED STANDING MSW PROGRAM

Background and Need. In 1939 the American Association of Schools of Social Work established a policy that professional social work education should occur at the graduate level. While this policy was initially controversial,<sup>1</sup> by the late 1940's the policy was firmly accepted by most social work professional associations and accrediting bodies. The Council of Social Work Education (CSWE), the current accrediting body, was established in 1952 from a merger of previous accrediting groups; CSWE continued the policy that professional social work education should be limited to graduate education. The National Association of Social Workers (NASW), the social work professional organization, which was established in 1955 from the merger of seven predecessor professional associations, also affirmed the 1939 policy by admitting into membership only persons with a master's degree in social work (a grandparent provision was available for members of the predecessor organizations.)

By the mid-1960's, however, the appropriateness of this policy for social work education was under considerable attack. In 1969 the National Association of Social Workers accepted the baccalaureate degree as providing appropriate preparation for beginning professional social work practice. Following this decision the Council on Social Work Education began to provide technical assistance to emerging undergraduate programs and began registration of programs which met specified standards. In 1974 CSWE began accrediting undergraduate social work education programs. As of 1985 there are 348 accredited undergraduate programs and 90 accredited MSW programs in the United States. Minnesota colleges have 12 accredited undergraduate programs. Accredited undergraduate social work programs must include the objectives of preparation for beginning social work practice.

Accreditation and teaching social work practice content at the undergraduate level requires modification in graduate programs. Since 1939 graduate social work education has been a two year course of study; the content offered in accredited BSW programs parallels content made available in the first year of graduate study. The 1984 revision of the MSW accreditation standards require graduate programs to make necessary adjustments to ensure that students coming from accredited BSW programs are not forced to duplicate work done in their undergraduate studies. Graduate social work education is to develop advanced, specialized areas of practice.

The School of Social Work graduate faculty could respond to this issue in at least two ways. Admission to the MSW program could be limited to students who have completed an accredited BSW program. Or, an advanced standing program could be offered for persons admitted with an accredited BSW degree; students with other preparation could continue to be admitted to the two-year program. The faculty does not want to deny access to the profession to persons who bring liberal arts degrees and recommends the establishment of a 69-credit advanced standing program.

Admission requirements. Students applying for the advanced standing program must apply for advanced standing as part of their application for admission to the MSW program. The applicant will be expected to meet all admission requirements for 81-credit MSW program and, in addition, must present an undergraduate-major in social work which, at the time of graduation, was

<sup>1</sup>A group of schools established a short-lived rival organization in support of social work professional education in baccalaureate program and a few current undergraduate programs have roots that go back or precede the 1939 policy.

accredited by the Council on Social Work Education. The applicant applying for admission to advanced standing will also apply for admission to one of the advanced concentrations (or propose an individually designed concentration) offered by the School of Social Work; there are currently three concentrations available--human service management, health and mental health, and children and family services. Applicants who wish to propose individually designed concentrations will confer with the director of graduate studies who will assign each applicant to an appropriate advisor for development of an individualized concentration between the admission and matriculation in the MSW program.

Program of study. Students in the advanced standing program will complete a 69-credit MSW program. The program of study may not include any courses included in the MSW core program required of 81 credit students because advanced standing is being granted on grounds that these core courses duplicate content included in accredited undergraduate courses of study.

Why 69 credits, rather than 40 to 45, since the two-year MSW program is 81 credits and since the studies completed in a BSW program are comparable to the core courses offered in the first year of the MSW program? While the advanced standing student comes with a strong background in social work practice taught at the undergraduate level, the introduction of social work practice content in undergraduate programs may have been accomplished through a reduction of content in liberal arts and the social and behavioral sciences foundation content desired for social work practice. Therefore, advanced standing students will be required to complete course work outside the School of Social Work which is not required for students in the 81 credit program.

The Advanced Standing Program will consist of:

1. Required concentration courses (See attached description of concentrations).	24 credits
2. Electives from outside the School of Social Work selected in consultation with adviser	24 credits
3. Social Work electives selected in consultation with adviser	21 credits
TOTAL	<u>69 credits</u>

Field instruction has traditionally been a primary instructional method in social work education. The required concentration courses include twelve credits of field instruction. A second, elective field internship will be made available to advanced standing students as a part of their social work elective courses.

Implementation date. Students will be admitted to advanced standing for matriculation in fall quarter, 1986.

Adopted by School of Social Work Graduate Faculty, June 11, 1985.

/pbh/BG2:PROPADVST1

Descriptions of concentrations offered in the Master of Social Work program taken from the School of Social Work Bulletin, 1985-87.

any area of professional practice. The content of these courses represents the "state-of-the-art" of that which is judged essential for understanding the profession. This common understanding provides cohesion in a profession with such a diversity of settings, organizations, clients, and activities. The core curriculum also ensures that students have mastered a central body of knowledge as a basis for later training in a selected concentration area.

### Concentrations

The School of Social Work offers second-year students the opportunity to concentrate their course work and field instruction in one of three areas—social work practice with families and children; social work practice in health/mental health settings; and human services management in social welfare. These three areas are central to current social work practice in the public and private social services and reflect the areas of substantive strength of the faculty.

Each concentration offers a foundation course in which students and faculty explore the nature of current practice, policy, and delivery systems in the area. Other courses focus on advanced practice and research related to the concentration area and are selected by the student according to educational and career interests. Field instruction in the second year is offered in a setting that is generally oriented toward the student's chosen concentration.

Elective courses in the School of Social Work and in other departments of the University round out the second year.

The concentrations offered by the School of Social Work change over time as the field itself changes. Although the three concentrations offered by the school meet the educational and career needs of most students, it is possible to develop an individualized concentration with the aid of a faculty adviser and the prior approval of the Director of Graduate Studies.

**Practice with Families and Children** focuses on education for practice in services to families, children, and youth. In both philosophy and intent, it embraces the central concerns that have been traditional in social work, namely, the support, maintenance, and development of families and concern for the welfare and well being of children and youth. The range of knowledge and practice areas within this concentration includes study of the family as a multi-generational unit, encompassing children, adults, and elderly members and the relationships among them.

The concentration embraces the broad range of policy and intervention issues that reflect changes in family configuration, alternative life styles, the relation between preventive and treatment strategies, the impact of legal constraints and expectations on the parameters of service and the impact of gender, race, and class upon both policy and practice. The impact of race and gender upon service delivery and the roles of women as the major providers within single-headed households and as caregivers to the young and the elderly have been identified as major policy and service issues.

**Practice in Health/Mental Health** focuses on education for direct practice, policy, research and research utilization, community intervention, interdisciplinary work, and evaluation. The concentration is designed to offer in-depth professional training to social work students who are interested in both public and private health/mental health service delivery systems. It develops master's level practice skills and a general understanding of policy, legal, and legislative directions necessary for a student to enter the field of health/mental health.

Students in this concentration must be prepared to understand the technological and economic changes that have taken place in our country, state, and community, and act as change agents at the systems level. They also must be able to respond to individual needs—both stress-related and organic—at the client service level.

## Programs and Curricula

**Practice in Human Service Management** prepares social workers for a variety of middle-range practice and leadership roles in the human services, including policy analyst, advocate, manager, planner, organizer, and evaluator. It is designed to impart a coherent set of practice skills such as needs assessment, goal-definition and priority setting, programming, fiscal management, supervision, information systems design, monitoring, and evaluation. The concentration focuses on policy issues and social change perspectives related to special populations and client groups. An international dimension proffers various alternatives for meeting human needs.

The courses in this concentration are useful to students preparing for direct practice positions. There are management issues in direct practice that are of concern to every social worker.

### **Field Instruction**

Twenty-four credits of field instruction, totaling a minimum of 960 hours, are required for the M.S.W. degree. Each student prepares a field plan in consultation with the coordinator of field instruction. The first-year plan is expected to meet the general educational objectives for all students, and the second-year practicum should satisfy the specific educational goals for the chosen concentration.

Because the curriculum requires elective courses taken outside the School of Social Work, M.S.W. students could be attending classes daily even though Wednesdays and Fridays are free of social work offerings. Thus, field assignments must be scheduled around classes. Field instruction may be taken concurrently with courses or in a block period of time, depending on the availability of placements and courses. Block placements are arranged only in the second year.

Normally, field instruction is distributed so that students complete 12 field credits during each year of graduate study. Field instruction requires 16 hours per week for each of 6 quarters, or some equivalent arrangement in a full-time (block) placement.

All field instruction placements must be approved in advance by the School of Social Work. Students should consult with the coordinator of field instruction before making any plans.

The following is a representative list of field practice agencies:

### *Chemical Dependency*

Family Renewal Center  
Hazelden Rehabilitation Center  
Way 12—Halfway House  
Pharm Center

### *Community Organization*

Crime Control Planning Board  
United Way of Minneapolis  
Women's Resource Center  
National Association of Social Workers  
Grupo Social, Bogota, Colombia, S.A.

### *Corrections*

Minnesota Department of Corrections:  
Oak Park Heights—Prison Sexual Offenders Program  
Stillwater—Prison Health Service  
Wilder Community Assistance Program

### *Family and Children*

Family Service of Greater Saint Paul  
Family and Children's Service of Minneapolis  
Jewish Family and Children's Service  
Northwest Suburban Youth Service Bureau

Washburn Child Guidance Clinic  
Minneapolis Public Schools  
Wilder Child Guidance Clinic  
Bridge for Runaway Youth

### *Health/Hospitals/Rehabilitation*

Developmental Disabilities Program,  
Gillette Children's Hospital  
Hennepin County Medical Center  
Sister Kenny Institute  
Social Service Department, University of Minnesota Hospitals  
Yorkshire Manor  
Saint Paul—Ramsey Hospital  
Veterans Administration Medical Center

### *Mental Health*

Hennepin County Crisis Intervention Center

CONCENTRATION COURSES  
1985-86

I. FAMILY & CHILDREN CONCENTRATION

A. Required Courses

- 8020 Field Instr. in F/C setting (F,W,S)
- 8121 (Found.) Social Policy & Delivery Systems for F/C Services (F)

B. Concentration Course Pool  
(select 3)

- 5010 Self-Help Strategies in Health & Family Work (S)
- 8104 Child Welfare & the Law (W)
- 8203 Family Stress (S)
- 8407 Strategies of Family Interv. (F,W)
- 8408 Direct Work with Children (S)
- 8450 Direct Work with Adoles. (F)

C. Recommended Social Work Electives  
(select at least 1 from each category)

1. Larger System Methods (select 1)

- 8301 Organizational Analysis Admin. & Mgmt. (W)
- 8305 Community Development (S)
- 8307 Social Planning (S)
- 8406 Superv. & Cons. in SW Prac. (W)
- 8903 Program Evaluation (W)

2. Substantive/Other Social Work Electives (select 1)

- 5010 Problems & Strengths of the Settlement Movement in Historical Perspective (F)
- 5010 Children, Youth & the Welfare State (F)
- 5010 International Development Seminar: Agriculture, Home Economics, Women and Youth (F)
- 5010 Analytical Psy. of C.G.Jung (W)
- 5010 Women and Public Policy (W)
- 5010 Social Work in Industry (S)
- 5013 Interdis. Team Training in Hlth. Serv. Del. (W)
- 5021,5022,5023 Sexuality for Hlth. & Helping Prof. (F,W,S)
- 5024 Multidis. Persp. on Aging (F)
- 5102 Changing Roles of Men & Women (W)
- 5228 Rural Issues in SW Prac. (S)
- 8111 International Social Welfare (S)
- 8130 Seminar: History of Soc. Work (S)

II. HEALTH/MENTAL HEALTH CONCENTRATION

A. Required Courses

- 8020 Field Instr. in H/MH Setting (F,W,S)
- 8122 (Found.) H/MH Policy (F)

B. Concentration Course Pool  
(select 3)

- 5010 Self-Help Strategies in Hlth. & Family Work (S)
- 5020 PubH/SW Integ. Sem. (S)
- 8150 Long-term Care (S)
- 8421 SW Prac.: Psychotherapy & Intervention (F)
- 8422 SW Prac. with Chroni- cally Mentally Ill (W)
- 8423 Chronic Illness: Impact on Families (S)
- 8450 Prac. Issues in Hlth. Settings (F)
- 8450 Social Work Strategies with Invol. Clients (F)
- 8450 Adv. Task Centered Prac. in H/MH Settings (S)

C. Recommended Social Work Electives (select at least 1 from each category)

1. Larger System Methods  
(select 1)

- 8301 Organizational Analysis Admin. & Mgmt. (W)
- 8305 Community Dev. (S)
- 8307 Social Planning (S)
- 8406 Superv. & Cons. in SW Practice (W)
- 8903 Program Evaluation (W)

2. Substantive/Other Social Work Electives (select 1)

- 5010 Problems & Strengths of the Settlement Movement in Historical Perspective (F)
- 5010 Children, Youth & the Welfare State (F)
- 5010 International Development Seminar: Agriculture, Home Economics, Women & Youth (F)
- 5010 Anal. Psy. of C.G.Jung (W)
- 5010 Women and Public Policy (W)

F/C Conc.--Subst. Elect. (cont.)

- 8150 Models of Pers. Soc. Serv. Systems (W)
- 8450 Family Violence (F)
- 8450 Cog.-Behav. Groupwork (W) (also core)
- 8450 Conflict Resolution (S)
- 8970 Directed Study (F,W,S)
- 8990 Research Projects (F,W,S)

H/MH Conc.--Subst. Elect. (cont.)

- 5013 Interdis. Team Training in Hlth. Serv. Delivery (W)
- 5021,5022,5023 Sexuality for Hlth. & Help. Professionals (F,W,S)
- 5024 Multidis. Persp. on Aging (F)
- 5102 Changing Roles of Men & Women (W)
- 5228 Rural Issues in Social Work Practice (S)
- 8111 International Soc. Welfare (S)
- 8130 Seminar: History of Social Work (S)
- 8150 Models of Pers. Soc. Serv. Systems (W)
- 8450 Cog.-Behav. Groupwork (W) (also core)
- 8450 Conflict Resolution (S)
- 8970 Directed Study (F,W,S)
- 8990 Research Projects (F,W,S)

III. HUMAN SERVICES MANAGEMENT CONCENTRATION

A. Required Courses

- 8020 Field Instruction in HSM setting (F,W,S)
- 8350 Planned Social Change (found.) (F)

B. Concentration Course Pool (select three)

- 8301 Organizational Analysis, Administration and Management (W)
- 8305 Community Development (S)
- 8307 Social Planning (S)
- 8406 Supervision and Consultation in SW Practice (W)
- 8903 Program Evaluation (W)

C. Electives (minimum of 6 credits)

1. Recommended Social Work Electives (minimum of 6 credits)

- 5010 Children, Youth and the Welfare State (F)
- 5010 Women and Public Policy (W)
- 5010 Social Work in Industry (S)
- 8121 Family/Children Foundation Course (F)
- 8122 Health/Mental Health Foundation Course (F)
- 8150 Models of Personal Social Service Systems (W)
- 8150 Long-Term Care (S)
- 8450 Conflict Resolution (S)
- 8970 Directed Study (F,W,S)
- 8990 Research Projects (F,W,S)

2. Recommended Non-Social Work Electives (maximum of 12 credits)

School of Public Affairs: Many of the courses in Planning and Urban Affairs; Human Service Systems; Quantitative Methods for Policy Analysis; or Administration and Implementation are recommended, e.g. PA 5515, 5516, 5517, 5521, 5661, 5671, 8220.

- PubH 5403 Computer Applications in Health Services Administration
- PubH 5773 Financial Management in Health Services Organization
- EdAd 8220 Quantitative Foundation for Management Methods
- EdAd 8213 Financial Resource Management
- EdAd 8214 School Management Information Systems

Note: Econ 3101 Microeconomic Theory is an important background course and a prerequisite for many public affairs courses but is not offered for graduate credit.

JUN 3 1985



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of Laboratory Medicine and Pathology  
Division of Medical Technology  
Box 198 Mayo Memorial Building  
420 Delaware Street S.E.  
Minneapolis, Minnesota 55455

(612) 373-9670  
Offices at 15-170 Phillips-Wangensteen Building

May 30, 1985

To: Graduate School Executive Committee

Re: Addendum to the proposal for the graduate program in Clinical  
Laboratory Science: Admission requirements for the graduate program.

From: Helen M. Hallgren, M.S.  
Carol L. Wells, Ph.D.  
Walid Yasmineh, Ph.D.

Because of the great variety of student backgrounds and because of the multidisciplinary nature of the graduate program, it is difficult to rigidly define the admission requirements for the program in Clinical Laboratory Science. The Admission's Committee will ultimately decide if the student has had the proper bachelor's degree program and the proper prerequisite courses for admission to a chosen specialty area in the graduate program. Students who have deficiencies in coursework may make these up during the first year of graduate work. The following recommendations can serve as a guide in determining the suitability of an applicant for admission into a specific specialty area.

- (a) Students seeking admission to the chemistry specialty area should hold a bachelor's degree in chemistry, physics or medical technology.
- (b) Students seeking admission to the specialty areas of genetics, hematology, immunology, or microbiology should hold a bachelor's degree in genetics, molecular biology, biological sciences, microbiology, or medical technology. In addition, students should have undergraduate coursework in their specific specialty area.
- (c) All applicants should have undergraduate coursework in organic and inorganic chemistry, quantitative analysis, physics, and mathematics.



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of Laboratory Medicine and Pathology  
Medical School  
Box 198 Mayo Memorial Building  
420 Delaware Street S.E.  
Minneapolis, Minnesota 55455  
(612) 373-8623

DATE: April 10, 1985

TO: Robert T. Holt, Dean  
Graduate School

FROM: The Graduate Committees for the Master's Degree Programs in  
Laboratory Medicine and Medical Technology

RE: Proposal to combine the Master's Degree Programs in Laboratory  
Medicine and Medical Technology under the new title of Clinical  
Laboratory Science

The enclosed documents comprise a proposal for a new Master's Degree program in the Department of Laboratory Medicine and Pathology. The new program is a multidisciplinary program titled Clinical Laboratory Science and is a merger of two existing multidisciplinary programs in the Department, namely Laboratory Medicine and Medical Technology. The Department of Laboratory Medicine and Pathology would thereby focus its efforts on a single multidisciplinary program which would involve the five disciplines of chemistry, genetics, hematology, immunology, and microbiology. The combined program incorporates and emphasizes the strengths of the two existing programs. The proposed program in Clinical Laboratory Science has the full support of the Graduate Committees in Laboratory Medicine and in Medical Technology, as well as the support of Ellis S. Benson, M.D., Head of the Department of Laboratory Medicine and Pathology. We feel that the Clinical Laboratory Science program would not only result in an economy of effort but would strengthen the level of graduate education in the Department. We therefore request its approval by the Graduate School.

cc: David M. Brown, M.D., Dean, Medical School

Ellis Benson, M.D., Professor and Head  
Department of Laboratory Medicine and Pathology

## Section II

### 1. Summary and Description of the Program

The Graduate Committees for the Master of Science degree in Laboratory Medicine and for the Master of Science degree in Medical Technology jointly submit this proposal to merge the two programs under the title of Clinical Laboratory Science. The Laboratory Medicine program and the Medical Technology program have similar and overlapping goals, faculty and curricula. Combining the two programs will not only eliminate cost duplication but will focus the efforts of the faculty.

The Clinical Laboratory Science program will offer a Master of Science degree which includes original research (Plan A thesis) and course work in one of five specialty areas which include chemistry, genetics, hematology, immunology, and microbiology. The objectives of the program are twofold: a) to provide students holding a bachelor's degree in a basic science the opportunity to gain competence in a specialized area of laboratory medicine; and b) to provide students holding a bachelor's degree in Medical Technology further training in the research, supervisory, and teaching aspects of laboratory medicine. Admission requirements include a bachelor's degree in a basic science or in Medical Technology, including standard college courses in organic/inorganic chemistry, physics, mathematics, and biology. Based on the interest and enrollment in the current Laboratory Medicine and Medical Technology programs, it is expected that there will be approximately thirty applications per year to the Clinical Laboratory Science program with a yearly admission of approximately ten to fifteen students.

The faculty and administrative staff for the Clinical Laboratory Science program will be provided from the existing faculty and staff in the

Laboratory Medicine and Medical Technology programs. This will be a reallocation of time and effort. The Department of Laboratory Medicine and Pathology will initially provide \$28,000 per year for student support.

2. Need for the Program

Students from the two original programs (Laboratory Medicine and Medical Technology) fill a need in a number of academic, research, and industrial settings (see Appendix C). Many graduates obtain supervisory or managerial positions in clinical laboratories and in industry. A substantial proportion of graduates have gone on to related Ph.D. programs or to medical school. Employment prospects for future students appear to continue to be favorable as noted by the sampling of current position advertisements contained in Appendix E.

3. Mission

Clinical Laboratory Science is a relatively new interdisciplinary program which encompasses the various specialty areas in laboratory medicine. Each of the original programs in Laboratory Medicine and Medical Technology offer a Master's Degree in various specialty areas of laboratory medicine. The Clinical Laboratory Science program is the logical result of combining these two programs. Graduates of this program will be able to enter responsible positions in clinical laboratories, research laboratories, or industry. No other graduate program in the state offers a Master's Degree in a specialized area of laboratory medicine.

4. Comparative Program Analysis

There are no similar programs in the state of Minnesota. We know of only one other similar program in the United States and this is a multidisciplinary program in clinical laboratory science offered at the University of Washington.

5. Duplication

As mentioned previously, there are no similar programs in the state of Minnesota. There is one similar program at the University of Washington. There is continued student interest in both the Laboratory Medicine and Medical Technology multidisciplinary programs. This, as well as the successful placement of graduates (Appendix C), indicates that the proposed combined program will serve a need in the state of Minnesota.

6. Cost/Benefit

The merger of the Laboratory Medicine and Medical Technology programs relate to graduate education in the Department of Laboratory Medicine and Pathology. The proposed Clinical Laboratory Science program will be administered by a Director of Graduate Studies and a Graduate Committee consisting of one faculty representative in each of the specialty areas of chemistry, genetics, hematology, immunology and microbiology.

The evaluation of graduate student performance will include the following:

- a. Faculty members who serve as major advisors have direct responsibility in guiding the student's program.
- b. Each student will be evaluated quarterly by the major advisor;

progress toward the degree will be re-evaluated yearly by the student and the advisor.

- c. Students will be expected to attend departmental rounds and seminars and to present three seminars appropriate to their disciplines.
- d. Students interested in education will participate in laboratory teaching appropriate to their needs and aspirations.
- e. All students will conduct research, write a Plan A thesis, and pass a final oral examination of thesis.
- f. A written comprehensive examination will be successfully completed on the end of the student's program.

Graduate faculty members will be reviewed periodically, or at least every five years, by the Director of Graduate Studies. Continued involvement in the program will depend on the faculty member's competency and his/her degree of active involvement in the program.

The primary benefits of combining the Laboratory Medicine and Medical Technology programs are the elimination of cost duplication and the focusing of faculty efforts. There are no additional costs associated with this program because it entails only a reallocation of resources.

Section III

April 15, 1985

(Date)

Proposal for: (name of new program)

Clinical Laboratory Science

Submitted by the: (name of department or departments)

Department of Laboratory Medicine and Pathology

of the: (name of the college or campus)

Medical School

The proposal has been reviewed and approved by:

\*\*\*\*\*

APPROVAL CERTIFICATION

ADDITIONAL APPROVALS (as appropriate)

Ellis J. Jensen 3/15/85  
(Department Chairman (Date)  
or Equivalent)

\_\_\_\_\_  
(Dean, Graduate School) (Date)

Edward M. Brown 4/15/85  
(Dean) (Date)

\_\_\_\_\_  
(Vice President, (Date)  
Institutional Relations)

\_\_\_\_\_  
(Vice President, (Date)  
Academic Affairs)

\_\_\_\_\_  
(Vice President, (Date)  
Health Sciences)

\_\_\_\_\_  
(Deputy Vice President, (Date)  
Agriculture, Forestry and Home Economics)

Approval by Regents: \_\_\_\_\_  
(Date)

First Reading by CAC: \_\_\_\_\_  
(Date)

Second Reading by CAC: \_\_\_\_\_  
(Date)

Recommendation by the MHECB: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Date)

Confirmation by Regents: \_\_\_\_\_  
(Date)

## Outline of Section III

- A. Introduction
- B. The Proposed Program
  - 1. Objectives
  - 2. Admission Requirements
  - 3. Curriculum - general description
  - 4. Curriculum - detailed description
    - a. assignment to advisor
    - b. program filing
    - c. graduate school requirements
    - d. course work
    - e. plan A thesis
    - f. seminar participation
    - g. laboratory teaching
    - h. comprehensive written examination
    - i. final oral examination
    - j. student file
    - k. academic performance
    - l. financial assistance
- C. Educational and Social Needs for the Program
  - 1. Student Interest
  - 2. Employment Prospects
  - 3. Benefits of Program
- D. Comparison with Similar Programs
- E. Quality Control
  - 1. The Graduate Faculty
  - 2. Governing Procedures
- F. Implementation
  - 1. Timetable
  - 2. University Resources
    - a. courses and faculty teaching
    - b. faculty advising and administration
    - c. support staff

### Section III

#### A. Introduction

The proposal for the Master of Science degree in Clinical Laboratory Science is submitted jointly by the Graduate Committee for the Master of Science degree in Laboratory Medicine and by the Graduate Committee for the Master of Science degree in Medical Technology. Both graduate programs are in the Department of Laboratory Medicine and Pathology. The Laboratory Medicine program and the Medical Technology program are proposing to merge under the new title of Clinical Laboratory Science. The existing Laboratory Medicine and the Medical Technology programs have similar and overlapping goals, faculty, and curricula. A merger under the new title of Clinical Laboratory Science will not only focus the efforts of the faculty but eliminate the duplication of costs and effort inherent in maintaining the two existing programs.

The objective of the graduate program in Medical Technology is to prepare medical technologists for a career of investigation and teaching in the area of clinical laboratory methods. The objective of the graduate program in Laboratory Medicine is to prepare physicians, medical technologists, chemists, biologists, and other qualified students for a career in research and/or teaching in the field of laboratory medicine. In both graduate programs, students pursue original research (Plan A thesis) as well as course work in a specialty area of laboratory medicine. The objectives of the Master of Science degree in Clinical Laboratory Science are formulated to encompass the objectives of the graduate programs in both Laboratory Medicine and Medical Technology. Students in Clinical Laboratory Science will pursue original research (Plan A thesis) and course work in one of five specialty

areas which will initially include chemistry, genetics, hematology, immunology, and microbiology.

**B. The Proposed Program**

**1. Objectives**

The objectives of this Plan A Master of Science degree are twofold:

a) to provide students holding a bachelor's degree in a basic science the opportunity to gain competence in a specialized area of laboratory medicine; and

b) to provide students holding a bachelor's degree in Medical Technology further training in the research, supervisory, and teaching aspects of laboratory medicine.

**2. Admission Requirements**

A bachelor's degree is required and is usually in a basic science or in Medical Technology, including standard college courses in organic/inorganic chemistry, physics, mathematics, and biology. Students with deficits must fulfill all requirements before admission to the program. Previous related work experience is advantageous. Applications for admission must include scores from the general aptitude section of the Graduate Record Examination, three letters of recommendation, and an autobiographical outline that includes a statement of career goals. Foreign students should have a minimum score of 550 on the TOEFL examination.

3. Curriculum for the Master of Science Degree in Clinical Laboratory Science

Upon admission to the program, each student will concentrate his/her studies in one area of Clinical Laboratory Science. Currently, there are five specialty areas available in the program which include chemistry, genetics, hematology, immunology, and microbiology. (More specialty areas may be added at a later date pending availability of courses and approval by the HSPRC.) A listing of courses available in CLS (Appendix A) and sample student programs in each specialty area (Appendix B) are appended to this proposal.

a) Students will complete a minimum of 20 quarter credits in the specialty area plus 16 thesis credits.

b) Students will complete a minimum of 9 quarter credits in a stipulated minor field or 8 quarter credits in related fields. Suggested minor fields for each area of specialization are listed along with the sample student programs available for each area of specialization (Appendix B).

c) A core course in Clinical Laboratory Science (currently, LMed 5101 and/or 5102) will be a prerequisite for all students lacking clinical laboratory experience as determined by the student's academic advisor.

d) Each student will complete a Plan A research thesis under the guidance of a member of the graduate faculty. Examples of thesis titles for each area of specialization are listed in Appendix B.

e) Each student will present three seminars as described in part 4d in Section III.

f) Students with an interest in teaching will assist in the instruction of one basic course in the specialty area.

g) Final examinations will include a comprehensive written examination in the specialty area and an oral examination of the Plan A thesis.

h) Most students will complete the program in two to three years. Maximum time for completion is seven years; allowances may be made for extenuating circumstances.

4. Detailed Description of the Curriculum for the Master of Science Degree in Clinical Laboratory Science

a) Assignment to Advisor

Prior to registration each student will be assigned an advisor in his/her area of specialization; the student's program will be formulated in consultation with the advisor based upon the student's background and career goals. A student shall meet with a minimum of three graduate faculty prior to selecting a permanent thesis advisor. A student has the opportunity to change advisors, providing a mutually satisfactory arrangement can be made.

b) Master's Degree Program Filing

A degree program form obtained from the Graduate School is used to outline the complete M.S. degree program to be offered and to list the title of the Plan A thesis to be submitted. No later than three quarters

prior to graduation, the degree program form is submitted to the advisor for review, approved by the director of graduate studies in the major and minor fields, and then approved by the Graduate School. Following the approval of the program, the student will record the outline of the program in the student progress file and forward a copy of it to the departmental office for the student file. Early submission of the program is encouraged, and it may be presented after completing 9-15 graduate credits (at least three of which are in the major). A transcript accompanies the Master's program form.

c) Graduate School Requirements for Master of Science Degree in Clinical Laboratory Science Plan A

The M.S. degree in Clinical Laboratory Science is offered only under Plan A. This includes satisfactory academic performance in the following:

- 1) A minimum of 20 quarter credits in the specialty area
- 2) A minimum of 9 quarter credits either in a single supporting field outside the major or 8 quarter credits in related fields outside the major
- 3) Plan A thesis including a minimum of 16 thesis credits
- 4) Written comprehensive examination in the major designated in the student's program
- 5) Final oral examination of the Plan A thesis

d) Course Work

Courses for the student's program will be determined by the advisor in view of the interest and competence of the advisee. Chemistry, genetics, hematology, immunology, and microbiology are the areas of speciali-

zation within the major field. Students who have satisfactorily completed appropriate graduate level courses at the University of Minnesota or other approved graduate institutions may transfer no more than 40% of the minimum program requirements. All credit transfers must be approved by the Director of Graduate Studies. The Graduate School requires a minimum of 20 credits in the major field for graduation with an M.S. degree in Clinical Laboratory Science. Most students will typically complete about 23-28 credits in the specialty area in addition to a minimum of 9 quarter credits in a supporting field or 8 quarter credits in related fields. Appendix A contains a listing of pertinent courses available to students in the Clinical Laboratory Science program. Appendix B contains a listing of courses required in each specialty area as well as a listing of elective courses, suggested minor fields, and sample thesis research titles.

e) Plan A Thesis

The Master's Degree in Clinical Laboratory Science is a degree with an emphasis on research and thus requires a Plan A thesis. This research is central to the student's program and development and is subjected to review and approval by the student's advisor and by the Committee on Graduate Studies in Clinical Laboratory Science. (The student's thesis advisor should be chosen prior to Fall Quarter of the second year.) The final draft of the thesis will be prepared and submitted to the oral examining committee for approval 5 weeks prior to the end of the quarter in which the student expects to finish the program.

f) Seminar Participation

Students are required to present three seminars on topics chosen by the student with the approval of his/her specialty area advisor. One seminar must be a presentation of the results of the thesis research. If the seminar topic relates to the student's thesis research, this seminar will be considered one credit of the sixteen credits required as Thesis Credits, CLS 8777. If the seminar topic is outside of the student's area of thesis research, the student is required to register for Seminar: Clinical Laboratory Science CLS 5102 and such credit(s) will be in addition to the credits required for the major field, supporting/related fields, and thesis credits. Each student must formally register for at least one quarter course (one credit) in CLS 5102 and give a seminar presentation during that quarter.

In addition, all students are encouraged to attend the staff seminars conducted by the Department of Laboratory Medicine and Pathology.

g) Laboratory Teaching

Students with an interest in teaching are required to assist and instruct in one or more of the basic laboratory courses offered in the student's area of specialization. The experience gained in teaching and preparation of a laboratory course is considered an essential aspect of advanced study. Credit may be obtained for this activity (1-3 credits), but such credit is in addition to other credit requirements for the degree.

h) Comprehensive Written Examination

A comprehensive written examination is to be successfully completed by all Clinical Laboratory Science graduate students. This exami-

nation is designed to test the competence of the student in fundamental aspects of his/her area of specialization. Specific areas to be covered and questions used in the examination will be determined by the graduate faculty in Clinical Laboratory Science, specifically those members with expertise in the student's specialty area. Administration of the exam (taken over a six-hour period) is the responsibility of the Clinical Laboratory Science Graduate Committee. Questions used in the exam are submitted by the graduate faculty in Clinical Laboratory Science. Grading of the examination will be the responsibility of the staff members whose questions were selected for the examination. Results of the exam are reported to the committee, who review the graded examination and inform both student and advisor of the results. The committee may also make recommendations, based on the test results. The grades are "pass," "pass-conditionally," and "fail." Students who fail in one section of the exam ("passed-conditionally ") will be given a second opportunity to be reexamined in that section, within two weeks of the original examination. Students who fail the entire examination may be permitted a final opportunity by the committee to repeat the examination. The second exam must be scheduled within one month of the original examination. The completed examination is filed in the student's file, and results are recorded on the Student Progress Form.

i) Final Oral Examination

The final oral examination is scheduled during the final quarter of residence. The examination is administered by a three-member examining committee in accordance with the procedures given in the Graduate School

Bulletin. The examining committee includes two members from the major field and one member from the student's minor or related fields. The student's advisor serves as the chairperson of the examining committee. The student's file is brought to the examination by the advisor. This allows other members of the examining committee to review the student's progress. All members will have copies of the Plan A thesis for reference during the examination. The date and time for the examination are arranged between the student and the members of the examining committee. The student must obtain the final oral examination form from the Graduate School in order for the results to be recorded in the Graduate School.

j) Student File

A file is prepared for each new graduate student at the time of matriculation. A student's progress form will be retained in the Clinical Laboratory Science office. The Director of Graduate Studies must keep the form thoroughly up-to-date. This includes recording grades each quarter, filing a copy of the Master's Degree program, and noting any changes in the program. Faculty are urged to write frequent informal reports and letters of recommendation concerning student evaluations. These reports will be of great benefit to the student when letters of recommendation are written to prospective employers.

k) Academic Performance

Students are expected to maintain a satisfactory rate of progress toward the completion of their degree requirements. This includes:

- 1) Performance in courses according to the standards of the Graduate School.
- 2) Acceptance of the Plan A thesis by the student's advisor and members of student's oral examination committee.
- 3) The prompt elimination of "Incomplete" grades.
- 4) Passing the comprehensive written and oral examinations.

During the first week of each quarter, the graduate committee meets to review the academic progress of (1) any student on "conditional status;" (2) any student, at the request of the student or his/her advisor.

This procedure should be followed: Within one week following the close of each examination period students must record unofficial grades in the Student Progress File and report the grades to his/her advisor. (Advisors should notify the committee of any unsatisfactory grades.)

1) Financial Assistance

The Department of Laboratory Medicine and Pathology will initially provide \$28,000 per year for student support which can include tuition and fees. The distribution of this money will be at the discretion of the Clinical Laboratory Science Graduate Committee.

C. Educational and Social Needs for the Program

1. Student Interest

Appendix C contains a listing of the graduates of the Master's Degree Programs in Laboratory Medicine and in Medical Technology along with the last

known professional position of each student. There are currently 12 students in the program in Laboratory Medicine. This program received 23 applications for the 1984-1985 academic year, and applications for the 1985-1986 academic year are being received at a comparable rate. There are currently 5 students in the program in Medical Technology. This program received 8 applications for the 1984-1985 academic year, and applications for the 1985-1986 academic year are being received at a comparable rate.

## 2. Employment Prospects

Students from the two original programs (Laboratory Medicine and Medical Technology) have found employment in academic and research institutions and as laboratory supervisors in a variety of settings. A substantial proportion have gone on to related Ph.D. programs or to medical school (see Appendix C).

Employment prospects for future students appear favorable. A report in March of 1984 from the Bureau of Labor Statistics shows health care to be one of the fastest-growing fields. The proposed program will provide graduates with the background necessary to pursue employment in academic institutions, research facilities, industry or clinical laboratories. Appendix E contains examples of current position advertisements for which graduates of the proposed program would be qualified.

## 3. Benefits of Program

Past graduates of both programs have been successful in education, research, and service. However, by merging the programs, the Department will eliminate costly duplication of effort that has occurred in sponsoring two

Master of Science programs. Equally important and inherent in the directives of the new President of the University, will be a better focus of faculty efforts. In addition, due to the merger, the graduate faculty has been greatly reduced in number; only persons committed to the new program are included among the graduate faculty. In short, the merged program incorporates the best of the previous programs: Medical Technology's success in research and teaching, Laboratory Medicine's success in research and service. While these strengths remain, the merged program will be more cohesive and better coordinated.

Administrative benefits include one central facility to handle all inquiries, admissions materials, and student files. Benefits to students include improved advising, increased association with peers, increased access to departmental support funds, and improved relationships with committed faculty members.

Other benefits will be examined periodically through a number of evaluation mechanisms. The Clinical Laboratory Science graduate program will be administered by the Director of Graduate Studies (DGS) and a Committee on Graduate Studies composed of members who represent the specialty areas of the Graduate Faculty.

Evaluation of graduate student performance will include the following:

a) Faculty members who serve as major advisors will have direct responsibilities for maintaining the standards of both the Graduate School and the Department of Laboratory Medicine and Pathology

b) Each student's progress will be evaluated quarterly by the major advisor; each year progress toward the degree will be re-evaluated by the student and advisor.

c) Graduate students will be expected to attend departmental rounds and seminars and to prepare three seminars appropriate to their disciplines.

d) Students interested in education will participate in laboratory teaching appropriate to their needs and aspirations.

e) All students will conduct research, write a Plan A thesis, and pass a final oral examination of the thesis.

f) A written comprehensive examination will be successfully completed at the conclusion of the student's program.

Graduate faculty members of Laboratory Medicine and Pathology will be reviewed periodically. Continuing competency and active involvement in the graduate program will be primary considerations for continued membership. Members of the graduate faculty will continue to be actively engaged in research, teach graduate level courses, be willing to serve as advisors and examiners, present seminars, and be available for service on various committees.

Finally, graduates will be surveyed as to their employment record, their post-hoc evaluation of the program and their suggestions for improving the program.

**D. Comparison with Similar Programs**

Clinical Laboratory Science is a relatively new, multidisciplinary field which includes chemistry, genetics, hematology, immunology, and microbiology. The first roots of this science grew at the University of Minnesota School of

Medicine where educational programs in Medical Technology, Clinical Chemistry, Hematology, and Clinical Pathology were established in 1923, 1939, 1948, and 1954 respectively. During these early years, the laboratories pertaining to these various specialties were administered in most institutions by various departments in which specific technologies were initially developed. These included Anatomy, Pathology, Microbiology, Biochemistry, Physiology, Zoology, Genetics, Medicine, Pediatrics, Surgery, Radiology and Obstetrics.

The first Department of Laboratory Medicine in this country was established in 1959 at the University of Minnesota. This occurred largely because of the 20 years of pioneering efforts of Dr. Gerald T. Evans who envisioned Laboratory Medicine as a separate entity to be administered independently, rather than jointly by various medical and/or basic science departments. Since that time, the department has grown rapidly and has been frequently used as a model of excellence to establish similar programs throughout the country. In 1973, the department was merged with the department of Pathology into one Department of Laboratory Medicine and Pathology. Presently, the department offers Master's Degree programs in Medical Technology and Laboratory Medicine, and a Ph.D. program in Pathobiology. The Medical Technology graduate program is the oldest in the country having graduated 50 students since its inception in 1958. The Laboratory Medicine graduate program is younger and has 21 graduates since its inception in 1970. Thus the proposed merger of these two programs involves a merger of two well established and proven programs.

There are very few programs in the country similar to the proposed program in Clinical Laboratory Science. Peterson's 1985 Guide lists 46 graduate

programs in Medical Technology and 20 are affiliated with medical schools. In contrast to programs in Medical Technology, there are very few programs in Laboratory Medicine. Although these admit both medical technology and basic science graduates, they are usually limited to one or two of the five major specialties, probably because of limitations in teaching or technical resources. To the best of knowledge, only two major institutions, the Universities of Minnesota and Washington, currently have Master of Science programs in most of the major specialties of laboratory medicine. Since the University of Minnesota, however, has both a Medical Technology program which admits only medical technology graduates, and a Laboratory Medicine program which admits both medical technology and basic science graduates, a merger of the two programs would allow a pooling of resources which should be beneficial to both programs.

#### E. Quality Control

##### 1. The Graduate Faculty in Clinical Laboratory Science

The graduate faculty represent the five specialty areas in the Clinical Laboratory Science Master's Degree Program. The graduate faculty (Appendix D) are in agreement with this outline of the proposed program in Clinical Laboratory Science and have agreed to actively participate in the program. Numbers of faculty have been greatly reduced so as to secure only those individuals who are committed to the merged program. Periodically (at least five year intervals), the Director of Graduate Studies will review the program-related activities of the Graduate Faculty. If it is determined that the graduate faculty member has not fulfilled his/her responsibilities to the

program, he/she will be encouraged to do so by the Director of Graduate Studies. Those faculty members who then cannot increase their commitment to the program will be asked to resign from the Graduate Faculty. If such faculty do not wish to resign, the Director of Graduate Studies, in consultation with the Clinical Laboratory Science Graduate Committee, will present the case for review by the Dean of the Graduate School in accordance with established procedures.

2. Governing Procedures

The graduate faculty will elect a Director of Graduate Studies for a term of three years. The Director of Graduate Studies will administer the program with a Graduate Committee representing the specialty areas of the graduate faculty. The changes in and evaluation of the program will be generated by the Graduate Studies Committee representing the graduate faculty in Clinical Laboratory Science.

The Policy and Review Council for the Health Sciences or other Policy and Review Council will be assigned by the Dean of the Graduate School to approve any changes and evaluate the progress of the proposed program.

The Dean of the Graduate School will schedule systematic reviews and evaluations of this program as with other graduate programs of the University of Minnesota.

F. Implementation

1. Timetable

The first group of students will be admitted to the program as soon as is feasible following confirmation of formal program approval. At that time

students will no longer be admitted to either the Medical Technology or Laboratory Medicine program. Students already enrolled in either of the two programs will be given the option of transferring to the program in Clinical Laboratory Science or finishing their degree under the guidelines of the original program.

2. University Resources

a) Courses and Faculty Teaching. All of the courses listed in the program have been approved by the college units and/or the Graduate School. These courses are listed in Appendix A along with the old (LMed or MedT) and new (CLS) letter designations. All LMed designations have been omitted, but selected MedT designations must be retained because the Division of Medical Technology has students in an undergraduate program who require selected graduate courses (5000 level) with the MedT designation.

b) Faculty Advising and Administration. A Director of Graduate Studies for Clinical Laboratory Science will administer the program along with a Graduate Studies Committee selected from members of the Graduate Faculty. This will require a reallocation of time and effort.

c) Support Staff. Office staff for correspondence and administration of the program will be provided by the Department of Laboratory Medicine and Pathology. The current office space is adequate.

Appendix ACourses Available in Clinical Laboratory Science

<u>Current Courses in Laboratory Medicine</u>	<u>Old Listing</u>	<u>New listing</u>
Thesis credits, 1-16 cr per qtr	LMed 8777	CLS 8777
Principles of Laboratory Medicine I (4 cr)	LMed 5101	CLS 5101
Principles of Laboratory Medicine II (4 cr)	LMed 5102	CLS 5102
Principles of Diagnostic Microbiology (5 cr)	LMed 5103	CLS 5103
Hospital Infections Control (2 cr)	LMed 5110	CLS 5110
Medical Mycology (4 cr)	LMed 5133	CLS 5133
Anaerobic Bacteriology (4 cr)	LMed 5136	CLS 5136
Clinical Microbiology Seminar (1 cr)	LMed 5138	CLS 5138
Advanced Microbiology (cr ar)	LMed 5139	CLS 5139
Human Cytogenetics (3 cr)	LMed 5160	CLS 5160
Human Cytogenetics Laboratory (2 cr)	LMed 5161	CLS 5161
Human Biochemical Genetics (3 cr)	LMed 5162	CLS 5162
Human Biochemical Genetics Laboratory (2 cr)	LMed 5163	CLS 5163
Research in Human Genetics (cr ar)	LMed 5169	CLS 5169
Advanced Problems in Medical Genetics (cr ar)	LMed 5170	CLS 5170
Introduction to Clinical Chemistry (10 cr)	LMed 5178	CLS 5178
Chemistry Seminar (1 cr)	LMed 5179	CLS 5179
Advanced Chemistry (cr ar)	LMed 5180	CLS 5180
Computer Applications in Medicine (4 cr)	LMed 5194	CLS 5194
Introduction to Computers in Laboratory Medicine and Pathology (cr ar)	LMed 5195	CLS 5195
Computer Methodology in the Delivery of Health Care I: Physiological Monitoring and Testing (3 cr)	LMed 5196	CLS 5196
Computer Methodology in the Delivery of Health Care II: Introduction to Medical Decision-Making Techniques (3 cr)	LMed 5197	CLS 5197
Computer Methodology in the Delivery of Health Care III: Health Information Systems (3 cr)	LMed 5198	CLS 5198
Immunohematology (2 cr)	LMed 5270	CLS 5270
Immunology Seminar (1 cr)	LMed 5272	CLS 5272
Advanced Immunology (cr ar)	LMed 5273	CLS 5273
Computer Applications: Health Care Providers (3-4 cr)	LMed 5346	CLS 5346
Hematology (4 cr)	LMed 5765	CLS 5765
Advanced Hematology (cr ar)	LMed 5768	CLS 5768
Research Seminar (1 cr)	LMed 5864	CLS 5864
Departmental Seminar (1 cr)	LMed 5865	CLS 5265
Principles of Diagnostic Enzymology (3 cr)	LMed 8105	CLS 8105
Advanced Clinical Laboratory Medicine (cr ar)	LMed 8235	CLS 8235
Research on Clinical Laboratory Problems (cr ar)	LMed 8236	CLS 8236

<u>Current Courses in Medical Technology</u>	<u>Old Listing</u>	<u>New Listing</u>
Thesis credits (1-16 cr per qtr)	MedT 8777	CLS 8777
Introduction to Urinalysis (3 cr)	MedT 5063*	CLS 5063
Introduction to Clinical Immunohematology (5 cr)	MedT 5066*	CLS 5066
Hemostasis (2 cr)	MedT 5067*	CLS 5067
Principles of Clinical Hematology I (3 cr)	MedT 5075*	CLS 5075
Principles of Clinical Hematology II (2 cr)	MedT 5076*	CLS 5076
Special Laboratory Methods (2 cr)	MedT 5090*	CLS 5090
Principles of Diagnostic Microbiology (5 cr)	MedT 5102	CLS 5103
Introduction to Clinical Chemistry (4 cr)	MedT 5110*	CLS 5110
Principles of Clinical Chemistry (6 cr)	MedT 5111*	CLS 5111
Seminar: Medical Technology (1-3 cr)	MedT 5120	CLS 5120
(name changed to Seminar: Clinical Laboratory Science, 1 cr)		
Practicum Teaching (cr ar, max 3 cr)	MedT 5125	CLS 5125
Elements of Laboratory Administration (3 cr)	MedT 5128	CLS 5128
Practicum in Laboratory Administration (3 cr)	MedT 5130	CLS 5130
Medical Mycology (4 cr)	MedT 5133	MedT 5133 CLS 5133
Anaerobic Bacteriology (4 cr)	MedT 5136	MedT 5136 CLS 5136
Techniques for Teaching (3 cr per qtr)	MedT 5140, MedT 5141	CLS 5140, CLS 5141
Development of Medical Technology (3 cr)	MedT 5145	CLS 5145
Advanced Clinical Hematology (5 cr)	MedT 5155	CLS 5155
Advanced Clinical Chemistry	MedT 5175	CLS 5175
Chemistry Seminar (1 cr)	MedT 5179	CLS 5179
Advanced Topics in Clinical Chemistry (3 cr)	MedT 8176	CLS 8176
Principles of Diagnostic Enzymology (3 cr)	MedT 8178	CLS 8178
Educational Administration in Medical Technology (3 cr)	MedT 8240	CLS 8240

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\*Courses will also retain MedT designation to be used in undergraduate program in Medical Technology.

Appendix B

Because of the multidisciplinary nature of the program, there are no courses (core or otherwise) that would encompass the whole student population and, therefore, graduate students will not often meet as a group. However, all students will meet as one group during the seminars which will be held at regular intervals throughout the academic year.

Sample CurriculaI. Specialty area: Chemistry**Required courses:**

CLS 5110	Introduction to Clinical Chemistry	4 credits
CLS 5111	Principles of Clinical Chemistry	6 credits
CLS 8176	Advanced Topics in Clinical Chemistry	3 credits
CLS 8105	Principles of Diagnostic Enzymology	3 credits
CLS 5179	Clinical CHEMISTRY Laboratory Rounds	1 credit
MdBc 8219	Biochemistry of Specialized Tissues	3 credits

**Elective courses:****Suggested minor fields:**

Pharmaceutics  
 Biochemistry  
 Biometry/Computer Science  
 Teaching/Management

**Sample thesis titles:**

"High Performance Liquid Chromatographic Separation of Urinary Estrogen Conjugates"

"Tricyclic Antidepressant Drug Analysis by Paired Ion High Performance Liquid Chromatography"

"Preparation of Ferritin for Use as a Reference Standard"

"The Measurement of Human Antithyroglobulin Antibodies by an Immunoradiometric Method"

"Determination of Acute Phase Proteins by Immunochemical Nephelometry"

II. Specialty area: Genetics

**Required courses:**

CLS 5160	Human Cytogenetics	3 credits
CLS 5161	Human Cytogenetics Laboratory	2 credits
CLS 5162	Human Biochemical Genetics	3 credits
CLS 5163	Human Biochemical Genetics Laboratory	2 credits

**Elective courses:**

GCB 5022	Genetics	4 credits
GCB 5031	Advanced Genetics I	4 credits
GCB 5032	Advanced Genetics II	4 credits
GCB 5043	Human Genetics	4 credits
GCB 5044	Human Population Genetics	4 credits
GCB 5046	Human Biochemical Genetics	3 credits
OPAT 8012	Human Biochemical Genetics	4 credits
OPAT 8015	Methods of Genetic Counselling	1 credit

**Suggested minor fields:**

Biochemistry  
Immunology  
Biology  
Statistics  
Teaching/Management

**Sample thesis titles:**

"Characterization of the Immunoglobulins of the Sea Lamprey (Petromyzon marinus)"

"Screening for Enzymatic Deficiencies in Red Blood Cell Glycolysis"

"Evaluation of Mixed Lymphocyte Culture Reactions in Twins"

"Vitamin D Binding Globulin (Gc): Subtypes of Selected North and Central American Populations"

"Retinoblastoma and its Association with a Deletion in Chromosome 13: A Survey Using High Resolution Chromosome Technique"

III. Specialty area: Hematology

**Required courses:**

CLS 5765 Hematology	4 credits
CLS 5768 Advanced Clinical Hematology	cr ar
GCB 5051 Histology: Cell and Tissue	5 credits
<u>or</u>	
Anat 5103 Human Histology	3-7 credits
MdBC 5300-5301 Biochemistry	9 credits
MedT 5067/CLS 5067 Hemostasis	2 credits
MedT 5075-5076/CLS 5075-5076 Clinical Hematology	5 credits

**Elective courses:**

CLS 5125 Practicum: Teaching	cr ar
MedT 5128/CLS 5128 Elements: Lab Administration	3 credits
CLS 5140-5141 Techniques for Teaching	6 credits
Anat 8135 Biological Electron Microscopy: Techniques	1-5 credits
GCB 5606 Biological Electron Microscopy	3 credits
GCB 5022 Genetics	3 credits
MicB 5218 Immunology	4 credits

**Suggested minor fields:**

Anatomy  
 Genetics and Cell Biology  
 Immunology  
 Biochemistry  
 Teaching/Management

**Sample thesis titles:**

"Cytogenetic Studies in Multiple Cycles of Pulmonary Metastases"

"Development and Clinical Significance of Antibody-Dependent Lymphocyte-Mediated Granulocytotoxicity"

"Coagulation Studied on Cord Blood of Normal Newborns"

"Adenosine-5-triphosphate Levels of Stored Human Granulocytes Determined by the Luciferin-Luciferase Assay"

An Opsonization Technique for the Detection of Antineutrophil Antibodies"

IV. Specialty area: Immunology**Required courses:**

Path 8218 Frontiers in Immunology I	3 credits
Path 8320 Frontiers in Immunology II	3 credits
Path 8321 Frontiers in Immunology III	3 credits

**Elective courses:**

MicB 5216 Immunology	3 credits
CLS 5270 Immunohematology	2 credits
CLS 5271 Immunohematology Laboratory	2 credits
CLS 5272 Immunology Seminar	1 credit
CLS 5273 Advanced Immunology	cr ar
Path 8275 Hybridomas and Monoclonal Antibodies	2 credits

**Suggested minor fields:**

Biochemistry  
Genetics/Cell Biology  
Teaching/Management

**Sample thesis titles:**

"Affinity Column Purification of IgE from Human Serum"

"Immunologic Characterization of the Human pre-B Lymphocyte"

"The Effect of Immunosuppressive Therapy on the Immunological Parameters of Renal Transplant Patients"

"Ultraviolet Induced DNA Repair Synthesis in Lymphocytes from Aged Humans"

"An Immunologic Study of Human Lymphoid Progenitors Using an Antibody to Terminal Deoxynucleotidyl Transferase, and Monoclonal Antibodies to Lymphoid Cell Surface Antigens"

V. Specialty area: Microbiology**Required courses:**

MicB 5216 Immunology	4 credits
CLS 5103 Principles of Diagnostic Microbiology	5 credits

**Elective courses:**

MicB 8110 Biology of Microorganisms	3 credits
MicB 5321 Physiology of Bacteria	3 credits

MicB 5424	Biology of Viruses	4 credits
MicB 8239	Preceptorship: Medical Microbiology	cr ar
MicB 8240	Preceptorship: Medical Microbiology	cr ar
CLS 5138	Clinical Microbiology Seminar	1 credit
CLS 5110	Hospital Infections Control	2 credits
CLS 5133	Medical Mycology	4 credits
CLS 5136	Anaerobic Microbiology	4 credits
PUBH 5342	Public Health Bacteriology	3 credits
PUBH 5232	Medical Microbiology	3 credits

**Suggested minor fields:**

Statistics  
Genetics  
Biochemistry  
Public Health  
Computer Programming  
Teaching/Management

**Sample thesis titles:**

"Cytomegalovirus in Dialysis Patients"

"The In Vivo Bactericidal Activity of ScH 34343, a New Penem Antimicrobial Agent"

"Serum Neutralization Assays for Detection of La Crosse Antibodies in Human Sera"

"Differentiation and Identification of Staphylococcus and Micrococcus species"

"Trimethoprim/Sulfamethoxazole Prevents Escherichia coli Translocation Across the Intestinal Tract"

Appendix C

Graduates of Master's Degree Programs in  
Laboratory Medicine and Medical Technology

I. Laboratory Medicine Graduate Program (approved in 1970; 21 graduates to date)

Graduates (year) and last known position

Helen Hallgren (1975)  
Associate Professor  
Dept Lab Med & Pathol  
Univ of Minn

Gabriel Fernandez (1975)  
Associate Professor  
Univ of Texas Health Sciences  
San Antonio, TX

John Baynes (1977)  
Continuing education

Penny Rogers (1977)  
Immunology Supervisor  
VA Medical Center

Nancy Reinsmoen (1977)  
Continuing education - Ph.D. program  
in Pathobiology, Univ of Minn

Margie Frederickson (1977)  
Continuing education - Medical School

Robert McCormack (1978)  
Continuing education - Ph.D. program  
in Pathobiology, Univ of Minn

Mary Ann Robinson (1978)  
Post-Doc, NIH

Mark Johnson (1980)  
Continuing education - Medical School

David Breutzmann (1981)  
Chief Technologist, Toxicology  
Hennepin County Medical Center

Mahmood Janatipour (1981)  
Unknown - Iran

Marlys Lund (1981)  
Research Supervisor, 3M  
St. Paul, MN

Sayed Sadrzadeh (1981)  
Continuing education - Ph.D. program  
in Pathobiology, Univ of Minn

Gregory Sachs (1982)  
Continuing education - Medical School

Georgiann Melink (1982)  
Medtronics

Brian Grogan (1983)  
Continuing education - Medical School

Charissa Oliphant (1983)  
Research Technologist  
Reiker Laboratories, 3M

Ellen Meinelt (1984)  
Research Associate  
Coulter Immunology

II. Medical Technology Graduate Program (approved in 1958; 50 graduates to date, 30 graduates prior to 1978)

Graduates (year) and last known position

Carmen Arndt (1978) Unknown	Nikki Jackson (1980) Bone Marrow Transplant Unit American Red Cross St. Paul
Nancy Jensen (1978) Supervisor, Immunology Lab HCMC, Minneapolis	John Baker (1981) Assistant Professor Univ of Vermont (also Doctoral candidate)
Terry Meyer (1978) Product Specialist LDC/Milton Roy, FL	Carrie Brashem (1981) Fred Hutchison Research Center Seattle, WA
Merle Yamada (1979) Faculty Univ of Hawaii	Marylee Rogers (1981) Technical representative Computer company, NE
Mary Olson (1979) Staff Technologist, Immunology VAMC, Minneapolis	Ann McNarmara (1981) Doctoral candidate Univ of Pittsburgh (?)
Catherine Foster (1980) Instructor, Univ of Minn Supervisor, Clinical Chemistry & Toxicology VAMC, Minneapolis	Cheryl Kraft (1982) Chemistry Supervisor, Lufkin Labs Minneapolis, MN
David Ojo (1980) Tropical Disease Vaccine Research Group Nigeria, West Africa	Gail Roberts (1983) Drug Analysis, Methods Development Chemistry Laboratory Univ of Minn
Edmundo Cox (1980) Unknown	Rebecca Keenan (1984) Teaching Specialist, Microbiology Univ of Minn
Vicki Frawley (1980) Chemistry Laboratory Baylor University	Marilyn Koenst (1985) Associate Scientist Dept of Medical Biochemistry Univ of Minn
Susan Beck (1980) Assistant Professor, Immunohematology Univ of N. Carolina	
Joan Bernhardt (1980) Unknown	

Appendix DThe Graduate Faculty in Clinical Laboratory Science

<u>Rank</u>	<u>Faculty</u>	<u>Specialty Area</u>
Professor	Eaton, John	Genetics
Associate Professor	Tsai, Michael	Genetics
Assistant Professor	de Martinville, B.	Genetics
Professor	Ferrieri, Patricia	Microbiology
Associate Professor	Peterson, Lance	Microbiology
Assistant Professor	Wells, Carol	Microbiology
Professor	Freier, Esther	Chemistry
Professor	Greenberg, Leonard	Chemistry
Associate Professor	Bowers, Larry	Chemistry
Associate Professor	Eckfeldt, John	Chemistry
Associate Professor	Wilson, Michael	Chemistry
Associate Professor	Yasmineh, Walid	Chemistry
Assistant Professor	Apple, Fred	Chemistry
Professor	Brunning, Richard	Hematology
Professor	Edson, Roger	Hematology
Professor	McKenna, Robert	Hematology
Associate Professor	Swaim, William	Hematology
Assistant Professor	Peterson, Loann	Hematology
Professor	Kersey, John	Immunology
Associate Professor	Hallgren, Helen	Immunology
Associate Professor	LeBien, Tucker	Immunology
Associate Professor	Orr, Harry	Immunology
Assistant Professor	Richards, Karen	Immunology
Assistant Professor	Clark, Connie	Immunology
Assistant Professor	Karni, Karen	Laboratory Management, Education

Appendix EExamples of Employment Prospects for Graduates of Clinical Laboratory Science

Journal of Medical Technology, March 1985

**Medical Technology: Education Coordinator** position available June 1, 1985. This person will be responsible for coordination of students in the clinical component and teaching courses in Hematology in this university based program. This is a tenure track position in the Department of Medical Technology, School of Allied Health at the University of Kansas College of Health Sciences and Hospital. Applicants must have nationally recognized MT certification, a masters degree in a clinical laboratory discipline or related area and clinical experience in hematology. A doctoral degree and teaching experience are preferred. Salary and faculty rank will be dependent upon qualifications and experience. Please send letter of application, curriculum vitae and the names and addresses of three references to Virginia Johnston, Ph.D., Chairman, Department of Medical Technology, 1013 Bell Memorial, University of Kansas College of Health Sciences, 39th and Rainbow Boulevard, Kansas City, Kansas 66103 by April 1, 1985. AA/EOE.

**Education Coordinator: 2 + 2** university based Medical Technology Program. Nationally recognized certification, Master's degree and experience required. Successful candidate should be able to assume responsibility for administrative duties related to faculty and student activities in a large academic institution. Limited teaching responsibility. Please send correspondence and credentials to Jason Masters, Ph.D., Program Director, University of Maryland Program in Medical Technology, 32 S. Greene Street, Baltimore, Maryland 21201

**Medical Technology Faculty Associate** position, available November 1, 1984. Bachelor's required, Master's preferred. Certified by a nationally recognized certification agency as a medical technologist or equivalent. Primary area of responsibility includes clinical microbiology and clinical immunology. Send resume and names of 3 references to: Diana Mass, Program Director, Dept. of Botany/Microbiology, Arizona State University, Tempe AZ 85287. An equal opportunity/affirmative action employer.

**Instructor** in University-based medical technology program. Position available January 9, 1985. Nationally recognized certification required. Preference extended to persons holding a Master's degree and/or teaching experience and knowledge of educational methodology. Duties include instruction in clinical chemistry, immunology, urinalysis and hematology, assist in coordination of clinical phase with assignments, and advising. Northeast Louisiana University is an equal opportunity employer and an equal educational opportunity institution. Send resume to: George H. Roberts, Program Director Medical Technology, NLU, 700 University, Monroe, Louisiana. 71209

Clinical Chemistry News, March 1985

**CLINICAL CHEMIST**—The Eastman Chemicals Division of Eastman Kodak Company, a major manufacturer of chemicals, plastics, and fibers, has a challenging opportunity for a Clinical Chemist. Individuals should have an MSc in Clinical Chemistry or a related field, such as Analytical or Agricultural Chemistry. Laboratory experience in blood, urine, tissue, and feed analysis is highly desirable. Also knowledge of HPLC, GC, radioimmunoassay, use of radioisotopes, etc., in analysis of biological samples is required. Assignment will involve developing specialized methods for the analysis of biological samples in the Animal Nutrition Supplements Program; implementing existing specialized methods for complex analysis of biological samples; supervising analytical

work in the Biochemistry Research Laboratory; and participating in research projects under the supervision of senior research staff for the innovation of new products for the animal industry. Individual will be domiciled in Rochester, NY, until mid-1986, then transferred to Kingsport, TN, a progressive city in the Tri-Cities area of Northeast Tennessee. The population of the Tri-Cities area is approximately 200 000. Individual will receive a salary commensurate with experience and qualifications and an outstanding employee benefits program. Interested candidates should send resume to: Mrs. Cheryl Harvey, Personnel Department, Tennessee Eastman Company, P.O. Box 1975, Kingsport, TN 37662.

American Society for Microbiology News, November and December 1984, January 1985

### Faculty Positions

Clinical chemistry, parasitology, microbiology, hematology, and immunology. Three tenure-track positions available for an integrated, cooperative medical laboratory science program. Applicants should have doctorate (master's with outstanding credentials considered) and must be certified or eligible for certification as medical technologists, clinical laboratory scientists, clinical chemists, microbiologists, hematologists, or immunohematologists. Experience in the clinical laboratory and academic teaching is essential. Demonstrated research ability and computer skills are desirable. Rank and salary are commensurate with qualifications and experience. Positions available 1 January 1985. Submit curriculum vitae to Dr. Gerald Davis, 206 Mugar Hall, Dept. 2, Northeastern University, Boston, MA 02115. An equal opportunity employer.

### Laboratory Manager

The Division of Microbiology of the Clinical Laboratories seeks a medical laboratory technologist manager. Qualifications: master's degree in microbiology (or equivalent); certification in medical technology, clinical microbiology, or both; and at least 4 years of working and supervisory experience in clinical microbiology. Apply to Dept. of Personnel Administration, University of Virginia, P.O. Box 9007, Carruthers Hall, 1001 N. Emmet St., Charlottesville, VA 22906. The University of Virginia is an equal opportunity, affirmative action employer.

### Microbiology Supervisor

We are presently recruiting a full-time microbiology supervisor. Responsibilities: overall direction of microbiology laboratory to include supervising staff, quality assurance, developing procedure and protocol, and ongoing training of students and employees. Qualifications: master's degree in clinical microbiology and 3 to 5 years of microbiology laboratory experience. Prefer supervisory experience. Contact personnel representative, St. Mary's Hospital, 407 E. 3rd St., Duluth, MN 55805, (218) 726-4564. An equal opportunity employer.

### Research Associate

A research associate is needed to apply DNA and RNA cloning approaches to elucidate gene expansion in plant, animal, and human cells and to carry out the cloning and expression of foreign DNAs, protein and peptide purification, amino acid sequence analysis, immunological detection techniques, and monoclonal antibody production. A B.S. or M.S. in biochemistry is required. A B.S. and 2 years of experience or M.S. and 1 year of experience is necessary. Salary is \$2,000 per month. The position will be available in the Los Angeles area. Send résumé and copy of this advertisement not later than 7 December 1984, to job no. 3080 Box 865, Sacramento, CA 95804.

### Laboratory Preceptor

Full-time, nontenured, subfaculty position at Washington State University. Individual to provide technical expertise and instructional assistance for advanced undergraduate lab courses in immunology and virology. M.S. and experience in modern techniques required. Salary, \$18,000/year. Send letter of application, curriculum vitae, transcripts, and three references to R. Brosemer, Bacteriology and Public Health, Washington State University, Pullman, WA 99164-4340. Closing date, 31 December 1984. Washington State University is an equal opportunity employer.

### Research Associate

Position (2 years) available 18 March 1985. Appointee must have an M.S. degree in biochemistry to perform research in mycotoxicology with a technician and graduate students. Research will be in the molecular biology of fungi and requires interest and experience with DNA plasmids and double-stranded-RNA viruses. Salary, \$14,500. Send curriculum vitae and three letters of reference to Urban L. Diener, Botany, Plant Pathology, and Microbiology Dept., Auburn University, Auburn, AL 36849. An equal opportunity, affirmative action employer.

### Research Associate

Applications are invited for an individual to work within the Infectious Disease Section, studying various aspects of bacteria-antibiotic interactions, animal models of infectious diseases, subcellular components of bacterial antimicrobial resistance, and development of diagnostic laboratory tests. Must have a master's degree or equivalent and some experience in diagnostic microbiology. Experience in handling laboratory animals is essential. Desire independent worker interested in publications. Salary is commensurate with experience. Send applications to Dr. Kenneth Aldridge, Section of Infectious Diseases, LSU Medical Center, 1542 Tulane Ave., New Orleans, LA 70112. An equal opportunity, affirmative action employer.



## NEW CAREER OPPORTUNITIES - MICROBIOLOGY

*Difco Laboratories, an international company and leader in the field of microbiological reagents, invites qualified applicants to apply for the following positions.*

### MICROBIOLOGY PRODUCT MANAGER

Qualified candidates will have a B.S. or M.S. degree in Microbiology with emphasis on medical microbiology plus two years experience in sales or product management. Responsibilities will include product planning, coordinating new product development with R&D, and new product training. Above average oral and written communication skills required. Experience in laboratory instrumentation and immunodiagnostic procedures is desirable.

### SALES PROMOTION MANAGER

Qualified candidates will have a B.S. degree in Microbiology or Medical Technology. A minimum of two years sales experience in the microbiology laboratory marketplace is desirable. Responsibilities will include development and coordination of sales promotion, advertising, and sales training programs. Strong communication skills and knowledge of microbiology products and procedures are needed.

Difco offers the successful candidate a competitive salary commensurate with experience, excellent fringe benefits, and paid relocation to Southeastern Michigan. Submit resume / transcript / C.V., salary requirements, and three references to the attention of L.M. Skrycki, DIFCO LABORATORIES, P.O. Box 1053, Detroit, MI 48232.

Equal Employment Opportunity M/F

UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of Psychiatry  
University Hospitals  
Box 393, Mayo Memorial Building  
420 Delaware Street S.E.  
Minneapolis, Minnesota 55455

May 14, 1985

MEMORANDUM

TO: Leonard G. Wilson,  
Head, History of Medicine

FROM: William Schofield,  
Chairman, Program Review Committee, HSP and RC

RE: Proposal for an M.A. Degree in History of Medicine

The purpose of this memorandum is to record those revisions of the original proposal which were discussed and agreed to at yesterday's meeting of the committee. Your presence for the discussion was very helpful.

Specific items of accord include the following:

- a. The program will be open to holders of masters' degrees in a biological science as well as to M.D.s and Ph.D.s.
- b. Each degree candidate will demonstrate a foreign language competency, either as a part of admission credentials or as part of the program of study.
- c. The program will be under Plan A and require a formal thesis.
- d. The original course requirements are modified to encompass the following distribution:

1) Survey courses	12 credits
2) Seminars	6 credits
3) Related department courses	4 credits
4) General history courses	8 credits
5) Thesis	16 credits

- e. Description of the program will specify that its successful completion will require from 4 to 6 academic quarters of full time study, or equivalent part-time study.

*Decided by the committee  
after I had left the meeting  
LGW 5/20/85*

MEMORANDUM Continued

Proposal for M.A. Degree in History of Medicine

May 14, 1985

page 2

With the understanding that these stipulations were agreeable to you, the committee voted unanimously to make a favorable recommendation to the Council.

For purposes of record, I am sending you two copies of this memorandum. Will you kindly sign and date one of them, below, and return it promptly to me. The Council meets on May 20.

Leonard G. Wilson

Professor Leonard G. Wilson

May 20, 1985

Date

William Schofield

Professor William Schofield

5/14/85

Date



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of History of Medicine  
510 Diehl Hall  
505 Essex Street S.E.  
Minneapolis, Minnesota 55455  
(612) 373-5946

GRADUATE SCHOOL  
FEB 22 1985  
OFFICE OF THE DEAN

FEB 12 1985

February 8, 1985

David M. Brown, M.D.  
Dean, Medical School  
Box 293 Mayo

Dear David:

You will find enclosed a proposal for a Master's Program in the History of Medicine, intended primarily for physicians who wish to gain sufficient knowledge of concepts and methods in the history of medicine to enable them to pursue their own historical research in a scholarly manner. At the time the Ph.D. program in the history of medicine was reviewed by the Graduate School, the Dean suggested that we might add such a master's program to our graduate teaching, and I have discussed the general nature of the proposed program with Kenneth Zimmerman, Associate Dean of the Graduate School. I would ask you to sign the covering document in the designated place, and forward the whole assemblage to the Graduate School.

Yours sincerely,

*Leonard*

Leonard G. Wilson  
Professor and Head

*Approved approval  
H. Med. Council 2-20-85*

enclosures

Section III

February 7, 1985

(Date)

Proposal for: (name of new program)  
Master of Arts Degree in History of Medicine and the Biological Sciences

Submitted by the: (name of department or departments)  
Department of History of Medicine

of the: (name of the college or campus)  
Medical School, Twin Cities campus

The proposal has been reviewed and approved by:

\*\*\*\*\*

APPROVAL CERTIFICATION

ADDITIONAL APPROVALS (as appropriate)

Linwood L. Wilson Feb 8, 1985  
(Department Chairman (Date)  
or Equivalent)

\_\_\_\_\_  
(Dean, Graduate School) (Date)

A. Neal Covert 2-19-85  
(Dean) (Date)

\_\_\_\_\_  
(Vice President, (Date)  
Institutional Relations)

\_\_\_\_\_  
(Vice President, (Date)  
Academic Affairs)

\_\_\_\_\_  
(Vice President, (Date)  
Health Sciences)

\_\_\_\_\_  
(Deputy Vice President, (Date)  
Agriculture, Forestry and Home Economics)

Approval by Regents: \_\_\_\_\_  
(Date)

First Reading by CAC: \_\_\_\_\_  
(Date)

Second Reading by CAC: \_\_\_\_\_  
(Date)

Recommendation by the MHECB: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Date)

Confirmation by Regents: \_\_\_\_\_  
(Date)

UNIFORM PROGRAM  
INVENTORY AND  
PROPOSAL FORM

SECTION I  
Program Proposal Abstract and Cover Sheet  
(See Attached Instructions)

1 Unit, Campus or College University of Minnesota, Twin Cities Code No. 2

I. General Information

A. Program Title History of Medicine and the Biological Sciences

8 27

B. Program Review Category:  Regular  
(check one)  Experimental (If Experimental, give Reporting Date:      /      /     )

C. Proposed Implementation Date: ASAP /      /     

36 38 40

D. Program Length: Total Cr/hr 44 Classroom 32 Thesis Laboratory 12

42 45 46 49 50 53

E. Administrative Unit Immediately Responsible for Program: Graduate School

54 73

F. Describe the Program (in 50 words or less):

2 The Master of Arts in History of Medicine and the Biological Sciences will  
prepare physicians or scientists, who already possess an M.D. or Ph.D.  
degree, to do serious scholarly work in the history of medicine. The  
3 program seeks to provide a broad knowledge of the literature and methods  
in the history of medicine through courses and seminars. Each student  
4 will write a thesis based on original historical research in primary sources.

5 G. Expected student interest in the program during the first year of operation, and when the program reaches full operating level:

	First Year: <u>8</u> (Yr.)		Full Operation: <u>40</u> (Yr.)	
	Number (Headcount) Expected	Student Credit or Contact Hours	Headcount Capacity	Student Credit or Contact Hours
a. Enrollment				
Program Enrollees	2 x 32	64	3 x 32	96
Other Students				
Total				
b. Program Graduates/Completers			3	

A. Projected Costs of the Program:

II. Budget Data

6  
7

	First Year				Full Operation			
	New		Re-assigned		New		Re-assigned	
	No. FTE	Annual Cost	No. FTE	Annual Cost	No. FTE	Annual Cost	No. FTE	Annual Cost
a. Faculty		\$ 0		\$ 0		\$ 0		\$ 0
	10 12	18 20	57 59	63 67	10 12	16 20	57 59	63 67
b. Civil Service		\$		\$		\$		\$
	13 15	21 25	60 62	68 72	13 15	21 25	60 62	68 72
c. Equipment, Supplies, etc.		\$		\$		\$		\$
		26 30		73 77		26 30		73 77
Total Direct Costs (a+b+c)		\$		\$		\$		\$
		31 35		78 82		31 35		78 82
d. One-time Costs		\$		\$		\$		\$
		36 40		83 87		36 40		83 87
e. Space Rental		\$		\$		\$		\$
		41 45		88 92		41 45		88 92
f. Indirect Costs		\$		\$		\$		\$
		46 50		93 97		46 50		93 97
g. Total Program Costs (a+b+c+d+e+f)		\$ 0		\$ 0		\$ 0		\$ 0
		51 56		98 103		51 56		98 103

B. Expected Sources of Funds for Program: \*

8  
9

	First Year:			Full Operation:		
	Dollar Amount	% of Annual Expend.	One Time Input	Dollar Amount	% of Annual Expend.	One Time Input
a. Local	\$		\$	\$		\$
	10 14	51	65 69	10 14	51	65 69
b. State	\$		\$	\$		\$
	15 19	53	70 74	15 19	53	70 74
c. Tuition	\$		\$	\$		\$
	20 24	55	75 79	20 24	55	75 79
d. Federal	\$		\$	\$		\$
	25 29	57	80 84	25 29	57	80 84
e. Private	\$		\$	\$		\$
	30 34	59	85 89	30 34	59	85 89
f. Dedicated Fees	\$		\$	\$		\$
	35 39	61	90 94	35 39	61	90 94
g. Other (Specify)	\$		\$	\$		\$
	40 44	63	95 99	40 44	63	95 99
h. Total	\$		\$	\$		\$
	45 50	100%	100 105	45 50	100%	100 105

10

C. If there are any formal arrangements with other institutions or agencies, (e.g. clinical sites, cooperation, joint programs) explain, giving names of institutions: \_\_\_\_\_

D. System Verification: \_\_\_\_\_ 8 \_\_\_\_\_ 15 \_\_\_\_\_ 22

\_\_\_\_\_  
Authorized Institution or System Signature Title Date  
\_\_\_\_\_  
29 39 40 42 47

\* The faculty, formal courses and administrative structure serving the present Ph.D. program in the History of Medicine and Biological Sciences should serve the proposed M.A. program initially and for the foreseeable future.

UNIFORM PROGRAM  
INVENTORY AND  
PROPOSAL FORM

SECTION I  
Program Proposal Abstract and Cover Sheet  
(See Attached Instructions)

1 Unit, Campus or College University of Minnesota, Twin Cities Code No. 2

I. General Information

A. Program Title History of Medicine and the Biological Sciences

8 27

B. Program Review Category:  Regular  
(check one)  Experimental (If Experimental, give Reporting Date: \_\_\_/\_\_\_/\_\_\_)

C. Proposed Implementation Date: ASAP / \_\_\_ / \_\_\_  
36 38 40

D. Program Length: Total Cr/hr 44 Classroom 32 Thesis Laboratory 12  
42 45 46 49 50 53

E. Administrative Unit Immediately Responsible for Program: Graduate School

54 73

F. Describe the Program (in 50 words or less):

2 The Master of Arts in History of Medicine and the Biological Sciences will  
prepare physicians or scientists, who already possess an M.D. or Ph.D.  
degree, to do serious scholarly work in the history of medicine. The  
3 program seeks to provide a broad knowledge of the literature and methods  
in the history of medicine through courses and seminars. Each student  
4 will write a thesis based on original historical research in primary sources.  
55 120 64 120 64 120

5 G. Expected student interest in the program during the first year of operation, and when the program reaches full operating level:

	First Year: <u>8</u> (Yr.)		Full Operation: <u>40</u> (Yr.)	
	Number (Headcount) Expected	Student Credit or Contact Hours	Headcount Capacity	Student Credit or Contact Hours
a. Enrollment				
Program Enrollees	2 x 32	64	3 x 32	96
Other Students				
Total				
b. Program Graduates/Completers				
			3	

# UNIFORM PROGRAM INVENTORY AND PROPOSAL FORM

## Instructions for Section I

Please complete an individual profile for each program offered by your institution. List the institution, campus and/or college that will offer the proposed program, whether the program is taken in residence at that institution or at another geographic location, e.g., Mankato State University, Anoka AVTI. Please type. This format is prepared for the computer coding of each informational question. If you do not have enough room for any given question, please continue on a separate piece of paper coded by the Roman numeral and alphabetical designation correlating to the carryover material.

You will note space for a code number for your institution on the top of the first page. This will be filled out in the MHECB office.

**I-A** Provide the title for the program, e.g., Licensed Practical Nurse, including: a) any Academic Classification that may be attached to the program (e.g., major, minor, concentration, supporting field); and b) the formal recognition given the program, e.g., Diploma, Certificate, Vocational Certificate, A.A., A.A.S., A.D., A.D. Technical, A.S., Minor, Major (concentration), Concentration (non-major), General Studies, B.A., B.A.S., B.E.S., B.G.E., B.S., B.S. (teaching cert.), M.A., M.E., M.S., M.S. (teaching cert.), Specialist, D.A., D.B.A., D.M.A., Ed.D., Ph.D.

**I-B** For review purposes, programs are classified as being either "Regular" or "Experimental" (check one).

If a program is classified as being "Experimental", indicate the termination date for the program by reporting when a written report regarding the program can be expected.

Basic to the concept of "experimental" programs is the notion of hypothesis and testing. Experimental programs characteristically undertake to discover unknown principles or effects through the construction and verification of hypotheses which generally represent a conscious and time-specific departure from educational program characteristics typical of individual institutions. When one or more experimental program descriptors are incorporated into the design of a program in order to test the validity of one or more hypotheses related to that program, it may for purposes of program review be designated as "experimental". (Refer to the MHECB Staff Report on Non-Traditional Studies.)

**I-C** Proposed Implementation Date – Give the date when the first student(s) will be considered to be in the program.

**I-D** Indicate the length of time (contact hours, or credit hours) required of a "full-time" student to complete the program. If this is a major for a general degree program, indicate the number of credits required for the major and for the degree program. If applicable, distinguish "classroom", (e.g., lecture) hours from "laboratory" hours (e.g., OJT, clinical).

**I-E** Indicate the name of the administrative unit which is directly responsible for the operation of this program, e.g., Center for Minority Studies, Agricultural Education Division, History Department.

**I-F** Provide a brief description of the program including general as well as special characteristics such as program content and results expected (i.e., learning, skills, preparation for further education and/or occupational preparation).

**I-G** In order to determine the design capacity of the program, estimate the number (headcount) of "typical" or "full-time" students expected to draw upon the resources allocated to this program during its first year of operation, and during the years it is operating at a steady state. A program's "Design Capacity" means the total annual count of the program's "typical" enrollees in the following categories: 1) Completers/Graduates – the annual number of degrees or formal recognitions granted which indicate that an individual has met the program's requirements; 2) Enrollees – number of students who are annually seeking the degree or formal recognition available through the program, including those who will graduate or are in the "completer" category; and 3) Other Students – the annual number (headcount) of students enrolled in course work related to this program who draw upon its resources. Student Credit or Contact Hours indicate the total annual program load, and is determined by adding together the product derived by multiplying the number of students included in each category times the number of credit or clock hours per student in that category.

**II-A** Estimate the projected costs for the program during its first year of operation, as well as when it reaches full operation according to the categories shown: a) Number of Full Time Equivalent (FTE) Faculty and the attendant costs that will be needed to operate the program. For purposes of reporting costs, a Full Year Equivalent "cost year" is defined as a 12-month period beginning summer term of a given year and continuing until the end of the institution's spring term of the following year. Provide the number of FTE faculty (new and re-assigned) so involved and the institution costs associated with those faculty; b) the number and cost associated with civil service personnel whose time will be assigned/reassigned, in total or in part to this program, a Full Year Equivalent (FYE) basis; c) the dollar value of supplies, equipment, travel, and other direct costs that will be allocated to the Program's yearly operation; d) an estimate of the one time start up costs associated with the program, such as facilities, equipment, and consultant expenditures. Include only those items not accounted for in (c) or (e); e) Space – facility rental costs; f) report other indirect costs assigned to the program's operation, e.g., administrative costs. Total direct cost represents a summation of categories (a), (b), (c), and provides a report on the direct operational costs for a program on an annual basis. Total Program costs (g) must not be greater than total Expected Sources of Funds (II-B-h).

**II-B** Considering the total effort and resources allocated to the program, give the amount of funds expected from local, state and federal sources, student tuition and other fees, and donations or endowments that may come from private sources. If "Other" sources are indicated, please specify their nature. Provide the estimated percentage of the program's total expenditures that will be supplied by the various sources, and indicate the dollar amount of items that represent a "one-time only" expenditure as compared to those that would recur annually. If the figures for items (b) and (c) are available as distinct entities, please report them as such. If these items cannot be separated, enter the total amount for both items on line b (State). Total Expected Sources of Funds (h) should equal total Program Costs (II-A-g)

**II-C** List the names of other institutions involved, if applicable.

**II-D** Provide the name and title of the person having final authority for this program within your institution or system, and the date of verification.

If you need additional forms, or have questions regarding any items, contact your systems office or the

Academic Planning Unit of the MHECB  
(612) 296-3974

**UNIFORM PROGRAM INVENTORY  
AND PROPOSAL FORM**

**Section II**

Program Title Master of Arts Degree in History of Medicine and Biological Sciences

Provide summary or abstract statements that address the coordination issues listed below. It is expected that less than one page of single spaced narrative will adequately summarize each issue. More detailed information would be expected in Section III. Section III is the document that each institution has previously submitted to its system office for the purpose of program review, e.g., State Department of Education F 52-2.

**1. Summary Description of Program**

Using the data provided in the proposal document (Section III), briefly describe the salient features of the program including a statement of the general purpose of goals and objectives, the organization and content of the curriculum, the length of the program, the nature of the degree, award, or certification, and special characteristics or innovative features of the program's design.

Also to be included in the summary description are prerequisites for admission to the program, estimates of the annual number of enrollees, and estimates of the annual number of completors/graduates.

Finally, the resources required for the program must be described. Normally these would include faculty, support personnel, library, space, and equipment. The description should include a statement of their costs together with new and existing sources of funding.

**2. Need for the Program**

Using the data provided in the proposal document (Section III) and other appropriate data as required, briefly summarize the need for the program.

The program's "need" is to be addressed from several aspects. First, for all post-secondary programs, indicate whether the program is job-related, and, if so, whether directly or indirectly. If directly, note entry-level, pre-service, in-service, and upgrading features of this program. If indirectly or not at all, describe the rationale regarding the need for this program accordingly.

Second, specify accreditation or certification requirements as well as labor market, manpower, and student demand, using research data or expert opinion as appropriate. Precisely relate these accreditations and demand specifications to the geographic scope of the program, whether local, regional, statewide, or larger.

Third, explain how the program is intended to meet accreditation and demand requirements previously identified.

**3. Mission**

Briefly compare this program to a) other related programs at your institution, and b) to similar programs elsewhere. Then briefly describe how this program fits into a) the total educational effort of your institution, and b) the overall educational undertaking of the State.

**4. Comparative Program Analysis**

Locate identical and similar programs in your institution, in other Minnesota institutions, and, if appropriate, in institution outside the state. (The MHECH Program Inventory may prove useful here). After listing these programs with their locations, compare them with the proposed program, commenting briefly on relevant similarities and dissimilarities in such a way as to justify the establishment of the proposed program. These comments should focus on the following factors (if appropriate): student characteristics, special features of program content, area served, benefits to be derived, occupational outcomes, institutional mission, and cooperative arrangements.

**5. Duplication**

After reviewing your answers to item No. 4, comment on the extent of duplication this program represents, and how this program provides a warranted new thrust requiring additional or redirected resource allocation.

**6. Cost/Benefit**

Using the data provided in the proposal document (Section III), discuss the program's planned evaluation procedures, especially as they address the personal, institutional and societal benefits that may accrue from the program, including potential contributions to areas such as public service and research. Information related to graduate follow-up studies is to be included, as well as cost information per student.

**7. Hypothesis to be Tested**

If this is considered an experimental program, decide the hypothesis that will be tested.

## SECTION II.

Program Title: Master of Arts Degree in the History of Medicine and the Biological Sciences

### 1. Summary Description of Program

The purpose of the program is to educate physicians or medical scientists, in historical methods and concepts so that they may pursue research and writing in the history of medicine in a scholarly manner. The program is intended to be completed in one calendar year (four quarters) of full-time study, or a longer period of part-time study, and will include approximately 44 credit hours of coursework and the writing of a thesis based upon original historical research. Candidates for admission to the program must possess either the M.D. degree or a Ph.D. degree in a medical or biological science. The program is expected to enroll two students initially and possibly a somewhat larger number in subsequent years. Because of the high level of qualification for admission to the program, a very high proportion of those entering the program are expected to graduate.

The present faculty in the Ph.D. program in History of Medicine and Biological Sciences will administer the program. Students will use the splendid resources of the Owen H. Wangensteen Historical Library of Biology and Medicine for study and research.

### 2. Need for the Program

The program is needed to provide a means for physicians and medical scientists, who are interested in the history of medicine, to develop a sufficient knowledge of the methods of historical research and writing to enable them to pursue their interest in a scholarly way that will be respected by professional medical historians. The program is indirectly job related in that graduates of the program, whose ordinary medical or scientific work is carried on in a university medical center, may be enabled to make the teaching of the history of medicine part of their professional activity. In such instances graduates of the program might provide competent teaching of the history of medicine in medical schools where otherwise such teaching would not be available.

The program has the potential to attract students from a wide area, especially from the Midwest and western United States. Although there are no certification requirements for medical historians, graduates of the program could establish themselves professionally by publication and by presenting papers at the annual meetings of the American Association for the History of Medicine, as their training would prepare them to do.

### 3. Mission

The program will complement the Ph.D. program in History of Medicine and Biological Sciences and can be carried on with it to the mutual benefit of both. The proposed program is similar to a Master's degree program that has been carried on for many years at the Institute of the History of Medicine, Johns Hopkins University with outstanding success. The program will promote the use of the extraordinarily rich collections of the Owen H. Wangensteen Historical Library of Biology and Medicine at the University of Minnesota and

it will provide a new kind of educational opportunity for physicians in Minnesota, a group which includes a high proportion of unusually well qualified and intelligent persons.

#### 4. Comparative Program Analysis

There are no similar programs in the University of Minnesota or at other Minnesota institutions. The principal comparable program in the United States is that mentioned above at Johns Hopkins University. The resources of the Wangenstein Library at Minnesota are probably superior to those at Johns Hopkins, and the faculty are comparable in numbers and scholarship.

#### 5. Duplication

The program does not duplicate any program in Minnesota or elsewhere in the Midwest. Its only counterpart in the United States would be the Master's program in the Institute of the History of Medicine, Johns Hopkins University.

#### 6. Cost/Benefit

On the scale that the program is expected to operate it will not impose additional costs on the University. By contrast the program will permit the more effective use of the faculty of the Department of History of Medicine and of the resources of the Owen H. Wangenstein Historical Library of Biology and Medicine. The training of physicians and medical scientists to do scholarly work in the history of medicine can help to create an atmosphere of learning in Minnesota that will be of continuing benefit to the educational, medical and scientific life of the state.

### SECTION III.

Program Title: Master of Arts Degree in the History of Medicine and the Biological Sciences

#### A. Introduction

The Master's degree program in the History of Medicine and Biological Sciences is intended for physicians or scientists who are interested in doing serious scholarly work in the history of medicine, but who cannot devote the number of years required to complete the work for a Ph.D. degree and do not intend to make the history of medicine their primary professional activity. Candidates for admission to the program would normally possess either the M.D. degree or a Ph.D. degree in a medical or biological science. The reason for establishing a Master's degree is that the department has received a number of inquiries from physicians who wish to undertake serious study in the history of medicine but who cannot take more than a limited period of time, such as one year, away from their medical or scientific work.

#### B. The Proposed Program

##### Objective

The primary objective of the program would be to provide candidates with a broad knowledge of the literature, methods and outstanding questions in the history of medicine so that they would become enabled to pursue historical research and do historical writing with a critical professional awareness of what constitutes good history.

##### Admission Requirements:

The requirements for admission to the program would normally be possession of an M.D. degree or a Ph.D. degree in a medical or biological science.

##### Curriculum

The curriculum will include 24 credit hours of courses in the history of medicine.

12 credit hours would be devoted to a survey of the history of medicine provided in the three quarter sequence HMed 5400, 5401, 5402:

- 5400. Early History of Medicine to 1650: Paleopathology, primitive medicine, medicine in ancient Egypt and Mesopotamia, Greek medicine in classical times and under Roman Empire, transmission of Greek medicine through the Arabs to the Latin West, medieval medicine, Andreas Vesalius and the revival of anatomy, William Harvey and the discovery of the circulation of the blood.
- 5401. Medicine during the Scientific Revolution, 1650-1850: Thomas Sydenham and the concept of distinct diseases, new chemical and mechanical theories of medicine, rise of medical teaching, pathological anatomy and definition of new diseases, impact of chemistry and physics on medicine in the early nineteenth century, cell theory, discovery of anesthesia.

5402. Medicine since 1850: Controversy over spontaneous generation and germ theory of disease, development of antiseptic surgery, the public health movement, revolution in basic medical sciences, reform of medical education and growth of medical specialties, changing relationship of medicine to society.

9 credit hours would be devoted to a three quarter seminar sequence intended to explore portions of the medical and scientific literature in depth and familiarize the student with the methods of historical research:

5410, 5411, 5412. Seminar: Emergence of Modern Medicine, 1750-1900

3-5 credit hours would be devoted to one of the following courses:

5002. Public Health Issues in Historical Perspective (3 cr): Introduction to the evolution of major recurring problems and issues in public health including environment and health, food customs and nutrition, control of alcohol and drugs, venereal diseases and public policy, human resources regulation, and relationship of science to promotion of health.
5035. The Germ Theory and the Medical Profession (4 cr): Formulation of the germ theory of disease and consequences for medical procedures (therapeutics, surgery, management of hospitals), public health programs, and structure and prestige of the medical profession.
5045. Medical Profession in America (4 cr): Historical analysis of the American medical profession in the nineteenth and twentieth centuries; role of institutions, influence of social and moral values, and consequences of specialization and scientific innovation.
5102. Medicine and Society in the Enlightenment (3 cr): Seminar dealing with the interrelations of medicine and society from the late seventeenth to the early nineteenth centuries. Emphasis on methods and materials used by medical historians.

Students will take an additional 8 credits of courses in history.

At the conclusion of their coursework each candidate will be required to show evidence of the knowledge they have gained of the literature, methods and outstanding questions in the history of medicine at a general oral examination.

Each candidate will also be required to submit a thesis which must be a substantial essay, forty to fifty pages in length, on a subject in the history of medicine, based on original historical research in primary sources and with proper citation of the sources used. Work on the thesis will be carried on through two academic quarters. The Director of Graduate Studies will appoint for each student a faculty adviser, with whom the student will meet regularly to discuss his or her progress. When the thesis is near completion each student will be asked to present his or her work informally to the assembled department. The thesis will be submitted first in preliminary draft, and then in a final draft which incorporates any necessary revisions.

### Graduation Requirements and Standards

Students must complete all courses and the thesis for graduation. The program is intended to be completed within four academic quarters of full-time study, or over a longer period of part-time study. A high academic standard will be maintained.

The Dean of the Graduate School will schedule systematic reviews and evaluations of the program as with other graduate programs of the University of Minnesota.

#### C. Educational and Social Need for the Program

The Department of History of Medicine has received a number of inquiries from physicians who wish to undertake serious study in the history of medicine but who cannot take more than a limited period of time, such as one year, away from their medical or scientific work. Two physicians currently enrolled in the Ph.D. program in History of Medicine and the Biological Sciences would prefer to be enrolled in a Master's program, if it were available, because such a program would be better proportioned to the amount of time and energy that they can devote to it apart from their other professional activities.

The University of Minnesota possesses in the Owen H. Wangensteen Library of Biology and Medicine an unusually rich resource for study and research in the history of medicine. The program may be expected therefore to attract students from beyond the borders of Minnesota as well as from within the state, and especially from medical centers where there is currently little teaching of the history of medicine.

On the basis of the experience of a similar program at Johns Hopkins University (see Comparison with Similar Programs) graduates of the program, who are members of the faculties of medical schools, might be expected to initiate courses in the history of medicine at their home institution and to pursue research and writing in the history of medicine as an avocation.

#### D. Comparison with Similar Programs

A Master's degree program has existed for many years in the Institute of the History of Medicine at Johns Hopkins University. Graduates of the Johns Hopkins program have continued their careers in such medical fields as cardiology, internal medicine, or medical administration, but have also made valuable contributions to the history of medicine in the form of articles and books. They have become active members of the American Association for the History of Medicine and the current president of the Association is a graduate of the Johns Hopkins program. A Master's program at Minnesota, similar in its purpose and outlines to that at Johns Hopkins, would have a similar potential to train physician scholars in the history of medicine.

#### E. Quality Control

The graduate faculty in the Department of History of Medicine will be responsible for the program. Curricula vitae are attached for Professors John M. Eyler and Leonard G. Wilson.

The program will be governed by the Director of Graduate Studies of the Department of History of Medicine and by the Graduate School.

F. Implementation

The program can begin to be implemented in 1985-86, because there are two graduate students enrolled in the Ph.D. program, who have indicated their desire to transfer to a Master's program if it becomes available. After the program has been approved, and has been announced, additional students may be expected to apply to enter it in 1986-87 and subsequent years.

Additional university resources are not needed to implement the program. The faculty for the existing Ph.D. program in History of Medicine and Biological Sciences will teach students in the Master's program. The Owen H. Wangensteen Library of Biology and Medicine, together with the collections of the Biomedical Library and other University of Minnesota libraries offer rich resources for study and research in the history of medicine.

## Curriculum Vitae

JOHN M. EYLER

Office Address: Department of History of Medicine  
511 Diehl Hall, University of Minnesota  
505 Essex Street S.E.  
Minneapolis, Minnesota 55455  
(612) 376-4145

Home Address: 262 Warwick Street  
St. Paul, Minnesota 55105  
(612) 690-4386

### Education

Undergraduate: University of Maryland, 1962-66, B.A.  
Major: History (Honors Program)  
Minor: Mathematics

Graduate: University of Wisconsin, 1966-71, M.A., Ph.D.  
Major: History of Science  
Minor: History

Postgraduate: Josiah Macy, Jr. Foundational Postdoctoral Fellowship in  
the History of Medicine and Biological Sciences, 1971-72  
National Institutes of Health Postdoctoral Fellowship,  
1972-73  
Both years at the University of Wisconsin.

### Teaching Experience

University of Wisconsin, 1968-69, 1970-71, Teaching Assistant, History of  
Science Department

Northwestern University, 1973-74, Visiting Assistant Professor, Department  
of History

University of Minnesota, 1974-79, Assistant Professor; 1979 - present,  
Associate Professor, Department of History of Medicine and Biological  
Sciences

#### Present Regular Courses

HMed 3001,3002,3003/Hist 3031,3032,3033. Doctors and Disease in History  
[introductory survey, cross-listed with history]

HMed 5002/PubH 5002. Public Health Issues in Historical Perspective  
[cross-listed with public health]

HMed 5035/Hist 5035. The Germ Theory and the Medical Profession  
[cross-listed with history]

HMed 5045/Hist 5045. The Medical Profession in America [cross-listed  
with history]

Occasional Courses

HMed 5102/Hist 5702. Seminar: Medicine and Society in the Enlightenment [cross-listed with history]

HMed 5120,5130/Hist 5940,5950. Historical Topics: Medicine in the Modern State [cross-listed with history]

Fellowships, Awards and Grants

Undergraduate: B.A. with High Honors and Honors in History, Senior Honors Award

Graduate: Non-Resident Scholarship  
Ford Foundation Partial Fellowship  
National Science Foundation Fellowship

Postdoctoral: See Education above

Professional: American Philosophical Society summer research grant, no. 7378, Penrose Fund, summer 1975  
University of Minnesota, single quarter leave, fall quarter 1976  
American Philosophical Society summer research grant, no. 8561, Penrose Fund, summer 1979  
University of Minnesota, Grant-in-Aid of Research, 423-0325-4909-03, "Preliminary Historical Research on the Career of Sir Arthur Newsholme," July 1, 1979 - June 30, 1980  
National Institutes of Health Research Grant 1R01-LM03765, "Sir Arthur Newsholme and Preventive Medicine: 1880-1940," September 1, 1981 - August 31, 1984

Publications

Article: William Farr on the Cholera: The Sanitarian's Disease Theory and the Statistician's Method," Journal of the History of Medicine and Allied Sciences, 28 (1973), 79-100.

Book Review: S. Squire Sprigg, Life and Times of Thomas Wakeley, Journal of the History of Medicine and Allied Sciences, 30 (1975), 173-175.

Article: "Mortality Statistics and Victorian Health Policy: Program and Criticism," Bulletin of the History of Medicine, 50 (1976), 335-355.

Book Review: David Large and Frances Round, Public Health in Mid-Victorian Bristol, Journal of the History of Medicine and Allied Sciences, 32 (1977), 97-98.

Book Review: William Farr, Vital Statistics: A Memorial Volume of Selections from the Reports and Writings of William Farr. Noel A. Humphreys, ed. [1885] with a new introduction by Mervyn Susser and Abraham Adelstein (Metuchen, N.J., 1975) Journal of the History of Medicine and Allied Sciences, 33 (1978), 449-450.

- Chapter: "The Conceptual Origins of William Farr's Epidemiology: Numerical Methods and Social Thought in the 1830s," in Times, Places, and Persons: Aspects of the History of Epidemiology, ed. Abraham M. Lilienfeld (Baltimore, 1980), pp. 1-21.
- Book: Victorian Social Medicine: Ideas and Methods of William Farr (Baltimore: The Johns Hopkins University Press, 1979).
- Book Review: Frederick F. Cartwright, A Social History of Medicine (London and New York, 1977) Isis, 70 (1979), 453-454.
- Article: "The Conversion of Angus Smith: A Note on the Changing Role of Chemistry and Biology in Sanitary Science, 1850-1880," Bulletin of the History of Medicine, 54 (1980), 216-234.
- Book Review: A. J. Youngson, The Scientific Revolution in Victorian Medicine (New York, 1979) American Historical Review, 85 (1980), 1197-1198.
- Book Review: M. J. Morris, Cholera 1832: The Social Response to an Epidemic (New York, 1976) Journal of the History of Medicine and Allied Sciences, 36 (1981), 360-361.
- Book Review: F. B. Smith, Florence Nightingale: Reputation and Power (New York, 1982) American Historical Review, 88 (1983), 397-398.
- Book Review: William Coleman, Death is a Social Disease: Public Health and Political Economy in Early Industrial France (Madison, Wisc., 1982) Science, 219 (Jan. 28, 1983), 380-381.
- Book Review: Anthony S. Wohl, Endangered Lives: Public Health in Victorian Britain (Cambridge, Mass., 1983) Science, 222 (Oct. 21, 1983), 317-318.
- Article: "Scarlet Fever in Brighton, 1888-1908: Epidemiology and Control Strategies," submitted for publication.

### Papers Read

- "The Retirement of William Farr: Politics and the Victorian Medical Community," Midwest Junto of the History of Science Society, University of Chicago, Chicago, Illinois, April 14, 1970.
- "William Farr on the Cholera: Etiology and Social Empiricism," Midwest Junto of the History of Science Society, University of Wisconsin, Madison, Wisconsin, April 1972.
- "Hard Heads and Soft Hearts: Statistics and State Medicine in Victorian England," William Snow Miller Medical History Seminar, Madison, Wisconsin, March 21, 1973.
- "The Victorian Use of Mortality Statistics as an Index of Social Condition: A Survey of the Problems," American Association for the History of Medicine, Cincinnati, Ohio, May 3, 1973.

"The European Background to the United States Public Health Movement," William Snow Miller Medical History Seminar, Madison, Wisconsin, September 18, 1975.

"Air Fit for Breathing: Victorian Chemists and Theories of Infection," American Association for the History of Medicine, Galveston, Texas, May 14, 1976.

"The Coming of Age of English Vital Statistics: The General Register Office in the Victorian Era," Committee of the History of Statistics and Statistical Thought of the American Academy of Arts and Sciences, Boston, Massachusetts, June 21, 1976.

"The Debt of Victorian Epidemiology to Actuary Practice: The Influence of Thomas Rowe Edmonds," Medical History Seminar, Institute for the History of Medicine, The Johns Hopkins Medical School, Baltimore, Maryland, March 17, 1977.

"William Farr's Contributions," Conference of the History of Epidemiology, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Maryland, May 5, 1978.

"Population, Poverty, and Disease: Observations on the Medical Face of Victorian Liberalism," North of Forty Group, Madison, Wisconsin, March 28, 1980.

"Children and Medical Politics: The Struggle in Whitehall over Infant Welfare Work, 1914-1920," American Association for the History of Medicine, San Francisco, California, May 4, 1984.

#### Departmental and University Affairs

Organized History of Medicine Department's Colloquium series, 1974-75

Participated in History of Medicine Department's Noon Hour Lecture series, 1974-75, 1976-77, 1977-78, 1978-79, 1979-80, 1980-81, 1981-82, 1983-84, 1984-85

Director of Departmental Graduate Studies, 1975-76

Departmental Representative to the Health Sciences Policy and Review Council of the Graduate School, 1975-76, 1977-78, 1978-79, 1979-80, 1983-84

Member of the Committee for the Review of 8xxx Course Proposals, 1977-78

Member of the Ad Hoc Committee on Graduate School Numbering for Courses in the Health Sciences, fall 1978

Member of the Committee for Review of Graduate Programs, 1978-79

Member of the History of Science Advisory Committee, 1975-76

Ph.D. Co-Advisor to Thomas Faiola.

Lectures to Cross Disciplinary Studies Health Sciences Symposium, fall 1975, fall 1977

Lecture on William Farr as an epidemiologist to Abraham Lilienfeld course on the History of Epidemiology in the Department of Epidemiology's summer program, 1977, 1978

Organized a series of discussion meetings between the historians of science, technology and medicine and their students at the University of Minnesota, winter and spring 1978 and spring 1979.

Lecture during Nursing Week celebration, School of Nursing, University of Minnesota: "Halos and Calluses: The Past Image of Nurses," May 11, 1981.

Lecture for Program in Biomedical Ethics, Student Committee on Biomedical Ethics, "Gold and the Golden Rule," winter 1984.

Member, Task Force on Biomedical Ethics, University of Minnesota

### Graduate School Examinations

M.S. Final Examination:	Maureen Steventon, School of Journalism, August 1975
Ph.D. Preliminary Examination:	Dale Smith, History of Medicine, March, 15, 1976
Ph.D. Final Examination	David Matz, Classics, April 12, 1976
Ph.D. Preliminary Examination:	Luis Toledo-Pereyra, History of Medicine, June 15, 1976
Ph.D. Preliminary Examination:	Katherine Kvale, Geography, spring 1977
Ph.D. Preliminary Examination:	Thomas Faiola, History of Medicine, February 3, 1978
M.S. Final Examination:	Marcia Mueller, Anthropology, May 23, 1979
M.F.A. Final Examination:	Julia Lysne, Music, May 26, 1978
M.A. Final Examination:	Nancy Hall, Mass Communication, June 5, 1978
Ph.D. Final Examination:	Jean Masteller, American Studies, June 15, 1978
Ph.D. Final Examination:	Dale C. Smith, History of Medicine, spring 1979
M.S. Final Examination:	Lori Klein, Library School, May 7, 1980
Ph.D. Preliminary Examination:	Ho Yin Tang, History of Medicine, January 23, 1981
Ph.D. Preliminary Examination:	Jane M. Hult, History of Medicine, December 15, 1981
Ph.D. Final Examination:	Luis Toledo-Pereyra, History of Medicine, May 17, 1984

Community Service and Extramural Affairs

Member of Program Committee, American Association for the History of Medicine, 1978

Associate Editor, Journal of the History of Medicine and Allied Sciences, 1975-78

Delegate, Minnesota's Pre-White House Conference on Library Services, September 10-12, 1978

Lecture to Surgery Grand Rounds, Veterans Administration Hospital, "Florence Nightingale and the Surgeons," February 21, 1980

Lecture to Internal Medicine Grand Rounds, St. Paul Ramsey Medical Center, "The Walter Reed Story," June 17, 1981

Osler Medal Committee, American Association for the History of Medicine, 1982

Member of the Council, American Association for the History of Medicine, 1982-84

Member, Special Study Section for the History of the Life Sciences, National Institutes of Health, 1983-84

## Curriculum Vitae

Leonard Gilchrist Wilson

General field: history of medicine and the biological sciences

Birthdate: 11 June 1928 Place: Orillia, Ontario, Canada

Married: 7 June 1969 Adelia Katherine Hans

Children: one, son

College education: University of Toronto B.A. 1949 (Honours, Biology)  
University of London M.Sc. 1955  
University of Wisconsin Ph.D. 1958

### Brief employment history:

- 1950-53 Lecturer, Dept. of Biology, Mount Allison University, Sackville, New Brunswick, Canada
- 1958-59 Visiting instructor, Dept. of History, University of California, Berkeley
- 1959-60 Assistant Professor, Dept. of History, Cornell University, Ithaca, New York
- 1960-65 Assistant Professor, 1965-67 Associate Professor, Dept. of History of Science and Medicine, Yale University School of Medicine
- 1967-present, Professor, Dept. of History of Medicine, University of Minnesota

### Honors and Fellowships:

Junior Faculty Fellowship, Yale University, 1964-65

### Committee memberships:

#### American Association for the History of Medicine

- 1964-66 Council
- 1965, 1974 Garrison Lecture Committee
- 1968-69 Nominating Committee Chairman
- 1970 Program Chairman
- 1978-79 Chairman, Welch Medal Committee
- 1983 Chairman, Local Arrangements Committee, Minneapolis meeting
- 1983-84 Committee on Meetings

#### History of Science Society

- 1963 Henry Schuman Prize Committee
- 1966-68 Council
- 1969 Pfizer Prize Committee
- 1971 Nominating Committee Chairman

1966-68 Trustee of the Associates of the Yale Medical Library

- 1968-72 Member of the History of the Life Sciences Study Section, National Institutes of Health, U.S. Dept. of Health, Education and Welfare
- 1968, '69, '71, '72, '73, '74 Appointed to the Fellowship Advisory Committee, Josiah Macy, Jr. Foundation, New York, N.Y.
- 1969- Library Research Associate, American Philosophical Society Library, Philadelphia
- 1971-75 Member, Senate Library Committee, University of Minnesota
- 1973 Appointed to the Advisory Committee on History and Philosophy of Science, Division of Social Sciences, National Science Foundation, Washington, D.C.
- 1974-78 Member, U.S. National Committee on the History of Geology, Dept. of the Interior and the National Academy of Sciences of the U.S.
- 1974-79 Appointed to the Committee on Isis, the official quarterly journal of the History of Science Society
- 1975-79 Appointed to the Advisory Board of the journal, Victorian Studies
- 1976- Member of the Health Sciences Biomedical Library Committee, University of Minnesota
- 1976- Corresponding member, Académie Internationale d'Histoire des Sciences, Paris
- 1979- Member, American Council of Learned Societies Committee on the Dictionary of American Biography
- 1980- Corresponding member, International Committee on the History of Geological Sciences (INHIGEO), International Union of Geological Sciences
- 1983 Elected Vice-president, Minnesota Academy of Medicine
- 1983 Appointed John F. Fulton Fellow, Yale University
- 1984 Elected President, Minnesota Academy of Medicine

## Scholarly activities:

- 1961 Awarded a three year grant by the National Science Foundation for the support of research entitled, "Lyell and the development of geology."
- 1961 Appointed to the Board of Editors of the Journal of the History of Medicine and Allied Sciences; 1962 was elected to the Board of Managers; 1966 became Secretary of its Incorporators; 1973-1982 served as Editor

- 1965 Appointed an Associate Editor of the Dictionary of Scientific Biography which was being prepared under the sponsorship of the American Council of Learned Societies. Completed in sixteen volumes in 1980.
- Organized the first Joint Atlantic Seminar in the History of Biology held at Yale University to provide an opportunity for graduate students working in the history of biology to give papers and have informal discussion. The twenty-first meeting of the Joint Atlantic Seminar will be held at the University of Toronto in April 1985.
- 1966 Awarded a three year grant by the National Science Foundation for the support of research entitled, "Biographical study of Charles Lyell after 1840."
- 1972 Paper presented at Joint Meeting of the History of Science Society and the AAAS, Section L, December 28, Washington, D.C., "Charles Lyell's contribution to Tertiary geology of the United States."
- 1975 Presented invited lecture at Montana State University, Bozeman, May 12, "Impact of the Flexner Report on medical education."
- Awarded three year grant by the National Science Foundation for the support of research entitled, "Biographical study of Sir Charles Lyell, geologist, after 1841--American travels and the species problem."
- Paper presented at the Charles Lyell Centenary Symposium, sponsored by the Royal Society of London, the Geological Society, the British Society for the History of Science, London, August 30 - September 5, "Charles Lyell's concept of uniformity: a revolution in geology." Also prepared an exhibit, "Sir Charles Lyell" at Kinnordy House, Kirriemuir, Angus, Scotland.
- 1976 Delivered the annual Dean's Lecture, University of Oklahoma Health Sciences Center, Oklahoma City, March 19, "Fevers and science in early nineteenth century medicine."
- 1977 Delivered the Beaumont Lecture, Yale University School of Medicine, March 18, "Disease and sea power in the eighteenth century."
- 1979 Paper presented at the meeting of the American Philosophical Society, Philadelphia, April 20, "Geology on the eve of Sir Charles Lyell's first visit to America, 1841."
- 1980 Reminiscences delivered at "A Gathering of Friends in Memory of Madeline Earle Stanton (1898-1980) held in the Historical Library, Yale University School of Medicine, November 22.
- 1981 Delivered a lecture, "History and innovation in medicine: the role of the library," at the annual dinner of the Friends of the University of Iowa Libraries, Iowa City, April 24.

Delivered a lecture, "Infant feeding and the search for safe milk" to Grand Rounds at the Minneapolis Children's Health Center, June 22.

Delivered a lecture, "Texas Cattle Fever: the discovery of the arthropod vector," at a meeting of the Mayo Foundation History of Medicine Society at Rochester, Minnesota on October 21.

Paper presented at Cincinnati, Ohio, at the annual meeting of the Geological Society of America, History of Geology Division, "Lyell on the geological similarity of North America and Europe," as part of the symposium, "The History of American Paleontology: Selected Views," November 3.

1982 Served as chairman of session A, April 30, at the fifty-fifth meeting of the American Association for the History of Medicine, Washington, D.C., April 28 - May 1.

Delivered a lecture, "The death of children and the search for safe milk," to a meeting of the Polk County Medical Society at Balsam Lake, Wisconsin, August 19.

Sponsored an exhibition of photographs by Grace Goldin, medical historian of Swarthmore, Pennsylvania on the theme, "A Photographic Exhibit of Historic Hospitals of Europe, 1200-1981." This exhibit was prepared and set up in the Owen H. Wangenstein Historical Library of Biology and Medicine, University of Minnesota by the staff of the Department of History of Medicine under Mrs. Goldin's direction in December and remained on display in the library until April 1983. The National Library of Medicine at Bethesda, Maryland wished to have the exhibition next, but could not receive it because the library was undergoing renovations, so the exhibition was stored here until 1984. In November 1984 the exhibition opened at the National Library of Medicine where it is currently on view. It is to go next to the University of Iowa.

1983 Delivered a lecture to a meeting of the Buffalo and Erie County Medical Society entitled, "The early struggle against streptococcal infections, 1895-1945" on February 27.

Served as Chairman of the Local Arrangements Committee, for the fifty-sixth annual meeting of the American Association for the History of Medicine held at Minneapolis, May 4-7.

Attended a symposium at the Institute of the History of Medicine, Johns Hopkins University held on June 3 in honor of Lloyd G. Stevenson, M.D., Ph.D., on the occasion of his retirement as William H. Welch Professor of the History of Medicine and Director of the Institute. At the symposium delivered an invited paper, "The early struggle to control streptococcal infections."

November 1-5 visited Yale University as John F. Fulton Fellow and as Fulton Fellow delivered the following lectures:

Nov. 2 "The recognition of streptococci as causes of disease" at Yale University School of Medicine.

"Texas Cattle Fever: the discovery of the arthropod vector" before the Nathan Smith Club at Jonathan Edwards College.

Nov. 3 "The riddle of puerperal fever: 1880-1930" at Yale University School of Medicine.

Nov. 4 John F. Fulton Lecture, "Internal secretions in disease: the historical relations of clinical medicine and scientific physiology" before the Beaumont Medical Club in the Historical Library, Yale University School of Medicine.

1985 Delivered a lecture, "The elucidation of rheumatic fever," to the medical staff of Bethesda Hospital, St. Paul, February 1.

#### Membership in Societies:

American Association for the Advancement of Science  
American Association for the History of Medicine  
American Historical Association  
British Society for the History of Science  
The Geological Society of America  
The History of Science Society  
International Academy of the History of Science  
The Minnesota Academy of Science  
The Society for the History of Technology  
The Society for the History of Natural History

#### Publications:

##### Articles

"Erasistratus, Galen and the Pneuma," Bull. Hist. Med., 1959, 33, 293-314.

"The development of the knowledge of kidney function in relation to structure--Malpighi to Bowman," Bull. Hist. Med., 1960, 34, 175-181.

"The transformation of ancient concepts of respiration in the seventeenth century," Isis, 1960, 51, 161-172.

"William Croone, F.R.S. (1633-1634)," with L. M. Payne and Sir Harold Hartley, F.R.S., Notes and Records of the Royal Society of London, 1960, 15, 211-219.

"William Croone's theory of muscular contraction," Notes and Records of the Royal Society of London, 1961, 16, 158-178.

- "Greek science and the Renaissance," Yale Scient. Mag., 1962, 36, 5-12.
- "The problem of the discovery of the pulmonary circulation," J. Hist. Med., 1962, 17, 229-244.
- "The development of the concept of uniformitarianism in the mind of Charles Lyell," Actes Xth Int. Cong. Hist. Sci., 1962, pp. 993-1001.
- "The origins of Charles Lyell's uniformitarianism," in Claude C. Albritton, ed., Uniformity and simplicity--a symposium on the principle of the uniformity of nature, New York, Geological Society of America, Special Paper 89, 1967, pp. 35-62.
- "The emergence of geology as a science in the United States," J. World Hist., 1967, 10, 416-427 and in Readings in the history of mankind, New York, The New American Library, Inc., 1967.
- "Sir Charles Lyell," Encyclopedia of World Biography, McGraw-Hill.
- "Starling's discovery of osmotic equilibrium in the capillaries," Episteme, 1968, 2, 3-25.
- "The intellectual background to Charles Lyell's Principles of Geology, 1830," in Cecil J. Schneer, ed., Toward a history of geology, Cambridge, Mass.; MIT Press, 1969, pp. 426-443..
- "Aristotle: anatomy and physiology," Dictionary of Scientific Biography, New York, Charles Scribner's Sons, 1970, I, 266-267.
- "Uniformitarianism and catastrophism," Dictionary of the History of Ideas, New York, Charles Scribner's Sons, 1970.
- "Sir Charles Lyell and the species question," American Scientist, 1971, 59, 43-44.
- "Galen: anatomy and physiology," Dict. Sci. Biog., s.v.
- "Edward Jenner," Dict. Sci. Biog., s.v.
- "Charles Lyell," Dict. Sci. Biog., s.v.
- "The clinical definition of scurvy and the discovery of vitamin C," J. Hist. Med., 1975, 30, 40-60.
- "Science by candlelight," in The mind and art of Victorian England, Joseph Altholz, ed., Minneapolis, University of Minnesota Press, 1976, pp. 94-106.
- "Lyell et la naissance de la géologie moderne," La Recherche (Paris), 1975, 6, 940-949.
- "Fevers in nineteenth century medicine," J. Hist. Med., 1978, 33, 386-407.
- "Geology on the eve of Charles Lyell's first visit to America, 1841," Proc. Am. Phil. Soc., 1980, 124, 168-202.

"In memory of Madeline E. Stanton," J. Hist. Med., 1981, 36, 130-133.

"Madeline Earle Stanton (1898-1980)," obituary in Bull. Med. Lib. Assoc., 1981, 69, 357-358.

Dale C. Smith and Leonard G. Wilson, "The education of physicians to practice scientific medicine," in Owen H. Wangensteen, ed., Elias Potter Lyon: Minnesota's leader in medical education, St. Louis, 1981, pp. 172-195.

"Lyell on the geological similarity of North America and Europe," J. Hist. Earth Sciences, 1982, 1, 45-47.

"Internal secretions in disease: the historical relations of clinical medicine and scientific physiology," J. Hist. Med., 1984, 39, 263-302.

[invited contribution] "Editorial: Dorothy Schullian retires from the Journal," J. Hist. Med., 1984, 39, 457-461.

#### Books

John F. Fulton and Leonard G. Wilson, Selected readings in the history of physiology, 2nd ed., Springfield, Ill., Charles Thomas, 1966.

Sir Charles Lyell's scientific journals on the species question, New Haven, Yale University Press, 1971, lxi, 572 pp.

Charles Lyell, the years to 1841: the revolution in geology, New Haven, Yale University Press, 1972, xiii, 553 pp.

edited, Benjamin Silliman and his circle: studies on the influence of Benjamin Silliman on science in America. Prepared in honor of Elizabeth H. Thomson, New York, Neale Watson Academic Publications, 1979.

editor, Journal of the History of Medicine and Allied Sciences, 1973-1982.

March 20, 1985

Professor Leonard Wilson  
Department of History of Medicine  
510 Dient Hall

Dear Leonard:

This is to provide some comments on the proposal for an M.A. in the History of Medicine and Biological Sciences. My colleagues and I (including Dean Holt) have carefully examined your document and based on our experience we believe that if your proposal were forwarded to the Policy and Review Councils, the Executive Committee, Academic Affairs, the Board of Regents, and HECB for review, it would not be approved.

Simply put, the rationale for seeking this degree is not convincing. When you note that "the program has the potential to attract students from a wide area" you do not provide any evidence to back up this assertion. Generally speaking, in a proposal such as this one demonstration of need is usually some combination of intellectual need, student demand, and job market demand. Have you had various inquiries? If so, how many? Are major medical schools adding History of Medicine courses to their curricula, thereby providing opportunities for certain faculty members? Etc., etc.

Another point is that conditions have changed considerably since the Ph.D. program in this area was approved. Now careful attention would be given to the critical mass of faculty. Normally the Policy and Review Councils believe that the minimum in this regard is about five or six faculty. Even if Malcolm Kottler's replacement would be willing to participate in this effort along with you and John Eyler, the faculty size doesn't come close enough to the rough yardstick used by Policy and Review Councils.

Thirdly, as regards admissions but also related to the rationale for the program, it would appear that the requirement of either the M.D. degree or a Ph.D. is unusually restrictive as an admission device. Wouldn't you be better off taking a broader view on this matter? Currently there are three Ph.D. students and if two of them would rather be in an M.A. their change of status would appear to jeopardize the stability of the Ph.D. program.

Finally the proposal is not crystal clear on whether the proposed degree is Plan A or Plan B. Since a thesis is mentioned we assume it would be a Plan A approach. However, requiring 44 coursework credits seems excessive since the Graduate School minimums are 28 credits (plus 16 thesis credits).

Professor Leonard Wilson  
March 20, 1985  
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If persons with M.D.s and Ph.D.s are interested in the History of Medicine why not simply admit them as coursework only students in the Ph.D. program and urge them to follow the regimen sketched in the proposal? Or, since there is some likelihood of a wide-ranging Master of Liberal Arts degree surfacing in the next six months, could you utilize that vehicle for this enterprise?

We are open to suggestions from you and John on this entire matter but for now we simply do not believe your proposal could receive approval given the assorted issues involved.

I regret having to pass along this gloomy assessment but it does represent our best judgment about the lay of the land.

Sincerely yours,

Kenneth Zimmerman  
Associate Dean

KZ:dks

cc: Dean H. Mead Cavert



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of History of Medicine  
510 Diehl Hall  
505 Essex Street S.E.  
Minneapolis, Minnesota 55455  
(612) 373-5946

March 27, 1985

Kenneth Zimmerman  
Associate Dean  
Graduate School  
Johnston Hall

Dear Ken:

Thank you very much for your letter of March 20, containing comments on my proposal for an M.A. in the History of Medicine and Biological Sciences, and embodying what you describe as a "gloomy assessment" of its chances for approval. Your assessment is indeed gloomy, and dark with foreboding in a broader and deeper sense than I believe you intended, because, if you and Dean Holt are correct in your judgment that our proposal for an M.A. program in the History of Medicine and Biological Sciences would not be approved then the future of graduate education at Minnesota is in serious jeopardy.

Before I refer to the various points that you mentioned in your letter, may I suggest that when a university is considering a new proposal for a graduate program, the primary question that should be asked is whether the proposed program would be academically sound. The measure of academic soundness would be the quality of education that students might receive in passing through the program. Would, for instance, students who pass through the proposed program for an M.A. degree in the History of Medicine and Biological Sciences receive an education in the history of medicine and biological sciences that would equal or exceed the education that they would receive studying for a comparable degree at a first rate university. In answer to that question, I think that they would, but permit me to provide evidence for that opinion a little later. A second question that a university may ask of a proposed graduate program is whether it would duplicate needlessly programs already in existence either at that university or at other universities. The answer to that question is that the proposed program would not duplicate any other program at the University of Minnesota or at any university in the Midwest. The only comparable program that I know of in the United States is that mentioned in the proposal at the Institute of the History of Medicine, Johns Hopkins University. A third question might be whether the University of Minnesota possesses the resources in terms of library collections and research facilities to support the program, but since that question must really be answered in considering the academic soundness of the program, I should prefer to deal with it under that head.

If a university administration goes beyond the questions outlined above to ask others of a more peripheral character to which frequently only speculative answers can be given, they are in danger of trespassing on the prerogatives of the faculty to judge what is important to study and to teach. They are also in grave danger of inhibiting the initiatives of the faculty in scholarship, and, therefore, of destroying the quality of their scholarly endeavor.

Kenneth Zimmerman  
March 27, 1985  
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Incidentally, a true university is, or ought to be, a community of scholars, who are quietly dedicated to the cultivation of learning, whether in the laboratory, in the field, or the library, and the communication of that learning to students. I hope that the nature and purpose of a university is generally understood in Minnesota, even if it should not be enunciated frequently.

Now to come to the specific points that you mention in your letter of March 20. You say that I do not provide evidence that "the program has the potential to attract students from a wide area." The chief reason for making that statement was that, since the program would be the only one of its kind in the Midwest, or between here and the West Coast, with the possible future exception of the University of California at San Francisco, any physician in that wide area who was interested doing serious work in the history of medicine, would at least consider the proposed program at the University of Minnesota. Whether we might also be able to attract students from the East Coast, I do not know, although I suspect that if we could offer adequate fellowship support, we could. As a measure of intellectual need (to which you refer) physicians who at present wish to prepare themselves to do serious scholarly work in the history of medicine, but who cannot devote the years required for a Ph.D., have at present only the program offered by the Institute of the History of Medicine at Johns Hopkins University. How many such potential students there might be is very difficult to estimate. The number would not likely be large, but it need not be large in order to be significant. During the past twenty-five years the Master's program at Johns Hopkins has graduated four students, whom I can identify, there may possibly be one or two others of whom I do not know. Three of the four are engaged to some degree in teaching the history of medicine in a medical school at the University of Kansas Medical Center, the University of Rochester School of Medicine, and Washington University-St. Louis, School of Medicine, respectively. All four have published good scholarly work in the history of medicine. The number of students produced by the Johns Hopkins program is clearly not large, but without being large its influence on teaching and research in the history of medicine has been significant. At the University of Minnesota I have had over the past fifteen years or so a few inquiries from physicians who wish to do work in the history of medicine (one was from a physician at the Mayo Clinic) but all that I could offer them was our Ph.D. program. As I mentioned in the proposal, at present two students enrolled in our Ph.D. program, who are physicians, would prefer to take a Master's degree, because they then would have some hope of completing the work for the degree within a reasonable period of time. If two students currently enrolled, who wish to enter the proposed program, does not constitute "student demand," when considered in relation to the four Master's students graduated by Johns Hopkins over a twenty-five year period, then student demand at Minnesota must be considered only mass demand and must rule out smaller, specialized programs such as the History of Medicine and Biological Sciences. Yet it would also rule out many other small specialized programs, which, taken in their aggregate, form a large part of graduate education at leading universities. As for job market demand, that is small in the history of medicine, but so is the supply of qualified candidates for jobs. In recent years graduates of programs in the history of medicine have generally been able to find jobs and there has not been the imbalance between supply and demand that has existed, and perhaps still exists, in other fields, such as general history.

Kenneth Zimmerman

March 27, 1985

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The second point that you mention in your letter, namely, that conditions have changed since the Ph.D. program in the History of Medicine and Biological Sciences was approved and that Policy and Review councils now believe that a minimum critical mass of faculty is about five or six faculty to conduct a Ph.D. program. The metaphor "critical mass of faculty," drawn from physics, is unfortunate in its implications, because it places a value on what George Orwell called group-think, the interactions among members of a herd, developed particularly well in sheep, which group thought does not deserve. Without wishing to undervalue the stimulus that colleagues may provide for each other, the critical factor in all education is the interaction between the individual teacher and a student. If what you describe as the current wisdom of Policy and Review councils had been applied to the Ph.D. program in the History of Medicine and Biological Sciences at the time it was established, it would not have been established. The implication of your point must be therefore that it would have been better had a Ph.D. program in the History of Medicine and Biological Sciences not been established, and had not graduated two Ph.D. candidates, with two more currently at work on their dissertations. Recently, I received from Dale C. Smith, Ph.D., who graduated from our program in 1979, a reprint of a paper that he had just published in the American Journal of Tropical Medicine and Hygiene based upon work that he began here. During the past year he has also sent me a monograph, published by the Johns Hopkins University Press, based on work that he carried out here as a research fellow. Dr. Smith is currently an assistant professor in the Section of Medical History at the Uniformed Services University of the Health Sciences, Bethesda, Maryland. He is regarded there as a highly effective teacher and scholar who is a credit to the University of Minnesota. Would it have been better for the University of Minnesota if Dr. Smith had received his training elsewhere?

The faculty in the Department of History of Medicine at Minnesota, numbering two members, is of the same size as the faculties in the history of medicine at other universities with graduate programs in the history of medicine. Until last year the faculty in the Institute of the History of Medicine at Johns Hopkins University included only two members. A third member has just been added. An essential factor to graduate teaching in the history of medicine at Minnesota has been that the department exists in intimate relation to the Owen H. Wangensteen Historical Library of Biology and Medicine. At the time the graduate program was established the department had among its faculty and research fellows four scholars who had written Ph.D. dissertations in the history of medicine for other universities, namely, the University of Chicago, Yale University, Johns Hopkins University, and the University of London. Although all four were supposedly at work on their dissertations before they came to Minnesota, when I asked upon their arrival to read what they had written, the various scraps of manuscript produced were so scanty that I can say with confidence that their dissertations were written at Minnesota with heavy reliance upon the resources of the Wangensteen Library. Two of those dissertations resulted in published books. A primary reason therefore, for establishing a Ph.D. program in the History of Medicine and Biological Sciences at the University of Minnesota was that we had concrete evidence that the collections of the Wangensteen Library and other libraries at Minnesota were adequate to produce dissertations satisfactory to the four universities mentioned, and therefore they ought to be adequate to produce Ph.D. dissertations satisfactory to the University of Minnesota. In this connection I might add that in the eighteen years since the Department of History of Medicine was established at the University of Minnesota, some nine books have been

Kenneth Zimmerman

March 27, 1985

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published by members of the department, students, or emeritus members of the faculty connected closely to the department, all using the collections of the Wangenstein Library. The resources of the department and the Wangenstein Library have therefore proven adequate to support research and graduate study in the History of Medicine and Biological Sciences. The yardstick of five or six faculty that you tell me is used by Policy and Review councils to determine the minimum number needed to operate a graduate program is therefore an inaccurate and inappropriate measure, if the Policy and Review councils adhere to it blindly.

In reply to your third point that the requirement of either the M.D. degree or Ph.D. degree is unusually restrictive, that is true, but the whole point of the proposed Master's program is that it is a special program for a special group of potential students. For other students who lack special medical or scientific training, the Ph.D. program with its more extensive coursework and longer period of study, is more appropriate.

In answer to your final point, the proposed program would be a Plan A program, because a thesis would be required. The forty-four coursework credits does exceed the graduate school minimum of twenty-eight credits, but is it forbidden to require for a special program a higher standard than the minimum used in other graduate programs? These are however details that might easily be modified if they constituted the only obstacles to approval of the program.

When you mention that a "wide-ranging Master of Liberal Arts degree" program may be approved in the next six months, I am finally completely astonished, because, if a Master's degree in the History of Medicine and Biological Sciences could be comprehended under a Master of Liberal Arts degree program, why could it not be approved as a program by itself, designed to meet the special needs of a particular group of students. The latter plan would be more sound academically.

In conclusion I do hope deeply that the University of Minnesota is not sinking under such a weight of bureaucratic obstacles as you describe in your letter. If it is, its future as an institution of higher learning is grim, and its decline in national reputation will follow with dreadful certainty.

Yours sincerely,

*Leonard.*

Leonard G. Wilson  
Professor and Head

cc H. Mead Cavert  
Associate Dean  
Medical School

University  
of  
Minnesota  
memo

Date 5/30/85  
To Vicki Fields  
From Harry Foreman, M.D.  
Subject Family Planning Administration

With my retirement on June 30, 1985, the program in Family Planning Administration will be phased out. Students in the program will have completed their work by that time and no other students will be admitted.

Thank you.