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About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Dr. David Rogers
Hale 114

FEB 2 7 1975

2/27/75

TO: EPOB Faculty

FROM: Charles Norris for Development Committee

SUBJECT: Building program development -- Special Faculty Meeting on This Fri. Feb. 28 at 3:30 in Ram. 216 -- Try to attend.

Attached to this you will find a questionnaire which will take a little time to fill out, but in our opinion, is absolutely crucial to the future of this Department. It is essential that we have the information requested if our document is to be successful in meeting the questions which will be asked by the Boulder Campus Planning Commisssion, the Board of Regents, the Colorado Commission on Higher Education, the Joint Budget Committee, the Governor's Executive Budget Committee, and the legislature itself. By the time the whole document (exclusive of detailed building plans) is completed, it will probably amount to two or three or more hundreds of pages.

The Planning Office is really behind us; they are showing it by assigning skillful people to the job. Yesterday we had an excellent and encouraging session with two of them, in which we were able to see how to proceed effectively. But in order to do the job, we must show what we need in very precise terms. Many of the necessary data, concerning contact hours, etc. will be provided by them from computer records. In this questionnaire, the first part will deal with our teaching functions. What we want to have in this is an indication of the kinds of environments in which different kinds of courses should be taught. This is not specific amount of space or anything of that sort. It is supposed to indicate number of students per section, kinds of rooms, including kinds of installed facilities, service areas, etc.

Remember that there is a constriction imposed by law on the number of FTE students the University can enroll, and that any increases we have must be compensated for by dropping enrollments in other Departments and/or Colleges. From plots of the student credit hour production in this Department, it appears that we are in a growth phase, and that we can expect some growth for a five year period. However, we should not at this time indicate drastic cuts in size of lecture sections, etc. All of the governmental agencies would simply say: "Just maintain exactly what you now do."

In the part of the questionnaire headed TEACHING you should provide information requested for all courses you teach now (including those regularly scheduled for every-other-year) and courses which have been taught in the past, which are still on file, but which have been temporarily discontinued for lack of facilities and/or faculty availability.

A little later, we will be fitting in curricular plans for the future as they develop. In this connection, our subcommittee on curriculum synthesis will set up hours during which you will be invited to come in and discuss their proposals for addition or deletion of courses. Please, after such hours are announced, do come to have head-to-head meetings with them.

In the section headed "Public Service, Research, and Continuing Education" indicate everything you and your students (undergraduate independent study, graduate independent study, and thesis research) are doing this year. This should also include talks to service clubs, church groups, consulting activities, etc. LAY IT ON HARD. Especially important are activities involved in research and service directly related to the State of Colorado.

Indicate numbers of students involved in your research programs, the kinds of environment (labs, etc.) in which work should be carried out, etc.

All of us are under tremendous time pressure, but please take a couple of hours and do the job well. And if we on the Development Committee are to do our job assembling and writing, we will have to have the questionnaires returned by March 7, 1975. With everything else that will have to be done, we will still have much to accomplish to meet our April 1 deadline of the Planning Office.

RESEARCH, PUBLIC SERVICE, CONTINUING EDUC.

1. Public Service: talks to service clubs, etc.; independent study activities tied to significance for Colorado especially; consulting for private & public organizations, especially Colorado based.

2. Research: What you & your students are up to, including those based on grants. What kinds of facilities are needed and used for effective work (not sq. ft. of area). How many students in various categories. Stress Colo. related activities. Make note of interdepartmental and institute related activities.

QUESTIONNAIRE - FOR FACULTY

Name & Rank _____

TEACHING

Course No. & Credit Hrs. _____ Name of Course: _____

What goes on the course (not routine catalogue description) especially in labs

_____

_____

_____

_____

_____

Lectures/wk____ contact hrs/week/sect. _____ labs/wk _____ Hrs/lab section

_____ contact hrs./lab section/wk. _____ Rec/wk _____ Hrs/Rec

_____, Contact hrs/rec section/wk. _____

Appropriate (not far from present) no. students/section

Lect. _____ Lab. _____ Rec. _____

Frequency of course offering (check one)

every semester_____; one sem/yr._____; one sem/2 yrs._____

Kinds (not space area) of facilities needed to teach the way it should be taught.

Lectures: _____

_____

Recitations: _____

_____

Laboratories _____

_____

_____

_____

Service for above _____

FEB 2 0 1975

UNIVERSITY OF COLORADO

BOULDER, COLORADO 80302

Department of Environmental,
Population and Organismic Biology

February 20, 1975

Dr. J. Bock
Dr. D. Jones
Dr. C. Norris
Dr. D. Rogers ✓
Dr. W. Segal
R. Duke
M. Pelanne

The Development Committee will not meet as usual on Monday afternoon. Instead the next meeting will be on Wednesday February 26 at 2 p.m. in Ramaley 211. Along with the Curriculum Synthesis Committee we will meet with representitives from Vice Chancellor Gary Andrew's office to conduct detailed Program Planning.

Dear Dave,

I hope you will not be too much annoyed by having to read through this appeal.

Regards,

Bob

Call Winston on Program Plan Outline.

Feb. 5, 1975

FEB 0 5 1975

TO: Faculty of EPOB

FROM: Charles H. Norris

SUBJECT: Executive Committee Meeting

Time: 3:00 PM 1/30/75 Place Ramaley 211

Present: Professors R. Bernstein, W. Crumpacker, Y. Linhart, D. Norris, C. Norris (chairman) and graduate representative, David Buckner.

Chairman Charles Norris announced that during the vacation he was informed by the University Development Office that a check for $1000.00 had been sent to them, for use by the EPOB department. He said that he had written to the donors, Mr. & Mrs. Matt Alvarez, of Park City, Utah, and asked if they had any preferences of how it should be used, and made suggestions of broad areas of use. Mrs. Alvarez answered, and indicated that helping graduate students would be pleasing to them, but that if in the judgment of the Department, some other use would be fine with them. The Executive Committee agreed that support of graduate activities would be good, and asked David Buckner to inquire of the graduate students just how it would best be used.

Chairman Norris then announced that the Department will have to deal with two tenure appointment questions this spring: Professors Norman Richardson and James Wilson (joint w/Psychology). He asked Professor Crumpacker to call a meeting of our Tenure Committee (all tenured members of our faculty) and act as temporary chairman of that committee, providing that a permanent chairman be elected.

The Executive Committee than discussed the problems of what areas should receive our highest priorities in requests to Dean Briggs for additional FTE's for 1975-1976. From the E.C. the following were suggested, and Chairman Norris was asked to obtain consideration by the Development Committee.

1. Plant cytotaxonomist (or cytogeneticist) who is interested in economic botany.

2. Physiological behaviorist who could add strength in animal physiology as well as behavior.

3. Ecological physiologist - plant or animal.

4. Developmental biologist - stressing the organ level of development plant or animal

NOTES on Chairman's meeting with the Development Committee

The Development Committee accepted the proposals from Executive Committee as being valid and in keeping with plans for the future. However, it was suggested by Professor Rogers that perhaps more important (perhaps two years from now) would be trying to get a quantitative biologist - not the usual biometrician but one skilled in other aspects of applied mathematics as well. The Development Committee proposes that the quantitative biologist might take priority over the developmental.

Further, it was noted that by making our desired categories rather broad, as was done last year, it would mean we would have a broader spectrum of applicants from which to choose.

Feb. 5, 1975

FROM: W. Segal

TO: Development Committee

POLICY STATEMENT REGARDING FUTURE DEVELOPMENT OF EPO BIOLOGY

The basic premise of our academic program is that the university complex must expand its role in the development of modern, industrialized society. A reciprocal relationship between university and society must be activated because of the pressing needs of society for extending the frontiers of knowledge and for applying this new understanding to the solution of acute problems facing our state, our nation and the world.

The Department of Environmental, Population and Organismic Biology is ideally constituted to undertake this societal function. Our orientation and our strength has historically been ecological. While still maintaining our academic integrity, our new program is primarily dedicated to the application of our ecological expertise to the challenging, problem-solving, environmental crises facing global society. Our present departmental organization and its proposed expansion, integrating the multitude of diverse sub-disciplines of biological science within the framework of a single department, is also ideally suited to the application of an interdisciplinary, systems analytical approach to the problem-solving of our present day environmental crises. It is to this goal that we dedicate our professional activities and we are confident that with the expansion of our program and facilities we can fulfill this role more directly and decisively than any other component at the University of Colorado.

In order to achieve success in the fulfillment of this function we recognize that we must integrate our teaching and research activities. As we gear our academic program to more environmentally relevant functions, the past disparity and seeming conflict in teaching and research activities will become non-existent. Our research will be directly relevant to the interests of students as they enter our program (since they represent the public interest at that time). Students can take more of an active, participatory part in the academic process (since it is problem-solving oriented); in the process they will obtain the complex, interdisciplinary training which will equip them to go out into the community and make significant contributions to the solution of these problems. In this way, both our research and teaching programs could be at the forefront of science and technology.

UNIVERSITY OF COLORADO

BOULDER, COLORADO 80302

Department of Environmental,
Population and Organismic Biology

February 10, 1975

Jane:

I took the various pieces of suggestions for the objectives of the department, had Janice retype my suggestions on them, and ask that the committee examine the results.

Please also try to incorporate what Dick Jones said in his paper, as a follow-on to the introductory material.

The committee should complete this in time to be presented as a preliminary statement for approval by the faculty.

I suggest that there is time to get it all retyped, and dittoed in time for consideration at the faculty meeting on Tuesday afternoon.

Ask the faculty to read, modify, and return to the development committee at the earliest possible time. Make a deadline of one week for any replies.

Than, we'll have to put it all together for submission to Gary Andrew.

Thanks, and good luck.

Dave

Dr. Rogers Copy

Title: Preface (or introduction) to Departmental Objectives.

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In addition to the broad-scale biological program for majors in the department, we recognize the continuing needs for service to other departments, schools and colleges in the University. Preprofessional service courses are needed for premedical students, pre-nursing students, physical therapy programs, general science for the humanitites, biological knowledge for the social and physical sciences in the College of Arts and Science, etc.

We recognize that emphases change over periods of time, demanding a flexibility and capability to modify our offerings. Recognition that the age of students and demand for education directed for differing purposes may be different in the decades ahead is built into the new curricular offerings, but at the same time, recognizing a need for a solid base of knowledge in all phases of biology.

As with our curriculum flexibility, we desire that our physical facilities be easily and economically modifiable for changing needs. As with physical facilities, our design for new faculty positions must emphasize the multidisciplinary capabilities, rather than over-emphasis on narrow specialization.

Page 1

FROM: W. Segal

TO: Development Committee

Title -

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Double space - 10 copies.

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Page 2

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Ask the faculty to read, modify, and return to the development committee at the earliest possible time. Make a deadline of one week for any replies.

Then, we'll have to put it all together for submission to Gary Andrew.

Thanks, and good luck. Dave.

memorandum

UNIVERSITY OF COLORADO

To Dr. Rogers Date 2/3/75

While you were out (Time 9:50)

Name Ron Duke ☒ Called

of ☐ Phoned

☐ Will call again

☐ Wants you to phone

☒ Left this message

He will be tied up this afternoon at 4:00 and won't be able to make the Development Committee Meeting.

By

Dr. Rogers,

As you can see by my schedule I am working at 4:00pm Monday afternoons. Is this the only time the committee can meet? If it's not possible to change the time I will attempt to change those hours, but I cannot be sure of the out come. At any rate I will not be able to make this afternoons meeting. Sorry.

Michele L. Pelanne

P.S It's also a bad time because if we have 2 hour meetings I won't be able to make dinner in my dorm.

JAN 27 1975

1/22/75
Date

Dr. D. J. Rogers is trying to arrange a meeting for

Development Committee
Name of Committee

involving the following persons:

C. Norris

Please cross out the times and days of the week when you could not attend (this) (these) meeting(s), and return to the person named above.

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00					
9:00					
10:00					
11:00					
12:00					
1:10					
2:10					
3:10					
4:10					

Thank you,

DJ Rogers

Dove - Here is a first crack at our dept. policies. Jane has already had input.

Dick Jones

Put these in Development Committee File (EPDB Biology)

JAN 14 1975

Charley

Mon. 8:30 - B'fst

UMC east Lounge.

JAN 2 8 1975

1/22/75
Date

Dr. P. J. Rogers is trying to arrange a meeting for

Development Committee
Name of Committee

involving the following persons: Ron Duke

Please cross out the times and days of the week when you could not attend (this) (these) meeting(s), and return to the person named above.

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00					
9:00		X		X	
10:00		X		X	
11:00	X	X	X	X	X
12:00	X	X	X	X	X
1:10		X	X	X	
2:10		X	X	X	
3:10			X		
4:10			X		

Thank you,

P. J. Rogers

JAN 27 1975

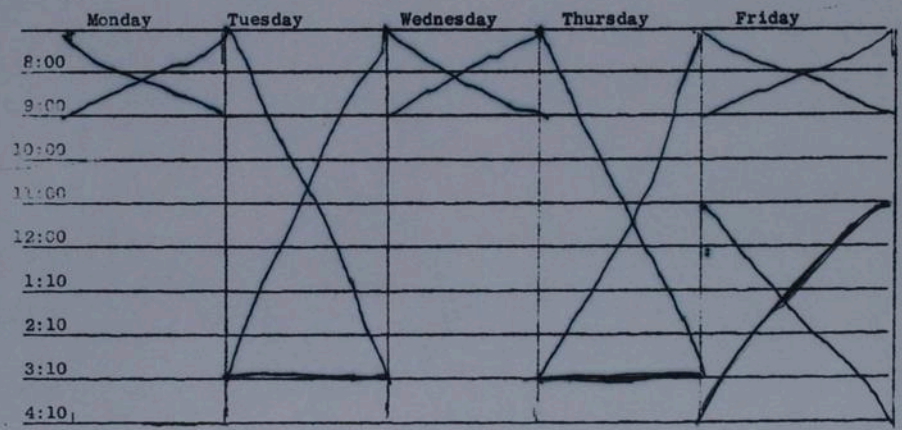
1/22/75
Date

Dr. D.J. Rogers is trying to arrange a meeting for

Development Committee
Name of Committee

involving the following persons: W. Segal

Please cross out the times and days of the week when you could not attend (this) (these) meeting(s), and return to the person named above.



Thank you,

DJ Rogers

Policies and commitments of the Department of Environmental, Population and Organismic Biology of the University of Colorado

The department seeks a balance of excellence in teaching, research, and service.

I. Teaching

We are dedicated to excellence in teaching, and are committed to improving this activity by 1) adjusting student-teacher ratios to optimum levels, 2) gaining facilities which provide optimum environments for undergraduate and graduate education, 3) hiring and keeping colleagues who teach effectively, 4) seeking teaching innovations, 5) encouraging interdepartmental and extradepartmental collaboration in teaching efforts. 6) training graduates to teach effectively, and 7) listening to constructive opinions of students and our colleagues concerning teaching standards and methodology.

II. Research and Development

We strongly encourage biological research and development activities by faculty and students to improve the human condition, the state of the earth's ecosystems, and human awareness of life processes. We will be diligent in our efforts to procure research support from governmental and private agencies. We encourage that adequate research facilities be available and that these facilities incorporate teaching functions when possible.

III. Professional training

We must prepare undergraduates to fill positions available in biology. To further this goal, we will 1) be aware of the kinds of jobs available in the community that require and use biological knowledge, 2) convey these opportunities to students through adequate counseling, and 3) provide teaching and training which prepares students to fit these jobs. We are dedicated to the task of providing excellent teaching and research training for our graduate students so that they compete well for teaching, research and administrative positions. Our emphasis is on awarding advanced degrees

to only a few, highly qualified students.

IV. Commitment to the State of Colorado

We encourage teaching, research and development which relates to the health of the ecosystems and people of the state of Colorado. Graduates of our department must be aware of biological issues related to Colorado, and many must be capable of effectively satisfying careers in biology in this state and other places in the Rocky Mountain West.

V. Cooperation and communication

We encourage interdepartmental and intradepartmental collaboration in teaching, research and development. We also favor communication among the university administration, other state institutions of higher learning, state government and people of Colorado related to the direction of our programs.

Ron Duke – G. Stud., Dev. Comm.
Mail in Hale - office 306E - Hale
Home phone - 499-6417

XL. 7002 - Michele Pelanne – U.G. Stud., Dev. Comm.
371 Buckingham
Call Kittredge Office ; leave message - I'll get back to you

Dr. Rogers,

Hi! I thought I'd get you my new schedule as soon as possible so we could get the committee going again. Also my address is still the same: 371 Buckingham.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8		EPOB 322		EPOB 322			
9	Eng 221		Eng 221	EPOB 322 L	Eng 221		
10	EPOB 332	EPOB 322 R	EPOB 332				
11	Chem 182		Chem 182		Chem 182		
12							
1	Phy 202	Phy 202		Phy 202	Phy 202		
2				EPOB 332 L			
3							
4	WORK	WORK	WORK		WORK		WORK 'til 9:00
5							
6							

I'll expect to hear from you soon about what's happening with the committee.

Thanks,
Michele L. Pelanne

File - Development Committee
EPDB

Rogers

DEC 16 1974

December 4, 1974

I have just read that Development committee report and have the following comments to make.

I am not particularly impressed with any of the suggestions concerning 101-102. I believe that 2 semesters of solid background are essential. By splitting 102 into a number of different courses, you will be encouraging the students to specialize too early and the students moving into the upper level courses will have a very spotty background. Worse yet, those students who can only take a little biology will perhaps wind up with some glaring blank spots. We presently encourage our students to proficiency if they had a lot of high school biology, and I think virtually all of them try to do this if they think they know the material. My exams show that those who stay in the course are not wasting their time working over old material. It takes 2 hard semesters to cover the elementary concepts, terminology, and perspective of modern biology. We have little choice but to offer this and even require it. I am less certain about the labs in these courses, and I think this deserves careful consideration.

I have proposed to teach a course in the techniques of freshwater ecology which I think will fill a need in the field of applied ecology. ✓ People who take technical positions and even our own graduate students faced with field problems need to know how to analyze for dissolved phosphate and the like, but we don't teach them this.

I think that a few team-taught courses do no harm, but that we should avoid putting a large number of these on the books. Team teaching is usually inferior overall due to diffused responsibility and reduced student contact.

William M. Lewis, Jr.
Hale 203D

1. Need 2 semesters of Gen. Biol., more or less, as is.
2. "Practical" course in F. W. Ecology (Techniques) (Applied course
3. Team-Taught courses not good.

UNIVERSITY OF COLORADO
Boulder, Colorado 80302

Health Sciences Advising

December 11, 1974

TO: EPOB Curriculum Synthesis Committee

FROM: Bruce M. Pollock

RE: Your Memo 12-4-74 - The Job to Be Done

There are two major points I would like to raise:

1. Where are future developments in Biology likely to occur? Do the proposed curriculum and research programs provide maximum potential for the Department to take the initiative in these future developments? Obviously, the answer to these questions will be strongly conditioned by personal bias, and I would like to support mine.

   At this time, Biology seems to be going in at least two entirely different directions: Environmental and Molecular-Cellular. At Boulder, these are represented by two separate departments. Both are discovering new facts about the biological world. Accumulation of these diverse facts is tending to splinter Biology still further. Eventually, however, these will join, and environmental (population, genetic, organismic) phenomena will become explicable at the molecular level. When this happens, I predict an explosive series of advances, not only in the field of theoretical biology, but also in the applied phases of Biology--our ability to control our biological environment. This will probably come first in the fields of food organisms and certain human diseases. One aspect of research in this area is already appearing on campus in the work of Dave Rogers and colleagues. Another is in the beginning use of the scanning electron microscope in structural biology and systematics.

   I am well aware of the feelings of the EPOB members toward the past happenings in the MCDB area on this campus. Is it possible to separate these feelings from an evaluation of future curriculum and Departmental development to give the fullest consideration to the future of Biology in the global sense?

2. Premeds and the like.

   There is a tendency for premeds to consider themselves different from other science students, and an equally strong tendency for faculty to do likewise. I talk to these students about alternatives to medicine. However, some other premed advisers reverse this order and speak of medicine as an alternative to another major goal. There is a good deal of rationale to this viewpoint. Perhaps it would be wiser both for students and University if the Department considered medicine as just

one of many vocational opportunities for its graduates. In my advising I try to get the students to prepare themselves for as many options as possible, since there can be no assurance that they can enter medicine. Perhaps the same rationale would be useful for most students in the Department.

There is, however, one area which should be carefully considered relative to the premeds and predents. These students apply to professional school at the end of their junior year. Activities in their senior year normally have no effect on professional school acceptance. Medical schools in particular are asking for excellence in some area, academic or personal. If a student is to become excellent in Biology, he must do so before the end of his junior year. This means that independent study opportunities should be available during the junior year. These people would be wise to use their senior year to broaden their background and prepare for their alternative vocations.

To: Board [illegible]
Re: comments on the committee report
From: [illegible] Shulls

Shulls

Plan A. The comments I have had from students who have [illegible] transferred from [illegible] was "the [illegible] I learned more in the regular courses (lec & labs)"

vs audio-tutorials

Plan B. I like some parts of this plan others not so well

I have some questions of introducing biology at the environmental level & "working down." It could be worked out however. Otherwise the 102 A, B, C, D courses are good — but how do you push students?

page 4 — you can't train students for a specific job — only give him the background —

✓ a point

Plan C. I like this approach better. It seems more logical & should help the student make up his own mind.

I would think that we should have several tracks after the second year — the second year emphasis should be a broad in depth look at biology.

Then with the students and their advisors a more specialized program can be worked out with what we have.

I don't believe that more new courses will impress the administration. Rather using some of the ideas expressed the text of this report be worked into a statement of the [illegible] future of the department.

For example we could have a track labled human biology. This would start ē 101 & 102 as outlined on page 5 plus the series of team taught courses but in depth — then followed by courses in physiology, genetics, micro, etc [illegible]

Mgt. S.S. Art. 450-451 Environmental Systems & Management.

I think as I have stated that the most important thing is to work out this statement. With the input of ideas at the specific level it seems to me that this can be done & then work out details.

One other idea I have is to have a meeting c̄ say I.B.M. and get a dialogue going on what industry wants or thinks they want in a biologist at the B.A. level.

Comments from Dave Norris – (Paul)

DEC 16 1974

Alternative 1 is funny if you simply want one to eliminate reality. Alternative 3 is a mistake at the undergraduate level (there are too many narrow people already!).
The more viable alternative is clearly No. 2 incorporating one point from D.

101 – should include genetics + evolution as it is the basis for looking at population biology.

To attempt to teach Plant + Animal Physiology in one course is ridiculous as those of us who have tried it are aware. Better to give 2 courses for reduced credit! ~~[illegible]~~

Why should 102C include "algae" + "protozoa"??

102A + B should be mandatory for all biology majors
both must be prerequisite for Ecology
102 A for Ethology & Animal Physiology & Systematics + Evolution.

Structural Biology? (Hogarth)

Human Anatomy is an essential "service" course – where is it?

What about Chem – Physics – Math – Statistics??

Any student with 2 years of H.S. biology should be allowed to skip 101 — 102 A+B and get his 30 hours above that. The hell with "advanced placement for credit" — give the student University credit but no biology credit.

102 D will not give major credit.

Scrap Biological Oceanography — a luxury we don't need in Colorado

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lecture class sizes 150 max??

Undergraduate labs max 20
100-200-300 labs

400-500-600 labs max 10

Unless we write objectives for each proposed course in this curriculum & then design the courses we will fail!! We must ignore all "pet" courses now on the books. We have a good start already with all.

Put the emphasis on pre-requisites and advising. Students should see advisors __every__ semester. Free advisors to do this (i.e., the week __before__ preregistration should be free of all committees, grad exams etc and limited to office hours. We should make it mandatory that faculty NOT LEAVE CAMPUS that week. Lets not require courses beyond 101, 102 A B + Genetics plus the ancillary science courses. Let's require at least "C" grades in all ancillary courses.

Advanced labs excellent idea with less emphasis on lectures — put it on students — make them buy books + __read__ them. Lets put present lab for 101 on scientific procedures as a required junior course when they have had some biology. Its great!

We must demand a registration that recognizes pre-requisites – such as all biology majors must get OK from adviser or the office that it is OK to sign up for a course based on knowledge that they have completed the pre requisite.

Winston

JAN 17 -15
Dev. Com.
F6

UNIVERSITY OF COLORADO
OFFICE OF UNIVERSITY-INDUSTRY RELATIONS
BOULDER, COLORADO 80302

ENGINEERING CENTER
AD 1-1

TELEPHONE 443-2211
EXT. 8211

October 10, 1974

MEMORANDUM

TO: R. C. Rautenstraus, Vice President for University Relations

FROM: R. D. Lemon, Director, Office of University-Industry Relations

SUBJECT: 1973-74 Annual Report - Office of University-Industry Relations

The following is a report of the Office of University-Industry Relations for the 1973-74 fiscal year ending June 30, 1974.

I. Office Organization

A. Personnel

The office staff consists of Ronald D. Lemon, Director; Rudy Hampf, Associate Director; Elizabeth Baume, Secretary III; and Ursula Hotz, who joined us on a half-time hourly basis as Secretary II to help handle the Audiovisual Continuing Education (ACE) program.

The Colorado Technical Reference Center (CTRC) staff consists of Saundra Smith, Director; Marilyn Shartran, Information Specialist; Claire Hoffman, Library Assistant III; and Christa Fremgen, Clerk II.

Tom Stein, Assistant Director for the Denver Campus Office of University-Industry Relations since November 1, 1972, was appointed, effective May 6, 1974, as Director of a newly-created Office of University-Community Relations for the Denver Campus reporting to Chancellor Harold Haak.

B. Office Re-evaluation Conducted

During the year an extensive re-evaluation of the function and activities of the Office of University-Industry Relations was conducted with University administrators, deans, and department chairpersons. Our goals and objectives were reviewed, and possible areas of involvement for non-general fund financial support of the office were examined. Following are some of the findings:

1. There was a consensus that we have been doing what we should be doing, and no specific changes in our stated goals and objectives or our methods of operation were recommended.

2. The College of Engineering and Applied Science felt strongly that the ACE program and intercampus television should be top priority projects.

3. It was suggested that University-Industry Relations should not be soliciting funds from industry in competition with academic requests for funds. Also, it was thought it would harm our program to ask for off-campus contributions for the support of our office.

C. Goals and Objectives

Our goals and objectives were extensively reviewed during the re-evaluation of our office. Our long-range goals and short-range objectives are as follows:

1. Long Range Goals (5 years)

   a. To enhance CU's image as the keystone institution of higher education in Colorado.

   b. To develop a positive impression among Colorado citizens employed in the business community that CU is a major state economic and social resource that can assist them in the conduct of their business endeavors.

   c. To become known throughout Colorado as an office of CU which business, industry, and government can call for assistance with their questions.

   d. To convey to the University administration and faculty the attitudes, feelings, and desires of the Colorado business community.

   e. To disseminate and explain the University administration and faculty goals, objectives, and policies to the business community.

   f. To assist in the beneficial development of Colorado by helping to identify economic and social needs and to locate University resources to help solve those needs.

   g. To represent the interests of the entire University to the Colorado business community and to help coordinate multi-disciplinary programs.

h. To organize and establish, where warranted, projects and auxiliary enterprises and to provide the business community with University-related services at a reasonable cost consistent with the University's academic responsibilities.

2. Short-Range Objectives (1 year +)

We have worked at accomplishing the above-mentioned goals by:

a. Providing one central point of contact for convenient access to the University for the business community.

b. Providing a University-wide, four-campus, interdisciplinary contact with employed taxpayers in business, industry, and government to identify and implement the use of University resources as they are needed.

c. Establishing and operating auxiliary enterprises such as CTRC and ACE to provide services to employed individuals.

d. Advising the business community of new courses and curriculums and educational programs available from the University.

e. Advising the business community of non-teaching resources available from the University, such as contract research, faculty consulting, and other specific services such as CTRC.

f. Maintaining a personal contact program with individuals in business, industry, and government to inform them as well as to solicit ways the University might better serve them.

g. Inviting members of the business community to the campus for briefings.

h. Maintaining lists of contacts in the business community.

i. Keeping the business community advised of significant University programs and dates of interest to them, including academic application and registration dates.

j. Fostering the moral and financial support of the University from the Colorado business community.

k. Assisting academic units in identifying and interacting with the business community.

II. Major Programs

The purpose and function of the Office of University-Industry Relations is to initiate and maintain effective relationships between individuals in the University and individuals in business, industry, and government in Colorado. The areas in which we engage cover a wide spectrum of the total University activities, from promoting degree education to providing informational services for the business community. We have also been instrumental in initiating several significant services of a multi-campus, interdisciplinary nature.

Our method of operation has been to stay flexible to meet the current demands on the University where applicable. The major programs we have engaged in during the past year are as follows:

A. Industry Counseling Service (to help match the needs of industry and government with University resources)

B. CTRC (to provide published information)

C. ACE (to provide unified video credit and non-credit courses for intercampus and off-campus use)

A. Industry Counseling Service

The core of the University-Industry Relations program is what we call our "Industry Counseling Service." This service is performed by members of the staff, who personally call on business persons to inform them of the facilities and resources of the University of Colorado and how these resources may be applied to their specific needs.

In calling on business persons, we have found that many have not in the past considered institutions of higher education or their libraries as resources they could use to help answer business-related questions. Also, we have found that the concept of having a representative of the University of Colorado personally call on them is entirely new to most of them, particularly to the smaller firms.

As a result of our discussions, many questions are raised. We actively solicit all questions and requests for help and try to match them up with appropriate resources, wherever these resources may be. Once we have identified the resources and have introduced the two parties, we step out and let the principals relate directly.

During the 1973-74 fiscal year we made over 1,000 off-campus contacts and 590 on-campus contacts, making a total of over 1,590 contacts for the year. As testimony to the success of our past contacts and publicity, 928 of our over 1,590 contacts made during 1973-74 were initiated by persons calling us for assistance, and 1,120 of the over 1,590 contacts were repeat requests or calls.

On page 13 examples of significant services provided by this office may be found. These were all on an individual request basis. In addition to individual requests, there are several activities in which the office engages that are of a continuing nature, and these are explained below.

1. Business Education Workshop

For seven years the Office of University-Industry Relations has coordinated the arrangements and managed for the College of Business and Administration the Business Education Workshop tours of Colorado business firms. These tours -- two one-day tours and one five-day tour around the state -- represent the field work for a summer school course (B Ed 520 Workshop in Business Education) taught by Professor Eileen Gentry. The purpose of the workshop is to provide students, who are teachers, principals, and counselors in high schools and colleges, with a better understanding of the operation of the free enterprise system in America and to give them a practical background for teaching business subjects. Funding for the tours is provided by the College of Business and Administration and the Rocky Mountain Chapter of the Young Presidents Organization.

This year there were 13 participants, and they visited the following business firms: Hewlett Packard Loveland Division, Century Modular Homes in Fort Morgan, Climax Molybdenum Co. in Climax, Vail Associates Inc. in Vail, the Hotel Colorado in Glenwood Springs, Colony Development Operation in Grand Valley, the US Bureau of Reclamation Power Operations Center in Montrose, the Gunnison County Stockgrowers organization, Portec, Inc. in Canon City, the Pueblo High Speed Ground Testing Track in Pueblo, Parkview Episcopal Hospital in Pueblo, the CF&I Steel Corporation in Pueblo, Air Force Academy in Colorado Springs, Electric Equipment and Engineering Company in Denver, Gates Rubber Company in Denver, and the Coors Brewery in Golden.

2. Liaison with Colorado State University

Our office assisted Colorado State University to establish its Office of Business Relations, which is patterned after CU's Office of University-Industry Relations. The function of CU's office was dis-

cussed with Dr. George Olson, Associate Vice President for Research at CSU, and on a number of occasions with Ed Beeks, who became Director of the CSU Office of Business Relations. In addition, this office made available to Mr. Beeks our study of similar types of activities at other universities, and on another occasion visited with a group of CSU administrators to show them our slide presentation entitled "Information Now" and to explain the University-Industry Relations program.

3. Liaison with Boulder Chamber of Commerce

This office since its inception has continued to provide liaison between the Boulder Chamber of Commerce and the University. The Director is an ex officio member of the Chamber Board.

B. Colorado Technical Reference Center (CTRC)

CTRC is a University program which specializes in locating and providing published information on any subject to persons in Colorado business, industry, and government. Books, research reports, government documents, patents, statistics, journal articles, and other published information are among the many items requested by organizations for use in programs of engineering, product development, management, marketing, and other fields. Services provided by CTRC on a fee basis include:

1. Loan of Books

Government documents, theses, technical reports, and other types of books, if not restricted to use in the library, may be borrowed from CTRC.

2. Copy Services

Journal articles, papers presented at conferences, and information in books restricted to library use can be provided in photocopy form, subject to copyright restrictions. Paper enlargements of microfilm or fiche can also be provided to companies which do not have equipment for reading microforms.

3. Bibliography Verification

If important details of identification are uncertain in a request, CTRC can confirm facts such as the author, title, or date, and can also locate the materials and supply them.

4. Reference Questions

Answers can generally be provided quickly to questions about addresses, prices, statistics, and other specific facts. More complex questions may require further assistance by the CTRC staff to provide interpretive answers.

5. Literature Searches

Companies can eliminate much duplication of effort by examining the published reports of research on their areas of interest. CTRC information specialists will systematically search current and past publications and prepare annotated bibliographies of relevant materials.

6. Location and Referral

If information requested is not available in the University of Colorado Libraries, CTRC will locate and obtain it from other sources or will refer it to specialized information analysis centers.

7. Current Awareness

This is a new service initiated this year to keep business people abreast of new articles and publications in their fields of interest. Tables of contents of journals of interest are sent to them monthly, and copies of the complete articles listed in these tables of contents will be sent to them on request.

The several activity indicators for CTRC listed below will give an idea of the magnitude of the requests handled during the year.

	Fiscal Year 1973-1974	1972-1973
Number of Companies Using CTRC	242	336
Reprints of Journal Articles(pages)	5226	4854
Literature Searches	129	142
Reference Questions	901	760

An estimated 80% of the requests were from Colorado firms and 20% from out-of-state firms. A sampling of the companies served by the Colorado Technical Reference Center includes:

AMAX Exploration
ABR Partnerships (Architecture)
Adolph Coors
Allied Chemical
American Gilsonite
American Waterworks Assn.
Arapahoe Chemicals
Atlantic Richfield
Ball Brothers
Beech Aircraft

Bell Laboratories
Calder & Co.
(Real Estate Management)
Climax Molybdenum
CF&I Engineers
CF&I Steel
Club 20 (Colorado West)
Colorado Interstate Corp.
Colorado Springs Chamber of Commerce

Cockerell Corp. (Mining)
Consolidated Coal
Continental Oil Co.
Coors Container
Coors Porcelain
Copper Range Exploration (Mining)
Denver Museum of Natural History
Dieterich Standard

Dixson, Inc.
Dow Chemical
Eastman Kodak
Exxon, U.S.A.
First National Bank of Denver
FRAMCO
Gates Rubber
Goddard, Purcell & People (Advertising)
Golden Cycle Gold (Mining)

Gulf Oil
Hazen Research
Hewlett-Packard
Holly Sugar
Honeywell, Inc.
IBM
Information Handling Service
Johns-Manville
Kaman Sciences
Marathon Oil Co.

Martin Marietta
McDowell & Associates
(Consulting Engineers)
Mountain Gravel & Construction
Petroleum Information
Lucius Pitkin (Attorneys)
Stearns-Roger
Storage Technology
Trinidad Development Institute
(Economic Development)

United Bank of Denver
Witkin Homes

C. ACE

The ACE program, now in its sixth year, is an instructional television medium for use by the University academic units. In addition to offering televised campus courses to off-campus employed students, it is used to enlarge and enrich credit and non-credit course offerings to students between campuses. The professors and academic units select and control the courses offered in the ACE program. University-Industry Relations then coordinates the intercampus offerings and markets the off-campus programs. On-campus students pay regular tuition, and off-campus students pay an enrollment fee. Technical production of videotapes and the transmission and reception of video signals are provided by the Bureau of Educational Media in Boulder, Learning Resources in Denver, and Audiovisual Instruction in Colorado Springs.

ACE Courses Conducted during the
Fall and Spring Semesters, 1973-1974

Fall 1973

1. Intercampus ACE

Course	Originating Professor	Originating Campus[1]	Offered at[1]	Final Student Enrollment
CE 456	Timber Design R. E. Rathburn	UCB	UCD	10
CE 616	Buckling Structures J. Chinn	UCB	UCD	3
EE 531	Telecommunications S. W. Maley	UCB	UCCS	16
EE 571	Engineering Systems Analysis W. Hanna	UCB	UCD	3
EE 591	Industrial Power Systems J. Fuller	UCB	UCD UCCS	6 1
EE 599	Hardware-Software Interface H. Jordan and B. Smith	UCB	UCD UCCS	32 2
ME 314	Measurements I B. T. Arnberg	UCB	UCD UCCS	2 2
ME 362	Heat Transfer F. O. Woodsome	UCB	UCD	6
			Total Intercampus	83

[1] UCB - University of Colorado at Boulder; UCD - University of Colorado at Denver; UCCS - University of Colorado at Colorado Springs

Fall 1973 (continued)

2. Off-Campus ACE

Course	Originating Professor	Originating Campus	Offered at[1]	Final Student Enrollment	
BL 412	Business Law J. L. Frascona	UCB	USBR[2] Bismarck, North Dakota	2	
			USBR Washington, D.C.	2	
CE 497	Engineering Economy G. Gromko	UCD	Stearns-Roger Corp., Denver	5	
			USBR Montrose	5	
EE 531	Telecommunications S. W. Maley	UCB	Bell Labs at ENT AFB, Colorado Springs	10	
EE 591	Industrial Power Systems J. Fuller	UCB	Stearns-Roger Corp., Denver	4	
			USBR Montrose	4	
			Ute Power Co., Montrose	1	
			Adolph Coors, Golden	9	
EE 599	Computer Hardware-Software Interface H. Jordan, B. Smith	UCB	Bell Labs, Denver	5	
			USBR Billings, Montana	2	
			Hewlett-Packard, Loveland	2	
			NOAA[2]	2	
			NCAR[2]	8	
		Total Off-Campus		61	
	Total for University Credit, Fall 1973				144
Engineer-in-Training Refresher Course		UCB	Bechtel Power, Rainier, Oregon	10	
			Eastman Kodak, Windsor	8	
			Fort Carson, Colorado Springs	15	
	Total for Non-Credit			33	
	TOTAL CREDIT AND NON-CREDIT FOR FALL, 1973				177

[1] If no state is listed, location is in Colorado.

[2] USBR - U.S. Bureau of Reclamation; NOAA - National Oceanic and Atmospheric Administration; NCAR - National Center for Atmospheric Research

Spring 1974

1. Intercampus ACE

Course	Originating Professor	Originating Campus	Offered at	Final Student Enrollment
Ar.E.240	Building Materials and Construction R. Carr	UCB	UCD UCCS	20 6
EE 316	Energy Conversion W. J. Hanna	UCB	UCCS	11
EE 422	Electronics III N. Kindig	UCB	UCCS	3
EE 455	Computer Techniques in Engineering P. Hultquist	UCD	UCCS	6
EE 532	Communications Systems Theory P. Beckmann	UCB	UCCS	5
EE 563	Discrete Time Systems R. Gabel	UCD	UCB	6
EE 598	Lightning and Switching E. Whitehead	UCB	UCD	7
ME 312	Thermodynamics II F. Woodsome	UCB	UCD UCCS	7 2
		Total Intercampus		73

2. Off-Campus ACE

Course	Originating Professor	Originating Campus	Offered at	Final Student Enrollment
BL 300/406	Business Law J. L. Frascona	UCB	Stearns-Roger Corp., Denver USBR Montrose	3 5
EE 316	Energy Conversion W. J. Hanna	UCB	USBR Montrose	1

Spring 1974 (continued)

Course	Originating Professor	Originating Campus	Offered at	Final Student Enrollment	
EE 413	Engineering Systems Analysis G. E. Gless	UCB	USBR Montrose	2	
EE 459	Computer Organization H. Jordan	UCB	Hewlett-Packard, Loveland	8	
EE 500	Independent Study W. Hanna	UCB	USBR Montrose	2	
EE 505	Principles of Electronic Devices R. Hayes	UCB	Hewlett-Packard, Loveland	8	
EE 598	Lightning and Switching E. Whitehead	UCB	USBR Washington D.C. USBR Billings, Montana USBR Bismarck, North Dakota	3 4 2	
ME 312	Thermodynamics II F. Woodsome	UCB	Hewlett Packard, Colorado Springs	1	
ME 522	Methods of Engineering Analysis II S. Datta	UCB	IBM, Boulder	3	
			Total Off-Campus	42	
			Total for University Credit, Spring, 1974		115
	Engineer-in-Training Refresher Course	UCB	Climax Molybdenum Co.:		
			Henderson Mine, Empire	9	
			Climax Mine, Climax	5	
			Martin Marietta, Denver	9	
			UCCS	9	
			UCCS[1]	7	
			UCB[1]	75	
			Fort Lewis College, Durango	10	
				124	

[1] Conducted on campus for senior engineering students at no charge.

Spring 1974 (continued)

Course	Originating Campus	Offered at	Final Student Enrollment		
Professional Engineering Refresher Course	UCB	Stearns-Roger Corp., Denver	8		
		Martin Marietta, Denver	15		
		Climax Molybdenum Co., Climax	7		
		Fort Lewis College, Durango	7		
		IBM, Boulder	6		
		USBR, Great Falls, Montana	9		
		UCCS	5		
			57		
Total for Non-Credit Spring 1974				181	
TOTAL CREDIT AND NON-CREDIT FOR SPRING, 1974					296
TOTAL CREDIT AND NON-CREDIT FOR FALL, 1973					177
GRAND TOTAL BOTH SEMESTERS, Credit and Non-Credit					473

III. Examples of Significant Services Provided - 1973-74

The specific activity examples listed below, grouped by program area, will provide an idea of the detail and breadth of our involvement with business, industry, and government in Colorado.

A. Counseling Service

1. Arranged for a visit to the Denver Campus by M. J. Losty, Head of Service Operations of Bell Laboratories, and arranged for the faculty of the Electrical Engineering Department to tour Bell Laboratories.

2. Conducted an Economic Impact Study of the Denver Campus, which was completed in July of 1973. We also coordinated work on an Economic Impact Study for the Colorado Springs Campus which is scheduled for completion in the fall of 1974.

3. Presented our "Information Now" slide show to the Englewood Rotary Club, the Lamar Rotary Club, and the training directors of Johns-Manville Corporation.

4. Worked with the U.S. Department of Labor, Colorado Division of Employment, through the Business Research Division in an effort to locate information to estimate the kinds of potential job applicants in specific labor areas.

5. Investigated through the College of Engineering faculty and the Engineering Research Center a project to test built-up roofing systems for the Built-up Roofing Institute conducted at Johns-Manville.

6. Investigated a project (with the Business Research Division) to prepare statistics on the Colorado skiing industry for Colorado Ski Country USA to help highlight the importance of skiing to the Colorado economy.

7. Arranged two academic counseling sessions for Martin Marietta employees at the main plant in Waterton.

8. Conducted an Urban Resources Seminar on the Denver Campus for University faculty and staff. The participants recommended the establishment of an Urban Resources Committee to coordinate all university work on urban programs.

9. Investigated with Martin Marietta the possibility of displaying the full-sized back-up multiple-docking section of Skylab on the Boulder Campus.

10. Identified for an economic development organization a project to compare taxes on businesses among selected states and cities. The Business Research Division submitted a proposal for this project.

11. Arranged for a small manufacturer of decorative flower pots to discuss problems of marketing and financing involved in expanding his company with a faculty member of the College of Business and Administration.

12. Assisted a local firm by providing marketing ideas for its new colloidal cleaning solution.

13. Assisted a Colorado Springs bank in locating a faculty member to speak on the Colorado Springs economy at an economic forum they were holding.

14. Hosted a meeting on the Boulder Campus for ten education representatives of local industry to discuss the problems which have arisen concerning special student enrollments, and assisted employees of local companies apply for special and regular student status on the Boulder Campus.

15. Assisted the Joint Institute for Laboratory Astrophysics (JILA) in obtaining a list of chief scientists in Colorado industry to invite to their "Man and Cosmos" lecture series. The response from industry in Dr. David Hummer's words was "excellent."

16. Operated a University-Industry Relations booth at the Denver Campus "Open House for Parents."

17. Arranged for a large national company with Colorado offices to conduct an in-plant course on how to make effective oral presentations for their supervisors using CU faculty members.

18. Worked with the personnel of Wallace Village in Broomfield to review their information needs.

19. Arranged for faculty members to consult with the Federation of Rocky Mountain States to 1) study the management problems of the entire Federation, 2) make an organizational analysis of the television satellite project, and 3) make a cost analysis of the television satellite project.

20. Prepared a list of Colorado executives for the College of Engineering to invite to the Relations-with-Industry meeting of the American Society for Engineering Education.

21. Referred a Boulder herb dealer to a Biology Department faculty member for a question regarding the testing of herbs for spray contamination.

22. Appeared on a panel at the Colorado Library Association meeting in Denver and spoke on "Needs and Responsibility of Library Patrons" from the business person's viewpoint.

23. Arranged for a Japanese student to be interpreter for a group of Japanese people visiting IBM.

24. Located a faculty consultant on energy for a local company concerned about dealing with future energy shortages and possible alternatives.

25. Assisted the community of Lamar in contacting the Medical Center for help in recruiting additional medical doctors for the community.

26. Assisted the Alumni Office in assembling a list of recent CU engineering graduates employed by local industry for the College of Engineering and Applied Science.

27. Identified two consultants on the generation of sound for a nationally-known siren manufacturer located in rural Colorado.

28. Assisted a local chamber of commerce locate a consultant to help them stimulate exporting of local manufactured products to Latin America.

29. Worked with the Office of Information Services to explore a metropolitan car-pooling project.

30. Implemented a one-day assembly of community and business leaders to discuss the role of the Denver Campus.

31. Worked with a Denver publishing company on the possibility of having CU hold a seminar to help coordinate a state energy information system.

32. Assisted the staff of the President's Leadership Class Program obtain speakers from local industry.

33. Provided the Denver Chamber of Commerce and the Public Service Company with information on engineering education available from CU for the use of industries and individuals considering Colorado for a location.

34. Arranged for the president of a Colorado life insurance company to discuss a financing plan with a faculty member.

35. Assisted in planning a one-day conference co-sponsored by CU and Colorado Women's College to bring together a group of women with representatives of business to discuss their respective needs and to gain a better understanding of matching people and jobs.

36. Made an extensive effort to initiate a program to assist county governments in Colorado develop a management information system using the University as a resource base.

37. Provided statistical data to a Colorado community on population breakdown by age group for a proposed nursing home project.

38. Coordinated a request from the Four Corners Regional Commission on interest at CU in the development of an Economic Development Computer Model for Colorado. This resulted in a $40,000 contract for the Business Research Division of the College of Business.

39. Assisted a large electronics company in Colorado Springs with ideas and leads for recruiting key engineering personnel.

40. Arranged for a large buffalo head to be sculptured for Hewlett-Packard Loveland Division by a faculty member in the Fine Arts Department. The buffalo is used by the Hewlett-Packard Loveland Division as their logo in marketing promotion.

41. Arranged for the School of Journalism to help a large local company write a job description for a photo-journalist.

42. Assisted a local company identify an interested faculty member to explore the design and use of windmills for pumping water for strip mining site reclamation.

43. Arranged for CU faculty to teach a seminar for the staff of a Colorado company on 1) contract law for engineers and 2) preparation and writing of technical specifications.

B. Colorado Technical Reference Center

1. Created a "Current Awareness" program involving energy and related areas for a large Boulder research and development company.

2. Gathered together publications to discuss the cost, financing, and methods of determining optimum location sites for airports for a southern Colorado Chamber of Commerce.

3. Conducted a search on the current production, uses, and markets for marble in the United States for a southwestern Colorado mining company.

4. Prepared for a Golden manufacturer information on sodium and mercury vapor lamps, including articles that discussed the past and future markets for their products.

5. Prepared information for a Grand Junction manufacturer on the use of solar energy for home heating and electricity.

6. Gathered information for a western Colorado economic development group on the economic aspects of the wine industry.

7. Provided a literature search for a Colorado Springs real estate firm on the economics of plant location and industrial park development.

8. Compiled a bibliography on spontaneous combustion of coal for a Denver coal mining concern.

9. Did a search for a Denver manufacturer on the pros and cons of electric versus gas heat, which incorporated future projections for usages of both kinds of heat.

10. Assembled material on career education for a large manufacturing company in northern Colorado.

11. Prepared a literature search on recreational centers, including searching out information on construction, cost, financing, and promotion.

12. Conducted a literature search for a lawyer in a remote part of the state who was looking for law cases that involved arbitration decisions dealing with mechanic's liens against property. The day after the request was received, the material was hand-carried from Boulder to Denver and put on a commercial plane for the lawyer's use in a court appearance the following day.

13. Worked with the Colorado State Library to develop with CTRC a cooperative information program for small rural businessmen in Colorado.

14. Supplied information on an analysis of the do-it-yourself market and data on several major competitors for a do-it-yourself auto repair kit manufacturer.

15. Provided names of consulting firms engaged in economic and industrial development in the United States for a community development organization.

C. ACE (Audiovisual Continuing Education)

1. Originated and offered on a sustained basis credit courses from the Denver Campus for use on the Boulder and Colorado Springs Campuses and for off-campus students.

2. Launched a cooperative program with the University of Denver to expand the offering of the Professional Engineering Examination Refresher Course in Boulder on a live basis and simultaneously to record the courses as part of the ACE non-credit videotape offering.

3. Conducted a cooperative program involving CU's Continuing Education Division's Western Colorado Office in Grand Junction and Fort Lewis College in Durango. The Engineer-in-Training and the Professional Engineering Refresher Courses were offered by videotape at Fort Lewis College, with engineers from a fifty-mile radius enrolled in the courses.

4. For the first time listed and identified videotape courses as part of the credit course offering in the respective schedules of courses of all three campuses.

There are many more such examples in each of the three program areas, but the above lists portray an assortment of the specific services we engaged in during the year.

IV. New or Special Programs under Consideration

We have always been on the lookout for needs of people within the business community that might necessitate the creation of new programs to make university services more accessible to them. Also, we have found that there are opportunities to apply special emphases to existing programs to create a greater awareness of them. Two such programs we are currently working on are mentioned below.

A. Industrial-Professional Associates Program

The Office of University-Industry Relations is working on a proposal to create a program involving the University and persons in industry and self-employed professionals. This program would explore areas of mutual interest between the University and people in the state concerned with engineering, science, and management.

This renewal of the idea of the Associates Program, discussed several years ago, could be mutually rewarding. The principal difference between the present method of operation of the Office of University-Industry Relations and the method of operation under the Associates Program is that there would be a formal agreement between the University and the participating industry or person, whereby they would pay the University a predetermined fee in return for certain specific services.

B. 1976 Centennial Year Program

Like other segments of the University, this office is working on a special centennial year program. Since the program is still in the planning stage, it would be premature to mention specific activities being planned. Basically, it will attempt through increased publicity to accentuate interest in existing University programs and to increase utilization of them.

V. Budget - 1973-74

A. Office Working Toward Financial Self-Support

The Office of University-Industry Relations is working to become a financially self-supporting unit of the University.

During the 1973-74 fiscal year, revenue (sales) from non-general fund sources ($44,730) covered 39 percent of total expenses ($114,004).

The following budget recap provides an overview of our several account areas.

B. Budget of the Office of University-Industry Relations

1. Parent Budget - Office of University-Industry Relations

	1973-74 FY
Expenses	
Salaries (including hourly)	$ 43,961
Office Supplies and Expense	2,619
Travel	2,033
Total	$ 48,613
Source of Funds	
Boulder General Fund	$ 48,613

2. Auxiliary Enterprise A - Colorado Technical Reference Center (CTRC)

	1973-74 FY
Expenses	
Salaries (including hourly)	$ 33,400
Office Supplies and Expense	11,242
Travel	31
Total	$ 44,673
Source of Funds	
Revenue (Sales)	$ 23,554
Boulder General Fund	15,761
Balance from Previous Year	5,635
Total	$ 44,950
Balance forward	$ 277

3. Auxiliary Enterprise B - Audiovisual Continuing Education (ACE)

	1973-74 FY
Expenses	
Salaries (including hourly)	$ 4,607
Office Supplies and Expense	15,283
Travel	828
Total	$ 20,718
Source of Funds	
Revenue (Sales)	$ 21,176
Balance from Previous Year	8,616
Total	$ 29,792
Balance Forward	$ 9,074

4. Summary - All Budgets

	1973-74 FY
Expenses	
Salaries (including hourly)	$ 81,968
Office Supplies and Expense	29,144
Travel	2,892
Total	$114,004
Source of Funds	
Boulder General Fund	$ 64,374
Revenue (Sales)	44,730
Balance from Previous Year	14,251
Total	$123,355
Balance Forward	$ 9,351

DATE RECEIVED:

Routing:

		Initial
Abbott, Lois		
April, Jay		
Bailey, Mark		
Bishop, Judy		
Hanley, Jim		
Hersh, Gil		
Louis, Joan		
McArthur, Greg		
Mount, Janet		
Rogers, Connie		
Rogers, Dave		
Saldana, Jose		
Schiffman, R.		
Slater, Chuck		
von Borstell, G.		

Filing:
Original EPOB Devel. Comm.
Copies:

In
Out
Internal
Administration
Fiscal/Contract

Organization EPOB. (my file)

Project

Proposal

COMMENTS:

Rogers

UNIVERSITY OF COLORADO
Boulder, Colorado 80302

Health Sciences Advising

DEC 1 1 1974

December 11, 1974

TO: EPOB Curriculum Synthesis Committee

FROM: Bruce M. Pollock

RE: Your Memo 12-4-74 - The Job to Be Done

There are two major points I would like to raise:

1. Where are future developments in Biology likely to occur? Do the proposed curriculum and research programs provide maximum potential for the Department to take the initiative in these future developments? Obviously, the answer to these questions will be strongly conditioned by personal bias, and I would like to support mine.

   At this time, Biology seems to be going in at least two entirely different directions: Environmental and Molecular-Cellular. At Boulder, these are represented by two separate departments. Both are discovering new facts about the biological world. Accumulation of these diverse facts is tending to splinter Biology still further. Eventually, however, these will join, and environmental (population, genetic, organismic) phenomena will become explicable at the molecular level. When this happens, I predict an explosive series of advances, not only in the field of theoretical biology, but also in the applied phases of Biology--our ability to control our biological environment. This will probably come first in the fields of food organisms and certain human diseases. One aspect of research in this area is already appearing on campus in the work of Dave Rogers and colleagues. Another is in the beginning use of the scanning electron microscope in structural biology and systematics.

   I am well aware of the feelings of the EPOB members toward the past happenings in the MCDB area on this campus. Is it possible to separate these feelings from an evaluation of future curriculum and Departmental development to give the fullest consideration to the future of Biology in the global sense?

2. Premeds and the like.

   There is a tendency for premeds to consider themselves different from other science students, and an equally strong tendency for faculty to do likewise. I talk to these students about alternatives to medicine. However, some other premed advisers reverse this order and speak of medicine as an alternative to another major goal. There is a good deal of rationale to this viewpoint. Perhaps it would be wiser both for students and University if the Department considered medicine as just

one of many vocational opportunities for its graduates. In my advising I try to get the students to prepare themselves for as many options as possible, since there can be no assurance that they can enter medicine. Perhaps the same rationale would be useful for most students in the Department.

There is, however, one area which should be carefully considered relative to the premeds and predents. These students apply to professional school at the end of their junior year. Activities in their senior year normally have no effect on professional school acceptance. Medical schools in particular are asking for excellence in some area, academic or personal. If a student is to become excellent in Biology, he must do so before the end of his junior year. This means that independent study opportunities should be available during the junior year. These people would be wise to use their senior year to broaden their background and prepare for their alternative vocations.

12/5/74

TO: Faculty of EPOB
FROM: Charles Morris
SUBJECT: Conduct of Faculty Meetings and some personal feelings.

DEC 0 6 1974

Along with many of the rest of you, I was terribly upset by yesterday's meeting. And I was largely at fault because I did not preside as I should have. Perhaps I should be hard-nosed, but I'm not really that kind of person.

However, I propose the following as procedure.

1. That when a committee report is being presented, the only interruptions are to be to ask brief questions for clarification. The questions will have to be recognized by the Chair.
2. That following the report, motions may be in order. Such may be either:
   a.) Motion to accept
   b.) Motion to receive
   A motion to receive does not denote approval while a motion to accept does.
3. Following a motion to receive the report, there could be debate. If someone wishes a limitation on debate, such a motion is privileged, non-debatable, and must carry by a 2/3 majority.

Now, some of my own feelings. Like others of the faculty, I have spent countless hours on planning buildings, only to have those plans thrown out and other departments get preferance. And like others, I have been depressed for a time. But, that does not mean I am unwilling to try again. With the traditionally strong emphasis on ecology in this Department, I am convinced that now is the time when we can get a more sympathetic hearing at all levels - from the University hierarchy and the various governmental agencies involved. I don't think I've been "snowed" by the Vice-Chancellor for Administration and Planning. I know that Dean Briggs and the A&S Space and Buildings Committee under Assoc. Dean Lewis Sawin are backing us with everything in their power. The small staff of the Planning Office has been given instructions to provide everything they can in help.

But we must do our part. Most of the members of the faculty are eager to do the jobs necessary. If we are to develope plans for a new building followed by renovation of Ramaley, we must have goals, we must have a curriculum, and we must know what kinds of faculty we need to achieve such. I am confident that this Faculty is dedicated to establishment of excellency for the Department. I find an excitement, an eagerness to get on with the job. We must maintain these attitudes.

Those of us who are of the older generation of biologists often experience shocks of various kinds at the directions in which biology is proliferating. The shocks may produce pain or pleasure or even delight. But all of us have to accept the idea that biology is undergoing a rapid evolution and as biologists who believe in evolution, we must seek to fit ourselves into the evolving patterns. I for one am eager to see that we develope the kind of curriculum which will retain the best and most useful of "classical" biology while incorporating the most promising of the new. This process will perhaps be a kind of metamorphosis, and I hope that the image which emerges will be a beautiful thing.

It is inevitable that we will make mistakes, and it is the obligation of all of us to seek to correct those errors. But let the criticisms be constructive, not a bitter set of recriminations against events of the past. I would like to see us move forward together once we have ironed out most of the expected wrinkles of what is coming from our Faculty, brought into focus by the development

Committee, and subjective to reexamination by the Faculty.

I am optimistic that this will be done.

I want to emphasize something of the hurdles ahead.

1. We must come up with a set of goals, curricula and faculty needs on which a base for building plans can be effectively produced. WE ARE THE ONLY ONES WHO CAN DO IT.
2. We must work with the Planning Office Staff to produce a building and remodelling program.
3. The building program will have to be completed by early in spring, 1975.
4. The building program will have to be submitted to the Boulder Campus Planning Commission (Chmn. Albert Bartlett) for approval in spring, 1975.
5. The BCPC approved program will be submitted to the Board of Regents.
6. The Regents approved program will be submitted during late summer or early fall of 1975 to the Colorado Commission on Higher Education.
7. The CCHE approved program will go to the Joint Budget Committee and the Governor's Executive Budget office in Fall 1975.
8. If it survives all these hurdles, it will be submitted to the Legislature beginning in January, 1976, with a request for architectural planning funds.
9. If that money is forthcoming beginning July 1, 1976 it is reasonable to assume that in the next legislature session, beginning in January 1976, construction money will be approved so that in fall 1977 Construction would start. Construction of the new part of the project could then be completed by late 1979 with the remodelling of Ramaley over by the mid or late 1980.

I don't believe that I will personally benefit appreciably by the building. I could retire next year if I wanted to, but right now I believe we have a chance to build something in our Department, and I want to be part of it so that after I do retire I can look back and think that I had something to do with it.

CHARTER
(Draft submitted by E.C. for action 10/6/74)

OCT 30 1974

DEPARTMENT OF ENVIRONMENTAL, POPULATION, AND ORGANISMIC BIOLOGY
UNIVERSITY OF COLORADO

The Faculty of the Department of Environmental, Population, and Organismic Biology (EPOB) is limited to members appointed on the Boulder Campus. This Charter pertains solely to that Faculty.

1. The Department

The Department has both academic and non-academic functions. The former include undergraduate and graduate teaching, research, and graduate training programs. The non-academic functions include overall budget control, acquisition and maintenance of facilities and equipment, University and public service, public relations, alumni contact, and counseling with students concerning their careers.

The Department has overall control of faculty assignments and recruiting.

2. The Faculty

Any regular member of the Department, with the rank of instructor, assistant, associate, full, or visiting professor, or corresponding appointments at attendant or adjoint ranks, belongs to the voting faculty if that person ordinarily teaches 6 credit hours per academic year in formal coursework. Other members who do not teach 6 hrs/yr. may attend and participate, but without vote.

Faculty meetings are presided over by the Chairperson of the Department, or an alternate approved by him.

3. The Administration

A. The Chairperson of the Department:

The Department is administered by a Chairperson, nominated and elected by a majority vote of the Faculty under the Laws of the Regents. The normal term of office is four years, with the full term being effective only if he

or she maintains the confidence of the Department. Confidence is established by a majority vote of the entire eligible faculty taken each year during the Spring Semester; failing to obtain that majority, the Executive Committee must at once entertain the Chairperson's resignation, appoint an Acting Chairperson to serve the rest of the year, and appoint a search committee to seek a replacement to take office as soon as possible.

The Chairperson may be elected to more than one term.

The Chairperson is charged with supplying leadership to and pursuing the public relations needs of the Department, and with representing the Department, as reflected by the decisions of the Executive Committee and the Faculty in all interchange with the College and University Administration.

On his or her own initiative, by request of the Executive Committee, or by request of one-fourth of the faculty members, he or she shall call meetings of the Faculty of the Department for discussion of matters of interest to the Department as a whole.

There shall be at least one meeting of the Faculty per semester of the regular academic year.

The Chairperson functions as the presiding officer of the Executive Committee and as a member, ex officio, of all other committees of the Department. While presiding, the Chairperson may vote only to break a tie. He or she is responsible for coordinating the activities of the Faculty and the non-academic staff. With the advice and consent of the Executive Committee, he or she appoints committees (except subcommittees) and redefines the functions of the Department as the need arises.

The Chairperson is charged with initiating consideration of all appointments, reappointments, promotions, and nominations for tenure for Faculty consideration, and with transmitting the departmental recommendations

to the Dean of the College, after approval of the Faculty of the Department. Salary adjustment recommendations are the sole responsibility of the Chairperson.

The Chairperson is responsible for the departmental budget and for its transmission through the Executive Committee to the Dean with recommendations. He also reviews building, space, and equipment needs of the Department, coordinates those needs, integrates construction design, and makes presentation of those needs to the appropriate University officials. In addition, he represents the Department to outside agencies, and assists in the preparation of requests for outside aid. Standing and ad hoc committees may aid in carrying out the responsibilities of the Chairperson's office.

The Chairperson shall, with the advice and consent of the Executive Committee and the Dean of the College, appoint an Associate Chairperson, to whom he (she) may delegate some of his (her) functions. In all these matters, and in all other business of general departmental concern, the Chairperson must consult with the Executive Committee, and must act in accordance with its decisions.

B. The Associate Chairperson of the Department

In accordance with 3A, the Chairperson shall arrange for the appointment of an Associate Chairperson, who shall be charged with the following duties. He or she shall:

1. Perform the duties of the Chairperson during the absence or incapacitation of the Chairperson.
2. Serve as Chairperson of the Graduate Program Committee, including
   a. Assignment of teaching assistants to specific courses.
   b. Assignment of new graduate students to advisors.

3. Serve as Chairperson of the Committee on Courses and Scheduling, and specifically oversee and supervise scheduling of all departmental course offerings.
4. Perform such specific duties as may be requested by the Chairperson or the Executive Committee.

C. The Executive Committee of the Department

This committee shall consist of the Chairperson, the Associate Chairperson, and four voting members of the Faculty, elected by the Faculty as a whole, plus one graduate student (who may vote if the voting Faculty members approve) elected by the graduate students, plus one staff member (without vote) elected by the non-academic staff.

The term of office is one year, but members may be reelected for the following year. Elections shall be in the spring, with duties to start in the fall semester. The presiding officer shall be the Chairperson without vote except to break ties.

Each of the faculty members of this Committee shall be designated as a member of at least one of the standing committees on Department policy.

The Executive Committee shall serve as advisors to the Chairperson on all questions of policy and implementation which he or she may bring before it. It shall receive reports from all standing and ad hoc committees, and when these reports suggest that such action is necessary, may refer actions of such committees to other committees or to the Faculty of the Department. It may establish policy for the Department, under emergency situations, but in significant policy decisions, actions must be ratified by the Faculty.

D. Other Committees.

Ad hoc and standing committees shall be designated by the Chairperson, shall exist solely by authority of the Executive Committee, and shall be viable entities adapted to the shifting needs and circumstances of the

Department. All have the Chairperson of the Department as an ex officio member. Standing Committees are designated during the Spring Semester for the following year. The Committees should as fully as possible reflect the various areas of interest and competance in the Department. Insofar as it is possible, there shall be rotation of Standing Committee assignments, so as to provide for appreciable continuity, while at the same time insuring that no persons be assigned to the same committee for more than three years in succession, i.e., one third of each standing committee should be replaced each year.

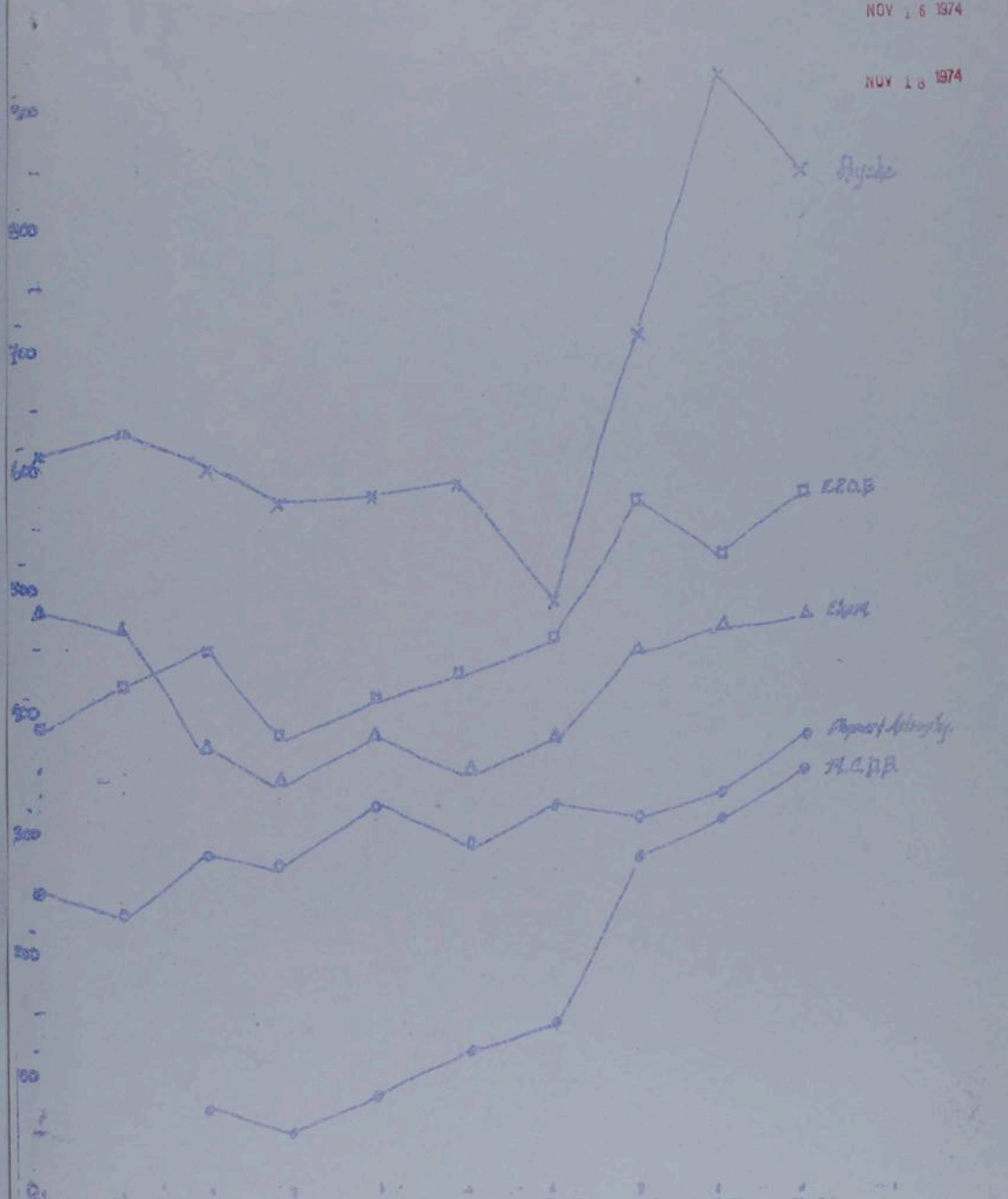
4. Provision for Amendments

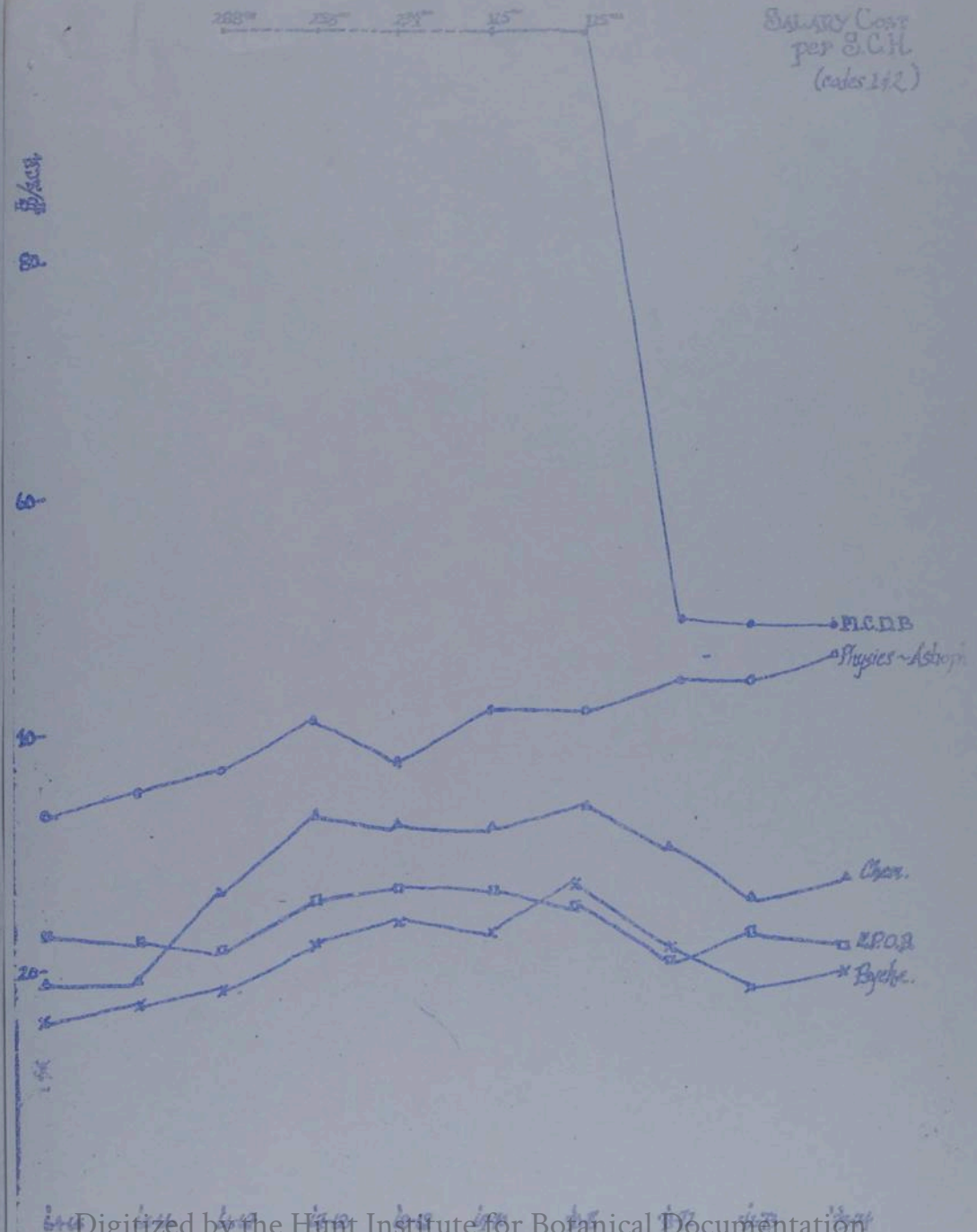
This Charter may be amended in the following manner. All proposed amendments must be presented as notices of motion, with action on such proposed amendments delayed until the next Faculty meeting at least one week following a notice of motion.

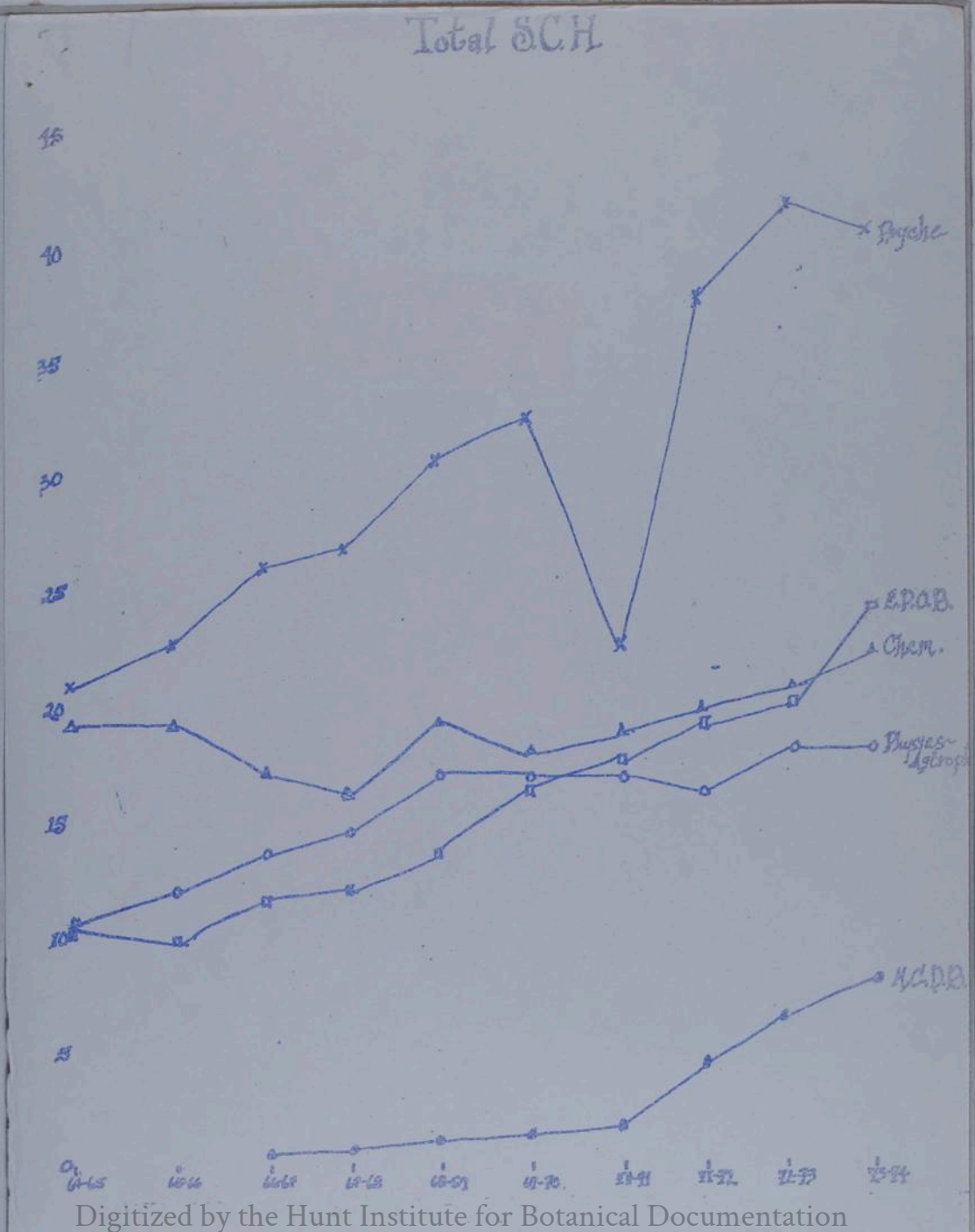
Such notices of motion may be presented orally at a Faculty meeting or in written form to all eligible faculty at least one week before action. If presented at a Faculty meeting, the proposal shall be open for questions concerning the meaning and/or implications may be asked, but there shall be no discussion.

A proposed amendment shall be considered enacted if approved by a two-thirds majority of eligible resident faculty. In this "resident" is to indicate all voting faculty who are regularly engaged in their duties, plus those who are on leave (e.g. sabbatical, faculty fellowship, etc.) but can be expected to attend the meeting at which the vote is to be taken. Voting by mail ballots may be authorized by a simple majority vote taken at the time of presentation of the notice of motion.

Put in devel.
committee
file –
Also, see if there
is an explanation
of these charts.
When did this
come from?







Dev. Comm.

MEMORANDUM

TO: Dr. Paul Winston

CC: Dr. J. Windell, Dr. Willie Segal

FROM: David J. Rogers Dave

DATE: November 27, 1974

RE: Suggested Curriculum

1. In keeping with our discussions, the following tabular outline for the undergraduate curriculum tries to merge some of the concepts that Jay espoused and some of the others in the committee. The concept of "conservative" vs the "progressive" ideas can be seen in this suggested curriculum. My belief is that some "conservative" wisdom needs to be given to the students as a background for "progressive" philosophy and the curriculum attempts to merge these two in the suggested series of levels moving from the "conservative" at levels 100, 200, and 300 to "progressive" at the 400 level.

2. Clearly, we need further discussions to see whether my concepts (noted in paragraph 1) reflect more thinking than just mine. I do like Jay's ideas and think they are sound. We will no doubt have modifications which will allow both of these concepts to be approached in our laboratory function at all levels from 100 through 400.

3. I trust that I have given you enough in the enclosed table to use as a basis for presentation.

DJR:jkb

Enclosure

Suggestions from Rogers on the Undergraduate Curriculum

	Majors			Non Majors
100 Level				
1st Semester:	101 (General, environmental approach)		1st Semester	102 (Summary of 101 A,B,C.)
Second Semester:	101 A-Animal Kingdom	101 B-Plant Kingdom	101 C-Microbial (Procaryote) and (Eucaryote)	

200 Level

(Principles level) — Principles of Ecology; Principles of Physiology; Principles of Taxonomy; Principles of Genetics; Principles of Structure; Principles of Behavior; Principles of Evolution

300 - Beginnings of Specialization Plant/Animal/Microbial

Plant — Animal — Microbial

Microbial

400 - Specialization - The Senior Research Program

Seminars (or symposia) by combined (teams) faculty

for ecology, population, systematics, physiologic, etc.

Allied courses, depending on specialization in Chem, Physics, Geography, Geology, Geology, Ecologists, Taxonomists - math - modern (combinatoric, finite) for Physiologists, geneticists - math - analytic, infinite, statistics.

Some types of additional outside requirements.

Dev. Comm. - Curriculum.

NOV 15 1974

Nov. 14, 1974

Dear Friends:

The Committee to Coordinate the Curriculum Reports needs one more thing from you and, unfortunately we need it in a real hurry. Would you please write a short statement on the goals of the curriculum of your discipline and something of the philosophy behind the way you set things up. It seems as though this should include undergraduate and graduate teaching, research, and perhaps some aspect of the non-academic applications of the discipline. We would also like some expression of what we should do about all those people who are not going to be professional biologists.

If you'd be so kind to get it to me by Monday or Tuesday, we'd appreciate it greatly. It shouldn't be long, only a half to one page long.

Thanks.

Paul Winston, Chmn.

CC: Bekoff
Jones
J. Bock
C. Bock
Marr
Shushan
Rogers
Crumpacker

11/20/74

TO: Rogers, Jones, J. Bock, Segal, C. Norris, Ron Duke, Michel Pelanne

There will be a Development Committee Meeting November 26 (Tuesday), 2:00 p.m. In ~~Ramsey 211~~ Hale 302.

NOV 20 1974

STANDING COMMITTEES OF E.P.O.
UNIVERSITY OF COLORADO

Dr. David Rogers
Hale 114

COMMITTEES ON DEPARTMENTAL POLICY

1. Development Committee. This Committee shall consist of four faculty members appointed by the Chairperson, with the advice and consent of the Executive Committee, plus one member of the Executive Committee, plus one graduate student and one undergraduate student. It is anticipated that the Committee shall appoint such subcommittees as appear desirable.

The Committee shall engage in activities designed to promote the present and future well-being of the Department in several related areas, as follows:

A. It shall seek to ascertain from sources within and outside the University (e.g., industry, various government agencies at all levels) what kinds of knowledge and skills are desirable attributes of persons they may hire, so as to have the basis on which the Department may develop curricular programs. Such curricular programs would be expected to provide the kinds of educational background as would provide greater assurance for our undergraduate and graduate students in obtaining employment in the highly competitive market for such employment. It is anticipated that such curricular programs would include not only course work in this Department, but would provide advice on courses in other Departments and Colleges which are desirable in the search for employment following the award of a degree.

B. It shall seek to ascertain what kinds of biologists are necessary to fill out the several needs of the Department, as suggested in A above, keeping in mind both the undergraduate programs and the development of appropriate areas in graduate teaching and research. It is expected that this will provide guidance in the recruiting of additional faculty.

C. On the basis of the findings indicated above, in A and B, it shall seek to establish a firm basis for decisions concerning the needs for space, both by remodelling of present spaces and by new construction. It is to be understood, of course, that such space and facilities proposals must incorporate provision for the kinds of facilities which will enable the Department to attract new faculty and retain present faculty, of the kinds required in the programs we develop. In this duty, there must be close collaboration with University Planning officers.

D. The Committee shall endeavor to ascertain the needs of the Faculty for effective pursuit of teaching, investigative, and scholarly activities, and shall diligently seek to encourage the Faculty in such pursuits, by all possible means.

E. The Committee shall endeavor to promote an effective image of the Department and its contributions in the eyes of the University Administration and the community at large, through all possible means.

2. Undergraduate Advising and Transfer Accreditation Committee. This Committee shall consist of four members of the Faculty, appointed by the Chairperson with the advice and consent of the Executive Committee, plus the secretary in the Office of the Department most knowledgable about such activities.

The Committee is expected to be thoroughly cognizant of the College and Major requirements for the award of the B.A. degree, and shall brief other members of the Faculty on these. All members of the Faculty of the Department are expected to participate in advising of undergraduate majors, and the members of the Committee are expected to assign advisees on the basis of interest of the students, insofar as this is possible.

The Committee shall insure that records of adviser assignments are maintained in the Office of the Department. The Committee shall attempt to devise a system for maintenance of records of all students in Department courses, so that when inquiries are made, information will be available.

3. Graduate Program Committee. This Committee shall consist of the Associate Chairperson of the Department, plus three members of the Faculty appointed by the Chairperson with the advice and consent of the Executive Committee, plus one graduate student (non-voting).

This Committee is empowered to establish standards for admission of students to the Graduate Program of the Department; to receive and act on admission applications; to receive and act on applications for appointments (assistantships, fellowships, and scholarships); to receive and act on applications for reappointments, basing actions on screening of past performance; to maintain policies in the Graduate Program, and to reassess such policies for determination of needed revision; to assign students to advisers, and approve the advisory committees of graduate students; to act as advisers to unassigned graduate students; to foster the integration of graduate students and Faculty, with the view toward maintenance of morale and communication.

4. Tenure Committee. This committee shall consist of all tenured members of the Faculty, and each year shall select a Chairperson from its membership

This Committee is charged with careful examination of all pertinent information concerning non-tenured members of the Faculty, whose consideration for continuous tenure is anticipated within a span of two years. The findings of the Committee shall be made known to the Chairperson of the Department for transmission to the Administration.

5. Learning and Teaching Committee. This committee shall consist of three members of the Faculty, appointed by the Chairperson with the advice and consent of the Executive Committee, plus a faculty member from the Executive Committee, plus one graduate student and one undergraduate student.

The Committee is charged with encouragement of the improvement of teaching, based on carefully prepared student-evaluation of individual members of the Faculty The Committee shall recognize that different criteria must be used for different kinds of teaching (lecture, recitation, laboratory, field studies) and for differences that exist in class sizes, etc. It shall counsel with and encourage members of the Faculty in their development of techniques for evaluation, and receive reports of such evaluations. It shall seek to provide means for recognition of superior teaching by members of the Faculty. Reports of evaluations are to be made available in the Department office for consultation by students, especially during registration periods.

6. Courses and Scheduling Committee. This committee shall consist of the Associate Chairperson of the Department, plus two faculty members appointed by the Chairperson, with the advice and consent of the Executive Committee, plus two graduate and two undergraduate students.

The Committee shall regularly review the content of courses offered by the Department, and when it appears necessary, shall suggest modifications which appear appropriate. This procedure is especially important when the course is being offered by a member of the Faculty new to that course. Moreover, the Committee shall solicit outlines of courses offered by other Departments, when such are being considered as fulfilling requirements for EPOB majors. This procedure is especially important when such courses are offered in Colleges and Schools other than Arts and Sciences where the Committee on Courses of the College has no authority.

In addition, the Committee shall be responsible for arranging the schedule of courses in the Department, making all possible efforts to avoid conflicts, and doing its utmost to insure maximally efficient utilization of space.

COMMITTEES ON SPECIAL ACTIVITIES

The following committees shall be appointed by the Chairperson, with the advice and consent of the Executive Committee. The duties of these committees are involved with more restricted aspects of the Department than those on Department Policy.

1. Committee on Ancillary Facilities and Services. This Committee shall consist of five faculty members and one graduate student, as representative as possible of the various needs of the Department for such facilities and services.

The Committee shall be responsible for ascertaining the needs of the Faculty and their graduate students for such facilities and services, and for supervision of those facilities and services, including the screening of applicants for staff positions involved, supervision of such staff, and evaluation of performances.

The facilities and services included are the following, and such others as may arise in the future:

Greenhouses and outdoor garden facilities, stockroom, shop, animal care, photographic darkrooms, audio-visual equipment, facilities for production of illustrative materials, calculators, missile site facilities.

In addition, the Committee is expected to provide liaison with appropriate administrative agencies for utilization of East Campus and Mountain stations.

2. Colloquium Committee. This Committee shall be composed of four members of the Faculty and one graduate student.

The Committee shall solicit from the Faculty and students in the Department suggestions for departmental colloquia, shall arrange schedules for such, and shall seek financial support for such programs from the University Committee on Special Events, through its Subcommittee on Convolcations, as well as from other possible sources of funds. When financial support is received from any such sources, appropriate acknowledgement must be made by the Committee, both in publicity and in the introductions of speakers.

3. Library Committee. This Committee shall consist of three members of the Faculty.

The Committee shall solicit from the Faculty and graduate students suggestions for library acquisitions, and shall seek to assure that the Boulder Campus University Library acquires those books and periodicals which are of basic importance to the teaching and research functions of the Department.

4. General Biology Committee. This Committee shall consist of all Faculty engaged in teaching of that course, plus the coordinator for that course (acting as Chairperson), plus the preparator for that course, and two experienced teaching assistants who are assigned to that course.

This Committee is charged with the maintenance of excellence in the General Biology course of the Department, with continuing evaluation of techniques, course plans, goals and relations to other courses in the Department. It shall report once per semester to the Faculty on the activities in that course, and shall seek the counsel of the Faculty of the Department as a whole on possible ways to increase the effectiveness of that course.

5. Honors Committee. This Committee shall consist of four members of the Faculty, representative of several areas of specialization in the Department.

The Committee shall publicize to all undergraduate majors in the Department the existence, purpose, scope, limitations, and regulations, concerning the Honors Program of the Department. It shall communicate to the students the eagerness of the Department for extensive utilization of the Program, while being watchful to prevent abuse or over-extension. It shall insure that the Faculty of the Department is cognizant of the Program, and shall seek active participation by the Faculty.

At least one member of the Committee shall serve on the University Honors Council.

6. Graduate Student Council. The Graduate Student Assembly of the Department shall elect a Chairperson and four other members. The Associate Chairperson of the Department shall serve as Faculty Representative to the Council, without vote.

The Council shall select representatives for FAculty and Executive Committee meetings, and shall select graduate students to serve on designated Committees of the Department. It shall be responsible for establishment of Committees within the Assembly, and shall hold elections for replacement of Council members.

7. Committee for Liaison with Institutes and Councils. This Committee shall consist of four members of the Faculty.

The Committee shall attempt to promote cooperative and effective relationships with such University Institutes and Councils as INSTAAR, IBC, the University Museum, etc., seeking to achieve mutually beneficial relations between those agencies and the Department.

SPECIAL INDIVIDUAL POSTS

Building Proctors - Hale, Denison, Ramaley

Computer Class Need Coordination

Awards - Lichty, Gardner-O'Dell, and Ramaley

UNIVERSITY OF COLORADO

BOULDER, COLORADO 80302

Department of Environmental,
Population and Organismic Biology

not sent at that time — program not completed advice of L. Sawin

~~Copy~~ Original sent w/ note 10/3/74 CSM

September 30, 1974

Vice-Chancellor Gary Andrew
Regent Hall
Campus

Dear Vice Chancellor Andrew:

The accompanying program for the remodelling of the Ramaley Bldg. designated exclusively for teaching activities (classroom and teaching labs) is submitted, with the Faculty of the Department unanimous in its protest against having it forced on us. It does show that it is possible to provide the teaching laboratory space for all courses in the Department with the exception of General Biology (EPOB 101-102) and courses in Microbiology (EPOB 301, 436, etc.), but the consequences would result in serious dislocations of departmental activities, making it essentially impossible to accomplish the obligations of the Department effectively for a minimum of four years between July 1, 1975 and some date in 1979 or 1980. The following are the reasons for the unacceptability of the plan:

1. The research programs of the Department would be so disrupted as to be almost disastrous.
    a. Assuming there would be space provided in buildings on the East Campus (and we have received no positive assurance of adequate space), the time required to pack up, move, reorganize, carry on research for four years or more, and then pack up, move, reorganize and get started again, would be very wasteful.
    b. Faculty would have to move back and forth too often in order to accomplish their required duties to teaching and research. This would be time-consuming and irritating.
    c. Much of the equipment used in teaching and research serves both functions. Either the research requirements would have to suffer or the teaching, by having to say which area would get which pieces of equipment.
    d. The stimulation of both the faculty and students resulting from the possibilities of being able to have students easily involved in research projects through independent study would be greatly hampered.
    e. The stockroom of the Department would have to stay somewhere in main campus, or go east - in either case, there would be severe constraints. Most likely the stockroom would have to stay on the main campus and this would further disrupt research.

2. The already fragile relationships between teachers and students would be further weakened.
   a. When the faculty must be at distant research facilities a good bit of the time, the students are far less likely to try to see them about their problems.
   b. the faculty will be less likely to be available at odd times - aside from specified office hours - for advising or helping students over difficulties in course work.
3. While we admit that space in the Hale building has not been used efficiently, it would be impossible to crowd all of EPOB, faculty and classes, into that building, during a 1 1/2 or 2 yr. period while remodelling of Ramaley is going on.
   a. No doubt EPOB 322, 423, 219 and 409 would have to meet for laboratories on the East Campus. This would necessitate busing students and faculty back and forth.
4. All of the moving out, and moving back in repeatedly would be terribly wasteful of time, energy, and money.

For the reasons above, plus others more subtle - having to do especially with the morale of the Faculty - especially the younger, eager, bright and dedicated individuals who must get effective research programs moving and keep them going - we urge that the present remodelling be abandoned and an alternative be used.

The alternative which has been proposed to the Faculty of EPO Biology and which has been unanimously accepted is that an addition to the Ramaley building be constructed to the north, with at least two floors being underground, and extending quite far to the north, (e.g., to the sidewalk leading to the Men's Gym) and with three floors above ground extending an appreciably shorter distance to the north. The area not occupied by those three floors, but over the underground part, would in part be occupied by an exhibit and teaching greenhouse, with appropriate landscaping. We are sure that almost all of the teaching laboratories, including those in Denison and Hale as well as Ramaley could be provided for. We consider that this addition would have no offices except those directly involved with General Biology. It would be exclusively for teaching labs and the essential support facilities (preparation, storage, etc.) for those labs.

There would be distinct financial advantages in the long run, as follows;
1. Moving costs would be minimal inasmuch as most moving could be shorter distance, and only one move would be involved.
2. After completion of such an addition, much less expensive remodelling of Ramaley, primarily for research, graduate teaching, etc., could be carried out, a small part at a time, and thus with less disruption.
3. The expense of remodelling Ekeley East for EPOB 101-102 and after a few years, remodelling it again for chemistry, would be eliminated. Chemistry could use the space immediately.
4. The time span involved in bringing all of biology into one area would be diminished by at least two years and thus save time and thus money, by allowing Denison to be demolished (if desired) and Hale converted to use by some other department.

5. By using the north end of the Ramaley building, and carefully attaching the addition, stone removed could be used in the addition.

As well as financial considerations, there are others. During a two year span, we could use our present facilities with practically no disruptions such as were indicated above. Faculty-student relations would be maintained; morale of the faculty would not be diminished and conceivably would be enhanced if they saw progress of the new construction.

All in all, we in EPO Biology urge the adoption of the alternative suggested and assure that there will be diligent cooperation. If this alternative is accepted we will quickly have a program to you - the Faculty is unanimous in its agreement to cooperate in such development in every possible way.

Sincerely,

Charles H. Norris
Chairman

CHN:ww

cc: Chancellor Lawson Crowe
Dean W. E. Briggs
Assoc. Dean Sawin
Mr. William Taber

Idea for better utilization of illustrative material for the Department.

1. Many of us have Kodachromes for illustrations of our own courses.
   Most (some) have been made at individual expense.
   Some have been purchased with departmental funds.
   Many are difficult to keep up with because of lack of time and funds for indexing + adequate storage techniques.
2. Many of the illustrations could be used in more than one course.
   The ecologist, taxonimist, geneticist, physiologist etc. could probably find some useful illustrations from each area.
3. There is presently no way to know who has what where.
   Need some common system to index, retrieve illustrative material.
4. Need some means to make a common file and maintain it.
5. Need a concerted effort to get all together.
6. Suggest, therefore, a common (coordinated, or agreed upon) request to some agency that would pay for duplication of slides, and ~~return~~ [illegible] to the Department

7. A dept. grant request to various possible fundings:

encyclopedias -
Biological supply houses -
Educational organizations -
Photographic concerns - (Kodak, et al)

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Organiz EPO Biology

Proj Devel Comm.

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COMMENT:

Need a current Acad. yr. file — for Devel Comm. Put this in it

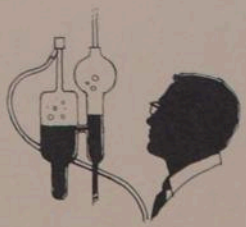
Dave -

The URP & SOS programs appropriate for us. Windell & Williams & Morr are much concerned with URP-like ventures. The Grad. Student Assembly should pursue the SOS possibilities. Do you want the Dev. Comm. to pursue this, or let Charlie do it? Deadlines Sept. 20 for URP, Nov. 15 for SOS.

Thanks much!

Robert

Guide for Preparation of Proposals and Project Operation



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JULY 1974

E-75-7

Developmental
Departmental Grants -

Possibilities -

- Bureau of H E - Off of Education
Departmental Development -
Ford, Rockefeller, Danforth,
Kellogg -
Esso Ed Foundation -
Great Western Sugar -
I.B.M.

Dept Resources -
Film Library
Slide collections -