WASHINGTON UNIVERSITY

ST. LOUIS, MISSOURI 63130

OFFICE OF THE ASSOCIATE VICE CHANCELLOR FOR RESEARCH

EDWARD L. MACCORDY

ASSOCIATE VICE CHANCELLOR
FOR RESEARCH

August 27, 1979

TELEPHONE
(314) 889-5889

Mr. Norman Latker
3515 Woodbine Street
Chevy Chase, Maryland 20015

Dear Norm:

The attached material concerning the planned project of the LES University/Industry Committee requires no explanation for you. It is based on the assumption that the primary research interests of university investigators are represented by their government sponsored research. In order not to distract them from this but to increase the new technology output I think industry may start extending such research by its own sponsored projects. The policies and procedures by which we interact with the government agencies are well established and specifically designed to support our research. Comparable understandings and procedures between us and industry don't exist and involve a whole set of different issues with which you are quite familiar.

I would be very interested in your comments, suggestions, etc.

Keep fighting.

Sincerely,

E.L. MacCordy

Encl.
ELM/mmb

LICENSING EXECUTIVES SOCIETY (U.S.A.), INC.

A Member Society of The Licensing Executives Society
A Worldwide Organization

PRESIDENT
Niels J. Reimers
Encina Annex
Stanford University
Stanford, CA 94305

PRESIDENT-ELECT
Tom Arnold
Arnold, White & Durkee
2100 Transco Tower
Houston, TX 77056

PAST PRESIDENT
Leonard B. Mackey
ITT
320 Park Avenue
New York, NY 10022

V.P.—EASTERN REGION
David J. Mugford
Bristol-Myers Company
345 Park Avenue
New York, NY 10022

V.P.—CENTRAL REGION
Roger G. Ditzel
University of California System
2200 University Avenue
Berkley, California 94720

V.P.—WESTERN REGION
Corwin R. Horton
Crown Zellerbach Corp.
One Bush St.
San Francisco, CA 94119

V.P.—CANADA
William S. Campbell
Consumers Glass Company Limited
701 Evans Avenue, Suite 510
Etobicoke, Ontario, Canada M9C 1A3

V.P.—INTERNATIONAL
Bertram Bradley
Cutter Laboratories, Inc.
Fourth & Parker Streets
Berkeley, CA 94710

SECRETARY
Kenneth E. Payne
Finnegan, Henderson,
Farabow & Garrett
1775 K Street, N.W.
Washington, D.C. 20006

TREASURER
William Marshall Lee
Lee & Smith
10 South Riverside Plaza
Chicago, IL 60606

ASST. SECRETARY-TREASURER
Glen P. Winton
Union Carbide Corp.
6733 W. 65th Street
Chicago, IL 60638
(312) 496-4737

TRUSTEES
Robert E. Bayes
Shell Development Company
One Shell Plaza-P.O. Box 2463
Houston, TX 77001

David E. Dougherty
Carborundum Company
P.O. Box 337
Niagara Falls, NY 14302

D. Edwin Hamby
Union Carbide Corporation
270 Park Avenue
New York, NY 10017

Robert H. Johnson
Eltra Corporation
P.O. Box 931
Toledo, OH 43694

Cyrus S. Nownejad
Tosco Corporation
10100 Santa Monica Blvd.
Los Angeles, CA 90067

William E. Riley, Jr.
Battelle Development Corporation
505 King Avenue
Columbus, Ohio 43201

Edwin A. Shalloway
Sherman & Shalloway
413 North Washington Street
Olde Towne
Alexandria, VA 22314

Philip Sperber
ITT
500 Washington Avenue
Nutley, New Jersey 07110

EDITOR OF LES NOUVELLES
Jack Stuart Ott
1225 Elbur Avenue
Cleveland, OH 44107

GENERAL COUNSEL
Richard G. Moser
Patterson, Belknap, Webb & Tyler
30 Rockefeller Plaza
New York, NY 10020

MEMBERSHIP CHAIRMAN

July 26, 1979

Box 1054
Washington University
Lindell & Skinker Blvds.
St. Louis, Missouri 63130

MEMORANDUM

TO: LES University/Industry Interest Group

FROM: Edward L. MacCordy

SUBJECT: University/Industry Committee Plan for 1979-80

Tom Arnold has appointed me to serve as Chairman of the U/I Committee for the coming LES year as the relief of dedicated, hard working Carl Wooten whose efforts are appreciated by all of us.

An ambitious plan of action confronts us this year and I am asking for volunteers to assume the leadership for this undertaking as Committee members.

Officials from the Government, the press, industry, unions and academia have expressed alarm at the national decline of innovation. Although industry and universities control essentially all research resources capable of producing new technology, and industry's resources are fully engaged with essential work, the potential for innovations of commercial value by university scientists is virtually untapped. An official at California's Lawrence Livermore Laboratory testified about this national problem to the House Subcommittee on Science, Research and Technology last week:

> "The enormous investment in the federally funded R & D establishment can be viewed as a reservoir of ideas, hardware, facilities, equipment, processes, capabilities, experience and individual expertise and there is much evidence that this reservoir of technologies lies largely untapped."

The time is opportune for universities and industry to act in concert to meet this national challenge by addressing the problems that keep them apart. The LES membership provides the access to these organizations and the thorough understanding of their needs and capabilities so essential to the success of such a joint effort.

Therefore, I am proposing that the immediate task of the Committee be to develop a cooperative university - industry program to stimulate an increase in the development of technology of commercial value by the university scientists and to assure its effective transfer to industry for conversion into useful products for society. Hopefully, we can attract about 100 leading research universities (which perform in excess of $3 billion of R & D each year) to participate in the program , to be joined by an even larger number of companies.

While industry and universities share many common interests, misunderstandings and poor communications have prevented widespread joining of their resources for mutual and societal benefit. A panel of the Government's Domestic Policy Review of Innovation, made up mostly of R & D administrators in large firms, concluded that there is an everwidening gap between the university and industrial communities resulting in a diminution of university contributions to innovation. The U/I Committee framework offers a unique opportunity for personal collaboration by industry and unviersity representatives to remove these barriers and to close the gap. The problem will not be solved by new government intervention in our affairs nor by more testimony that the problem should be solved. It's time for thoughtful action.

For years standardized procedures and business terms and conditions acceptable to universities and government agencies have assured an effective working relationship between them. Universities and industry need such a common framework for productive relations, albeit one which addresses a somewhat different set of interests. This is the objective of the proposed U/I Program, to encourage productive working relationships through the development of a mutually acceptable set of operating principles to govern those relationships. Each company and university which adopts the program (with or without specific reservations) can particpate with confidence based on a common understanding of the general obligations, expectations and rules of ethical conduct governing all parties. Specific project agreements between two parties will be negotiated in the normal manner within this framework.

Exhibit A, enclosed, is a suggested first draft annotated outline of the Program operating principles and procedures which is offered as a starting point. Some items are obvious and non-controversial. Others need thoughtful study and further definition in the manner suggested on Exhibit B, although this set of questions is not represented as being complete. These operating principles and procedures need to be worked out, preferably by joint efforts of representatives from both the university and industry sectors including those from private practice.

So I ask those of you who are interested in contributing, regardless of whether or not you will be at the Vancouver LES meeting, to volunteer to immediately start working on the problem areas. Let me know the subject area(s) on which you are willing to work and I'll place you in contact with others with shared interests. Since the broad scope of

most of the subject areas demands a variety of knowledge and experience (research administration, legal, licensing, etc.), I would encourage you to enlist the assistance of others in LES, in your company or university, or elsewhere on at least an informal exchange basis. Such input of a variety of viewpoints is essential if the Program is to find widespread acceptance by company and university management and function well in practice.

To make the best possible progress toward this goal it would be desirable to have the problem areas explored and recommendations formulated within six months. In view of the importance of these matters and the need to have wide dissemination and discussion of the studies I would encourage all to circulate their results among those in the U/I group and to publish their results in "Les Nouvelles".

With early success we should look forward to presentation of a comprehensive Program proposal without extended delay to the interested community of companies and universities in an appropriate forum.

While LES can take the lead in formulating and initiating this Program its final acceptance will also require involvement by officials of companies and universities beyond the LES membership. This is a future matter but one which I hope the Committee members will address as we proceed.

That's it. There is a national problem of importance and urgency which the LES membership is uniquely qualified to attack. But the LES membership comes down to you and me and maybe some new faces being willing to make a personal commitment to the task. As soon as possible let me hear your thoughts on the Program concept, etc., but especially your willingness to work on specific problems as a U/I Committee member. For those attending the Vancouver meeting let's discuss the plan at the U/I Committee meeting at 2:00 P.M. on Tuesday.

Sincerely,



E.L. MacCordy
Chairman
U/I Committee

Enclosures:
program (Exhibit "A")
study areas (Exhibit "B")

ELM/sjg

(Draft Outline)
U/I PROGRAM TO STIMULATE INNOVATION

I. Purpose- A flexible program to facilitate the utilization of university scientists and associated resources selected by a company to pursue specific new technology objectives of mutual interest to the scientist(s) and the company.

II. Operating Principles and Procedures (These should address conduct by participants during preliminary contacts as well as under subsequent specific contract agreements).

A. Participation in the Program
(Each company and university can become an acknowledged participant by formally adopting the Program and providing evidence of this to other participants. Participation can be under qualifications or exceptions specified to parties with which it wishes to interact, the overall intent being to establish a general apriori understanding between parties as a basis for commencing and continuing an interaction.)

B. Ethical Relations Between Participants
(This should address the reasonable obligations of U/I participants in interactions with each other, including:
(1) disclosure of the nature of the potential scientific relationship, be it a close research collaboration between university and company scientists, research only by the university scientist, separate research efforts by the company and one or several universities in the same technical area, etc.
(2) disclosure of the extent of involvement of each party with potential conflicting or competitive present and planned activities, including new involvements which arise during the course of an agreement and faculty consulting commitments.
(3) acceptance of an obligation and disclosure of the nature of employment agreements for the protection and the control of use of proprietary information transmitted by one party to another at any time during their interaction including pre-and post-agreement stages.
(4) avoidance of untimely disclosures through publication or otherwise which might jeopardize potential proprietary rights in which others have an interest.)

(authority)

C. Administrative Capabilities (authority)

(Participants should possess the professional capabilities necessary to administer the program within their organizations including fulfilling obligations to safeguard and prevent misuse of proprietary information, receiving and responding to requests for research proposals, evaluating proposals, negotiating agreements, establishing and protecting proprietary rights, and transferring new technology, etc.)

D. Utilization of New Technology

(Participants should agree to cooperate in reasonable action to establish and protect property rights covering newly developed technology and to take, or allow others to take, effective and timely action to bring the benefits of such new technology to the public.)

E. Financial Incentives for Program Participation

(Participants in a research venture should develop an equitable basis for the sharing of proceeds from commercial success attributable to the venture based on a reasonable measure of contributions to such success.)

F. Processes to Initiate Interactions

(Participants should specify the types of processes in which they will participate, ie, unsolicited research proposals, competitive or selected source requests for research proposals in specific areas, coupling with non-commercial research sponsored by others, etc. Solicitations of research proposals should be preceeded by information describing the solicitor's process for receiving, evaluating and selecting proposals. Adequate opportunity should be provided to prospective respondents to make inquiries before submission of proposals.)

SUGGESTED AREAS REQUIRING STUDY AND DEFINITION
(Headings refer to Exhibit A)

II. Operating Principles and Procedures

A. Participation in the Program

(1) What indication of adoption should be furnished? Execution by an officer of the corporation?

(2) What means for recording exceptions/qualifications should be provided?

(3) Should LES, a university association, etc. maintain a registry of participants, exception/qualifications, etc. for program monitoring and improvement?

(4) Should provision be made for a company participant to restrict knowledge of its participation from other companies?

B. Ethical Relations Between U/I Participants

(1) Should this provision go beyond full disclosure by the parties and directly address the avoidance of unproductive secrecy and competition between parties stemming from self serving desires to establish exclusive property rights or other causes? (Related to "E") Can these be avoided when the company is conducting closely related, or directly competitive, in-house R & D or desires to have several universities work simultaneously on the same or closely related projects?

(2) Can a university (one department or scientist) become involved, simultaneously or in succession, with more than one company on closely related technologies? By disclosures and consent of the companies? Should it make the same technical proposal to more than one company at a time?

(3) How can the limitations of a university's control over its scientists and its compartmentalization into independent performing departments (or even individual scientists) be made clear to companies who operate on a completely different authority structure? Is the use of subagreements with these individuals by the university acceptable to both parties or is a direct commitment by individual scientists to the company on some issues (confidentiality?) desirable or necessary?

(4) What reasonable safeguards should companies adopt in establishing a process for evaluation of university proposals to assure university scientists that their research ideas in rejected proposals will not be retained and used by company scientists nor conveyed to scientists at another university whose research proposal is accepted?

(5) Should universities be required to provide companies with their internal policy statements and practices regarding confidentiality, faculty rights (obligations?) to publish, etc.? Can universities provide the privacy companies may desire (from its competitors) concerning what scientific investigations the company is pursuing in the university, what requests for technical proposals it has submitted to the university, etc.?

(6) Are there problems over time, and ethical rules to be defined for a university scientist who completes an investigation for one company and thereby cannot avoid retention of new scientific knowledge (not proprietary rights) and its possible application in subsequent work for another company? Does such knowledge fall in a class of "fundamental new knowledge" lying outside the boundaries of proprietary data? Should this subject be covered in the Program "Principles"?

(7) It is inevitable that technology research by universities for industry will often be closely related to mainstream ongoing research sponsored by government agencies. The university's contractural obligation to the government on inventions is imprecisely prescribed and is possibly susceptible to ethical apriori avoidance in many cases. To avoid technology transfer problems and misunderstandings between a company and the university both the legal and ethical issues of the reasonable boundary of government claims need definition.

C. Administrative Capabilities

(1) An assessment of the administrative capabilities of universities to properly particpate in the Program is essential and quite likely will reveal significant deficiencies for many. Most have the minimal mechanisms necessary for receiving, disseminating and responding to government programs, predominately with unsolicited research proposals. What embellishments of these mechanisms are needed for effective interactions with industry for the various types of processes listed in "E"?

(2) In negotiating agreements with industry, conducting new technology research and looking after post-agreement interests of the university, what technology transfer and technology management capabilities are required and how can they be obtained? (in house or service arrangements?)

(3) How should company capabilities, that are currently directed primarily to handling unsolicited outside ideas and licensing of proven technology, best be adapted to searching for new technology research opportunities, readily receiving and evaluating proposals, negotiating combined research/technology transfer agreements, etc? Can the "NIH syndrome" from company R & D departments be minimized as a prevalent influence on internal company decision making?

D. Utilization of New Technology

(1) It is reasonable to assume that universities will not be willing to place themselves in a situation where, directly or indirectly, new technology produced in the university is intentionally withheld from society. Is industry willing to either use such technology in a reasonable time frame or to facilitate its use by other companies?

(2) For technology having several fields of use only one of which is to be commercialized by the company, should its licensing in the other fields be mandatory?

E. Financial Incentives for Program Participation

What contributions to commercially successful new technology, resulting from a university-industry venture, should be determining factors in proceeds sharing with the university (sole university inventor patent position, co-inventor patent position, initial lead or key invention from which larger patent position is subsequently developed by company, significant unpatentable technical developments, market lead time, market share, etc.)?

F. Processes to Initiate Interactions

Under B(2) above a question is raised concerning a university simultaneously submitting the same proposal to more than one company. In the process labeled "coupling with non-commercial research sponsored by others" (ie, extension of on-going non-commercial research into areas of specific application) should a university circulate such opportunities (comparable to a skeleton proposal) to more than one company at a time in the same manner that a company is able to request proposals on a single area simultaneously from multiple universities?