MINUTES OF THE MEETING OF THE BOARD OF TRUSTEES OF OHIO UNIVERSITY

Friday, October 17 and Saturday, October 18, 1997 Ohio University, Athens Campus

THE OHIO UNIVERSITY BOARD OF TRUSTEES MINUTES OF October 17, 1997 MEETING TABLE OF CONTENTS

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EXECUTIVE SESSION

1:30 p.m., Friday, October 17, 1997 McGuffey Hall, Trustees' Room Ohio University, Athens Campus

On a motion by Mr. Goodman, and a second by Mr. Emrick, the Ohio University Board of Trustees resolved to hold an executive session to consider personnel matters under Section 121.22(G)(1), real estate matters under Section 121.22(G)(2), and litigation or the threat thereof under Section 121.22(G)(3) of the Ohio Revised Code on the 17th day of October 1997.

On a roll call vote, Dr. Ackerman, Mr. Brunner, Mr. Emrick, Mr. Grover, Mr. Goodman, Mr. Hodson, and Mr. Walter voted aye. This constituted a quorum. President Robert Glidden, Board Secretary Alan Geiger, Vice President Gary North and Counselor John Burns attended.

Personnel

No personnel matters were discussed.

Real Estate

Vice President North reviewed the status of the purchased and planned purchases of real estate. Matters of property leases and rentals were reviewed. Trustees concurred with the plan to acquire real estate, dated October 3, 1997, presented by Dr. North. The annexation of The Ridges was also discussed.

Litigation

Several matters of litigation were reviewed and discussed. These matters included the request for a "trademark" of the Ohio name with "Attack Cat," the release of student disciplinary records, Trustee liability issues, possible Dysart Woods legal activities, and the response to questions about other matters of litigation.

I. ROLL CALL

Seven members were present: Chairman Brandon T. Grover; Patricia A. Ackerman; Gordon F. Brunner; Charles R. Emrick, Jr.; N. Victor Goodman; Thomas S. Hodson and Robert D. Walter. This constituted a quorum.

President Robert Glidden and Secretary Alan H. Geiger were also present.

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K.C. Melnik and Erik Roush, student trustees, also attended. This was Mr. Roush's first meeting; he replaces student trustee Kevin T. Sasson who had completed his two-year term.

II. APPROVAL OF THE MINUTES OF THE MEETING OF JUNE 28, 1997 (previously distributed)

Mr. Emrick moved approval of the previously distributed minutes. Dr. Ackerman seconded the motion. All voted aye.

III. COMMUNICATIONS, PETTTIONS, AND MEMORIALS

Secretary Geiger reported there were none.

IV. ANNOUNCEMENTS

Secretary Geiger reported there were none.

V. REPORTS

President Glidden introduced, in turn, Provost Sharon S. Brehm, Vice President for Administration Gary North and Executive Assistant to the President for Equity William Y. Smith for brief reports. A copy of their presentation materials is included with the official minutes. Therefore, only summary comments are included herein.

Provost Brehm outlined enrollment data for the past years noting for Fall 1997 a total university headcount of 28,233 students with 19,229 of those on the Athens Campus. This compares to a Fall 1996 level of 27,386 and 19,168 students respectively. She noted new first year students at 3,307 with transfers numbering 575. Comparable Fall 1996 figures were 3,191 and 484 students. Dr. Brehm discussed the matter of the relative low success rate in attracting first-year minority students to campus and the need for greater attention to this issue.

Vice President Gary North provided a brief report on Fall 1997 occupancy in the residence hall system. Dr. North noted 43 fewer students are in the system than budgeted, while 51 more have purchased food contracts than anticipated. He stated neither of those levels has significant budget implications.

Executive Assistant to the President William Smith earlier had provided Trustees with a Fall 1997 Workforce Update report. Mr. Smith responded to questions. Mr. Smith commented on the need to continue the effort of recruiting minority females to the faculty and staff.

VI. UNFINISHED BUSINESS

Secretary Geiger reported no unfinished business.

VII. NEW BUSINESS

Chairman Grover reported that Board committees had, at their respective meetings, discussed matters being presented to the Board. Items for action will be presented by the committee chairman or a committee member as designated by the chairman.

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A. BUDGET, FINANCE, AND PHYSICAL PLANT COMMITTEE

Committee Chairman Goodman reported the committee had earlier received a report from President Glidden on the design of a new campus capital and space planning effort. The President's report outlined expected versus requested capital appropriations for the next three biennia as approved by the Trustees; and the possible impact that K-12 funding might have on higher education appropriations.

Committee Chairman Goodman presented and moved approval, with a second by Mr. Hodson; and all trustees voted aye to approve the following resolution:

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Amendment to Energy Conservation Resolution 1981-598 - Res. 1997 -- 1550

AMENDMENT TO ENERGY CONSERVATION RESOLUTION 1981-598

WHEREAS, the Ohio University Board of Trustees did by Resolution 1981-589 establish an Energy Conservation Program, and

WHEREAS, the program over the years has been effective in meeting its charge of reducing the rate of utility cost increases through the implementation of energy conservation measures and cost avoidance, and

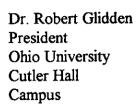
WHEREAS, the original investment of escrow accounts from the restructuring of dormitory revenue bonds is to be repaid and residence halls auxiliary is to be released from further financial obligation to program, effective July 1, 1996, and

WHEREAS, the administration wishes to continue the program anticipating future major utility-related and conservation projects, including the use of these funds for intrafund borrowing for capital and land needs with periodic reports provided to the Board of Trustees on the status of the program and funds.

NOW, THEREFORE, BE IT RESOLVED, that the Ohio University Board of Trustees modifies and reauthorizes the Energy Conservation Program under the condition presented herein. Vice President for Administration



Cutler Hall 209 Athens OH 45701-2979 614-593-2556



Dear Bob,

Please find enclosed a resolution to modify the energy conservation program to repay bond funds used to start the program and release Housing from further obligations effective July 1, 1996. Housing will use funds generated through this change to invest in residence halls utility upgrades.

OHIO UNIVERSITY

It is most important for the general university to continue the program through a commitment of funds generated by energy saving and cost avoidance projects. The university heat plant is aging and will soon require major maintenance. In addition, extending steam lines throughout the campus to replace gas boilers and the completion of a campus wide chilled water loop are projects that will help us reduce utilization, improve service and better manage utility costs. These projects are expensive and funds are not now available for their completion. Continuing to build the energy management reserve will, in time, help finance those projects.

I recommend approval.

Sincerely,

Gary North Vice President for Administration

GN:mm

VII. NEW BUSINESS

Chairman Taylor stated that Board committees had, at their respective meetings, discussed the matters now being presented to the Board. Chairmen, or committee members designated by them, were invited to present the matters for action.

A. BUDGET, FINANCE AND PHYSICAL PLANT COMMITTEE MATTERS

1. ENERGY CONSERVATION PROGRAM

Mr. Russ moved approval of the resolution. Mr. Spencer seconded the motion. Approval was unanimous.

RESOLUTION 1981--589

WHEREAS, the utility costs for coal, electricity, gas and water have increased due to cost of production and inflation approximately \$387,000 annually, representing an average annual increase of 12.6 per cent during the past four years.

WHEREAS, current projections based on data available indicate that the annual cost increase during the next five years will average over \$800,000, representing a 15.3 per cent average increase.

WHEREAS, recent studies by staff members and consulting firms indicate that energy use can be reduced significantly by the identification and implementation of energy conservation measures which will produce extensive budget dollar reductions through cost avoidance.

WHEREAS implementation of energy conservation measures requires the expenditure of operating funds.

WHEREAS, arbitrage regulations restrict the investment of the proceeds from structuring the 1974 Escrow Accounts.

NOW, THEREFORE, BE IT RESOLVED that the Board of Trustees authorize the use of the funds created through the restructuring of the escrow accounts of the dormitory revenue bond funds as advanced investment funds for implementation of conservation measures based on the premise that the advanced funds will be returned within five years and retained within the Plant Fund Group for future allocation as a revolving fund for energy conservation.

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B. EDUCATIONAL POLICIES COMMITTEE

Committee Chairman Ackerman briefly reviewed the discussions held by the committee and asked individual committee members to present matters for consideration.

On a motion by Dr. Ackerman, seconded by Mr. Emrick, the Trustees voted unanimously to approve the following resolutions:

College of Education Reorganization - Res. 1997 -- 1551

Name Change for the Institute for The College of Health & Human Services - Res. 1997 -- 1552 -

Five-Year Review of Centers and Institutes - Res. 1997 -- 1553

Establishment of New Institute - Ohio University-Tsinghua University Institute for Genetics and Biotechnology - Res. 1997 -- 1554

COLLEGE OF EDUCATION REORGANIZATION

RESOLUTION 1997 -

WHEREAS, the faculty of the Ohio University College of Education is a diverse faculty with many professional activities, and

WHEREAS, the preservice and inservice preparation needs to address current and future educational needs within the United States, and

WHEREAS, the faculty needs to be able to be full and equal participants in resource and educational policy implementation and on-going dialogue at various levels, and

WHEREAS, departmental status is deemed critical to fulfill such a mission, and

WHEREAS, the dean and faculty of the Ohio University College of Education have discussed and endorsed a reorganization to be desirable.

NOW, THEREFORE, BE IT RESOLVED that the following three departments be formed:

Counseling and Higher Education Educational Studies Teacher Education

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Office of the Provost Curler Hall Athens OH 45701-2979

OHIO UNIVERSITY 1804

DATE: September 11, 1997

TO: Robert Glidden, President

FROM: Sharon Stephens Brehm, Provost

SUBJECT: College of Education

The attached request for college reorganization into the departments of Counseling and Higher Education, Educational Studies, and Teacher Education is one that I support and recommend for approval. Such reorganization will facilitate the college's efforts to strengthen its effectiveness in all aspects of its mission: teaching, research, and public service.

SSB/jt

Ohio University

College of Education McCracken Hall Ohio University Athens, Ohio 45701-2979 614/593-4400

Office of the Dean

To:	Sharon S. Brehm, Provost
From:	Karen J. Viechnicki, Interim Dean
Re:	Proposal to Reorganize the College of Education
Date:	September 9, 1997

The College of Education was charged by the Provost to examine its organizational structure. A College Task Force was convened in October 1996. The membership included representation from the School of Curriculum and Instruction, the School of Applied Behavioral Science and Educational Leadership, a graduate student, and a member of the Society of Alumni and Friends.

The Task Force carried out its work in a systematic and thorough manner. It provided many opportunities to faculty and staff for oral and written feedback. I concur with the recommendation of the Task Force that the College of Education should be reorganized into a three department model. The arguments to do so are compelling:

Streamlining the Organization: The three department model will streamline the organization.

- It will provide venues for increased communication among program areas and individual faculty.
- It will allow for increased communication with the Dean's office by adding an additional seat on the Executive Council.
- It will allow for more department participation on budgeting.
- It will allow for more department participation in scheduling.

Curriculum: The three department model will provide new and potentially exciting opportunities for faculty to work together in curriculum development and program delivery.

- The Board of Regents charge to review the progress of Educational Administration and Higher Education led to a College wide committee's recommendation that Educational Leadership become an overarching theme that would span undergraduate and graduate education in all program areas.
- The Colleges' continuing accreditation review by NCATE in 1995 provided the opportunity for the theoretical framework of constructivism to be established as the College's knowledge

base. This construct, which provides the infrastructure for the work that we do, will be reviewed again during our next continuing visit in 2000. The Educational Studies department will enable us to develop and implement this construct within the College.

- Recently, discussions of technology have been prominent at many levels throughout the University. It will be the University's challenge to ensure that curriculum drives technology and that the access of technology to enhance curriculum be available to all disciplines. The College is poised to assume a leadership role in this area
- With the change in Ohio teacher education standards that require every teacher to earn a masters degree, there is a need to develop graduate programs that meet the needs of educators in the field.

Committees: The number of standing committees will be reduced. The number of College faculty cannot effectively support department and college committees. At present their work is sometimes redundant.

- A reduced number of College standing committees will be established. These include: Graduate Curriculum, Graduate Admissions and Retention, Undergraduate, Professional Development, and Ethics, Equity and Grievance.
- <u>Promotion and Tenure</u>. Both former schools have systematic tenure and promotion policies. They were more similar then different. The new departments will be strongly encouraged to review both models. Basic understandings should exist across the three departments. Tenure and promotion policy should reflects the diversity of roles that are emerging in the professoriate.

The charge to the College Task Force was to recommend a structure. It will now become the work of others to determine how the newly organized College will function. Many implementation issues were raised in the final discussions of the Task Force that fell outside of the Task Force's charge. These included advising loads, scheduling, budgeting and space. I am confident that these will begin to be addressed beginning during the 1997-98 academic year.

Ohio University

Interoffice Communication

Date: September 8, 1997.

To: Karen Viechnicki, Dean College of Education

From Richard Hazler, Chair

Subject: Establishment of the Department of Counseling and Higher Education

The College of Education proposes to establish a Department of Counseling and Higher Education. Faculty will consist of professionals with expertise in the areas of school and community counseling, higher education counseling and administration, college student personnel services, and issues of social and cultural diversity. The Department would include faculty in these areas that had been members of the former School of Applied Behavioral Sciences and Educational Leadership which is eliminated in the College of Education reorganization.

Educational Objectives:

- To continually upgrade masters and doctoral curricula in line with changes in the highest professional standards set for graduates seeking positions as professional counselors in a variety of settings, faculty and administrators in higher education, and college student personnel professionals.
- To coordinate curricula and provide an academic home for students in counselor education and higher education programs.
- To provide courses for undergraduate students in the areas of career, personal, and cultural development.
- To provide professional level experiential learning opportunities for students in counseling and higher education through development of grants and contracts for graduate associate positions, service learning opportunities, field experiences, and internships.
- · To create and maintain a diverse learning community of faculty and students.

Research Objectives:

- To perform quantitative and qualitative research designed to increase understanding of the nature, needs, thoughts, and actions of human beings.
- To perform quantitative and qualitative research designed to assess process and outcomes of traditional as well as innovative programs and methods in the areas of education, human development, and mental health.

- To develop concepts, materials, and programs that provide for the practical implementation of research results in the areas of education, human development, and mental health.
- To access external funding in support of research activities.
- To collaborate with professionals in the field and from other institutions in the development and implementation of research as well as the practical use of research results.

Service Objectives:

- To provide academic, programmatic, and consultative sharing and support with local, national, and international groups of professionals through involvement and leadership in professional organizations, providing growth opportunities for professionals in the field, and working cooperatively with various professionals on common projects.
- To provide counseling, consultative, and educational support for local, national, and international clientele through the George E. Hill Center for Counseling and Research and the Center for Higher Education and International Programs as well as through individual services offered by individual faculty.

Ohio University Interoffice Communication

To: Karen Viechnicki, Dean College of Education

From: Sandra Turner, Chair Proposed Department of Educational Studies

Subject: Establishment of the Department of Educational Studies

The College of Education proposes to establish a Department of Educational Studies. The faculty will consist of professionals with expertise in the areas of educational leadership and administration, educational foundations and cultural studies, educational research and evaluation, technology in teaching and learning, and international studies in education. The overall mission of the department is to support teaching, research, and service activities that are foundational to the entire field of education. The academic specialties of the department faculty and the courses they teach are interdisciplinary in nature and relate to programs across the entire College of Education, and thus the faculty will be working in close collaboration with the other two departments in curriculum planning, teaching, advising, and research. About half of the new department's faculty were in the former School of Curriculum and Instruction and half in the former School of Applied Behavioral Sciences and Educational Leadership, both of which were eliminated in the College of Education reorganization.

Educational Objectives:

- To provide courses for undergraduate and graduate students in the areas of educational leadership, cultural studies, technology, and research.
- To provide masters, specialist, and doctoral programs for professionals in education seeking positions in educational administration, technology, and research.
- To collaborate with other departments in the College of Education in developing new curricula and revising existing curricula to meet the current needs of preservice and inservice teachers, school administrators, and professionals in higher education.

- To provide support for faculty in the College of Education in integrating technology across the curriculum.
- To provide support for faculty in the College of Education in integrating cultural studies across the curriculum.
- To create a diverse learning community of faculty and students.

Research Objectives:

- To conduct research that contributes to our understanding of how children and adults learn.
- To provide support for faculty in the College of Education in conducting quantitative and qualitative research and evaluation studies.
- To seek external and internal funding in support of research activities.

Service Objectives:

- To encourage and support partnerships between the College of Education and K-12 schools in southeastern Ohio.
- To seek external funding in support of school partnerships.

Ohio University

Interoffice Communication

Date: September 8, 1997

TO: Karen Viechnicki, Dean College of Education

FR: Ralph Martin, Chair Proposed Department of Teacher Education

RE: Establishment of the Department of Teacher Education

The College Task Force on Reorganization proposed establishment of a Department of Teacher Education. The faculty in this department will consist of Group I professionals with expertise in the areas of curriculum, teaching, learning, learner development, and learner exceptionalities (special education and talented and gifted), as well as represent the content disciplines of school curricula. Full time faculty will come from the former School of Curriculum and Instruction, which shall be eliminated from the College's organization. Clinical faculty will also support the applied nature of the teacher preparation and licensing programs, serving in instructional and supervisory roles both on-campus and off-campus within the several school partnerships previously established by the College.

Educational Objectives:

• To offer complete undergraduate teacher certification and licensing programs as approved by the State of Ohio's Department of Education and NCATE, presently grades 1-12 and special, later to adjust to the new state structure of grades 3-12 and special.

• To support undergraduate teacher certification and licensing programs on the five area regional campuses.

- To continually improve undergraduate, masters and doctoral programs respective to changes in the standards of the state and the professional learned societies, which set preparation policies and benchmark expectations.
- To coordinate the curriculum and provide an academic home for students in the masters programs in economic education, elementary education, middle school education, secondary education and special education.
- To coordinate the curriculum and provide an academic home for students who specialize in the following approved specializations of the Doctoral Program in Curriculum and Instruction: curriculum and instruction, economic education, mathematics education, middle level education, reading and language arts, social studies education, supervision.

- As a part of an enrollment management plan, encourage the development of doctoral specializations in high demand or urgent need areas, such as instructional leadership, special education and science education.
- To encourage and support the coordination of masters level programming through the southeast regional professional development center and regional campuses.

Research Objectives:

- To perform research designed to improve school and college level teaching.
- To conduct research on the dimensions and processes of pupil learning, including special populations.
- To conduct research on the improvement of curricula, teaching and learning in the academic school disciplines, e.g., mathematics, science, language arts, etc.
- To perform research designed to promote the expansion of family and community literacy.
- To perform research designed to investigate the appropriate uses of technology in curricula, teaching, and learning.
- To seek external funding in support of the department's research priorities.

Service Objectives:

- To provide educational support to area schools who are affiliated with the College through arranged partnerships.
- To involve teacher preparation students in service learning programs where appropriate linkages can be forged with clinical settings.
- To provide a programming interface and faculty consultative support for the teacher professional development efforts of the regional professional development center and other supported projects.
- To provide collaborative support for inter-departmental domestic and international outreach efforts associated with the College's academic programs, centers, and institutes.
- To seek external funding in support of the department's service priorities.

RENAMING OF INSTITUTE FOR THE COLLEGE OF HEALTH AND HUMAN SERVICES

RESOLUTION 1997 - 1552

WHEREAS, the Institute for the College of Health and Human Services is an established Institute at Ohio University, and

WHEREAS, the current and future focus of the Institute addresses academic, research, and community service programs, and

WHEREAS, the programs currently within the Institute involve multiple schools within the College of Health and Human Services and also include colleges and schools throughout Ohio University and some community agencies, and

WHEREAS, a more collegial image will be fostered as the Institute works toward more networking and collaboration within the University.

NOW, THEREFORE, BE IT RESOLVED that the name of the Institute for the College of Health and Human Services be changed to Institute for Health and Human Services, effective immediately.



Office of the Provost Cutler Hall Athens OH 45701-2979

OHIO UNIVERSITY 1804

DATE: September 11, 1997

TO: Robert Glidden, President

FROM: Sharon Stephens Brehm, Provost

SUBJECT: Name Change

The dean of the College of Health and Human Services is recommending a name change for the Institute for the College of Health and Human Services to Institute for Health and Human Services.

It seems to me that the rationale presented by the director of the institute and supported by the dean is sound and that the name change is in the best interests of the college. I therefore concur with the name change and recommend that it be approved.

SSB/jt

Office of the Vice President Research & Graduate Studies

Research & Technology Center 101 Athens OH 45701-2979 614-593-0370 phone 614-593-0380 fax



OHIO UNIVERSITY

DATE:July 9, 1997TO:Sharon S. Brehm, Provost

FROM: T. Lloyd Chesnut, Vice President for Research and Graduate Studies

SUBJECT: Change of Name for the Institute for the College of Health and Human Services

Attached is a proposal and resolution for changing the name of the Institute for the College of Health and Human Services to **Institute for Health and Human Services.** I have reviewed the proposal and recommend that it be presented to the Board of Trustees at their September meeting.

bv Enclosures

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Office of the Dean

College of Health and Human Services Grosvenor Hall 014 Athens OH 45701-2979 614-593-9336 phone 614⁵593-0285 fax



OHIO UNIVERSITY

V	CE PRESIDENT RESEARCH & GRADUATE STUDIES
	JUN ~ 2 1997
	OHIO UNIVERSITY

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June 2, 1997

Services

To:

T. Lloyd Chesnut, Vice Presiden Research and Graduate Studies Barbara Chapman, Dean

College of Health and

From:

Re:

Review of Institute for the College of Health and Human Services

The Review of the Institute for the College of Health and Human Services has been completed in accordance with the Procedure for the Review of Centers and Institutes. Enclosed is a copy of the self-study document prepared by the Executive Director, Dr. Ann Teske. Also enclosed is the review committee report and recommendations.

There are a number of significant activities and accomplishments of the Institute during the past five years. The Institute is fulfilling its mission and is an integral part of the College of Health and Human Services.

The self-study and review committee reports are thoughtful and thorough. I have no additional information to share and am in agreement with the conclusions and recommendations.

I am adding one more recommendation at the request of the review committee and the Executive Director. That is to **change the name** from Institute for the College of Health and Human Services to **Institute for Health and Human Services.** The rationale for the change is in the attached memorandum from the Executive Director, Dr. Ann Teske.

If you have questions or need additional information, please do not hesitate to contact me.

Institute for Health and Human Services

College of Health and Human Services Grosvenor Hall 014 Athens OH 45701-2979 614-593-9335 phone 614-593-0285 fax

OHIO UNIVERSITY

May 30, 1997

TO DEAN CHAPMAN FROM: ANN TESKE AT RE: NAME OF INSTITUTE

This is a request to consider modifying the name of the Institute for the College of Health and Human Services to the Institute for Health and Human Services.

When the Institute was formed, its major purpose was to provide an organizational structure in which to create new academic programs within the College and to foster interdisciplinary certificate and research programs within the College. As academic, research, and community service programs have evolved into multi-disciplinary programs, it is important for the Institute's name to evolve also. All of the programs currently within the Institute involve multiple schools within the College of Health and Human Services but also include colleges and schools throughout Ohio University, and even include some community agencies.

The name: Institute for Health and Human Services fosters a more collegial image as we work toward more networking and collaboration within the University.

Thank you for your consideration.

REVIEW OF CENTERS AND INSTITUTES

RESOLUTION 1997 -- 1553

WHEREAS, the continued review of academic programs is essential to the maintenance of quality within an educational institution, and

WHEREAS, Ohio University has had for many years a rigorous program of internal review, and

WHEREAS, Section 67 of House Bill 694 provides for the review and evaluation of all programs of instruction conducted by state institutions.

NOW, THEREFORE, BE IT RESOLVED that the Board of Trustees of Ohio University accepts the 1996-97 Reviews of Centers and Institutes, which recommend that the following centers and institutes be continued or terminated as noted:

Center for Intelligent Chemical Instrumentation - Continue

Institute for the College of Health & Human Services - Continue

Institute for Health & Behavioral Sciences - Terminate

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Office of the Provost Cutler Hall Athens OH 45701-2979

OHIO UNIVERSITY 1804

DATE: September 11, 1997
TO: Robert Glidden, President
FROM: Sharon Stephens Brehm Frovost

SUBJECT: Centers and Institutes

Ohio University has long had a policy requiring that centers and institutes be reviewed every five years and that such reviews are to recommend either the continuation or termination of the center or institute. The reviews included here recommend the continuation of one center and one institute, the termination of one institute, and a delay in the review of two institutes.

I support the proposed actions and recommend them to you for board approval.

SB/jt Enclosure Office of the Vice President Research & Graduate Studies

Research & Technology Center 101 Athens OH 45701-2979 614-593-0370 phone 614-593-0380 fax



OHIO UNIVERSITY

DATE: July 9, 1997

TO: Sharon Brehm, Provost

FROM: T. Lloyd Chesnut, Vice President for Research and Graduate Studies

SUBJECT: Review of Centers and Institutes - 1996-97

Reviews conducted during 1996-97 included:

Center for Intelligent Chemical Instrumentation Charles J. Ping Institute for the Teaching of the Humanities Institute for Health & Behavioral Sciences Institute for the College of Health & Human Services Ohio University Insurance Institute

Attached are reports of these reviews and a brief summary. I concur with the recommendation associated with each reviewed Center or Institute. I suggest that these recommendations be presented to the Board of Trustees for their action at their September meeting.

bv Enclosures

REVIEW OF CENTERS AND INSTITUTES - 1996-97

Center for Intelligent Chemical Instrumentation

The Center was formally established in April 1992. Motivated by a desire to enhance collaborations between academic, industrial, and government scientists, the Center for Intelligent Chemical Instrumentation (CICI) was established. The objectives of CICI are to foster industrial-academic and academic-governmental research collaboration sin the area of intelligent chemical instrumentation, to provide advanced training for graduate and undergraduate students, and to seek national and international prominence for Ohio University in this important research area. The development can be assessed by consideration of standard measures of research productivity. The CICI researchers have been extremely successful in attracting external funding. More than \$2.4 million in total funding has been obtained, and 58% of submitted proposals have been funded. These successes clearly establish the viability of CICI and demonstrate the importance and fundability of the research being performed. The Review Committee recommended that the Center for Intelligent Chemical Instrumentation be continued with support at its current level. They also recommended that the Center publish a promotional brochure, pay attention to a systematic process of technology transfer, and consider seating a CICI advisory committee that includes industrial membership.

Recommend continuation of the Center.

Charles J. Ping Institute for the Teaching of the Humanities

A one-year extension for the review has been requested by the Provost.

Institute for Health & Behavioral Sciences

A request for discontinuance was received from the office of the Dean of Arts and Sciences stating that with the departure of Tom Creer and Harry Kostes, the Institute was no longer needed.

Recommend termination of the Institute.

Institute for the College of Health & Human Services

The Institute was initiated in 1980 to provide the basis for the following four purposes: 1) to provide an organizational home for newly proposed academic programs; 2) to promote off-campus and on-campus clinical site development; 3) to foster disciplinary research projects; 4) to generate grant writing activities designed to access state, federal, and private funding. As one of the recommendations in the Institute's last review, a full time executive director was hired. Under the executive director's leadership the Institute developed a mission statement, goals and organizational structure and identified an advisory committee for the first time. Continuation of the Institute has been recommended.

Recommend continuation of the Institute.

Ohio University Insurance Institute

A one-year extension has been requested by the Provost.

Ohio University

Interoffice Communication

VICE PRESIDENT RESEARCH & GRADUATE STUDIES MAY 2 9 1997 OHIO UNIVERSITY

Date: May 28, 1997

To: T. Lloyd Chesnut, Vice President for Research and Graduate Studies

From: Leslie A. Flemming, Dean, Arts and Sciences / CAF

Subject: Five Year Review of the Center for Intelligent Chemical Instrumentation

I am pleased to submit and endorse the positive recommendations, made by our review committee, for continuation of the Center for Intelligent Chemical Instrumentation (CICI).

The accomplishments of the CICI during its first five years have clearly lived up to our expectations and provide a sound basis for future success.

cc: Gary W. Small, Director, Center for Intelligent Chemical Instrumentation Michael Prudich, Chair, Chemical Engineering

Date sent:	Wed, 18 Jun 1997 14:07:36 -0400
From:	"Roger W. Rollins" < rollins@ohiou.edu >
Subject:	Institutes and Centers
To:	chesnut@ouvaxa.cats.ohiou.edu
Copies to:	flemming@oak.cats.ohiou.edu, blum@ouvaxa.cats.ohiou.edu,
•	arkes@ouvaxa.cats.ohiou.edu

Lloyd,

During the last week in May the College of A & S sent the five year review of the Center for Intelligent Chemical Instrumentation for your approval and submission to the Board of Trustees. I am just checking to make sure that you did receive that document.

Also, as you may have noticed, we did not send the similar review for the Institute for Health and Behavioral Sciences because Hal Arkes, Chair, Department of Psychology, indicated that, with the departure of Tom Creer and Harry Kostes, the Institute was no longer needed. Thus, we request that the Institute for Health and Behavioral Sciences be discontinued.

Thanks, Roger

Roger W. Rollins Associate Dean and Professor of Physics and Astronomy College of Arts and Sciences Ohio University Athens, OH 45701-2979

Ohio University

Department of Chemical Engineering

RECEIVED

MAY 23 1997

Date: 23 May 1997

ARTS & SCIENCE:

To: Leslie Flemming, Dean, College of Arts and Sciences

From: Five-Year Review Committee for the Center for Intelligent Chemical Instrumentation (CICI) [Michael Prudick (Chair), David Drabold, Donald Miles, Gayle Mitchell]

Subject:

FIVE-YEAR REVIEW OF THE CENTER FOR INTELLIGENT CHEMICAL INSTRUMENTATION (CICI)

This report represents the first five-year review for the Center for Intelligent Chemical Instrumentation (CICI). Source information for this report comes from: (i) a Self-Study Report for the Center for Intelligent Chemical Instrumentation [dated 01 April 1997], (ii) a memorandum from Dr. Gary Small, Director of the CICI, to the Review Committee supplying additional information requested by the Review Committee [dated 21 April 1997], (iii) additional written information supplied by Dr. Small to the Review Committee [dated 29 April 1997], and (iv) verbal information supplied by Dr. Small to the Review Committee during its meeting of 29 April, 1997.

The Review Committee met three times [01 April 1997, 22 April 1997, 29 April 1997] and as directed by the Procedure for the Review of Centers and Institutes considered the following:

- (a) an evaluation of the current viability of the CICI,
- (b) an evaluation of the current cost/benefit basis of the CICI,
- (c) an evaluation of the future viability of the CICI,
- (d) an evaluation of the future cost/benefit basis of the CICI, and
- (e) a recommendation as to the future of the CICI.

As a result of the review process, the Review Committee recommends that the Center for Intelligent Chemical Instrumentation be continued with support at its current level. The Committee recommends that the Center publish a promotional brochure, pay attention to a systematic process of technology transfer, and consider seating a CICI advisory committee that includes industrial membership.

The Review Committee is concerned that needs for increased laboratory space and clerical/technician help may lie in the CICI's near future.

(a) Evaluation of the Current Viability of the Center for Intelligent Chemical Instrumentation (CICI).

The Committee finds the Center for Intelligent Chemical Instrumentation (CICI) to be an active and viable research and academic contributor to the mission of Ohio University.

The Center for Intelligent Chemical Instrumentation (CICI) was formally established by the Ohio University Board of Trustees on April 3, 1992. Current faculty participants in the CICI include: Dr. Gary W. Small (Professor of Chemistry and Director of the CICI), Dr. Anthony R. J. Andrews (Assistant Professor of Chemistry), Dr. Howard D. Dewald (Associate Professor of Chemistry), and Dr. Peter de B. Harrington (Associate Professor of Chemistry). Drs. Small, Dewald, and Harrington are founding members of the CICI. Dr. Andrews joined the CICI in 1995 when he accepted a faculty appointment in the Department of Chemistry at Ohio University.

The development and current viability of the CICI can be assessed by standard measures of research and academic productivity. Standard output measures of research productivity as expressed in numbers of patents granted, publications printed, and presentations made are summarized in Table 1, below. Table 1 also includes input measures of research activity such as research proposals submitted and funded as well as external funding requested and received. It is of interest to note that 57.8% of the research proposals submitted were funded and that 33.6% of the external funding requested was received over the period under review. Sources of research funding have been varied to date including industry (14.4%), the federal government (77.3%), the State of Ohio (7.5%), and internal Ohio University sources (0.9%).

The CICI has also taken care to pay attention to its educational/training mission. Since its inception, students working in areas covered by the work of the CICI have earned seven doctoral degrees and three master's degrees. The names of graduate students appear on thirtyeight (53.5%) of the seventy-one research publications cited in Table 1, below. Currently, there are eleven doctoral students and five master's students engaged in working on research associated with the CICI.

The incorporation of undergraduate students into the research mission of the CICI has not been ignored. Since its inception, eight undergraduate students (three past participants and five current participants) have contributed to the research mission of the center. Undergraduate students have appeared as coauthors on three (4.2%) of the seventy-one research publications cited in Table 1, below.

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Table 1. Summary of CICI Research Productivity.									
	1992	1993	1994	1 995	1996	1 997 1	Total		
Patents	0	0	0	3	0	0	3		
Publications	7	14	9	8	20	13	71		
Presentations	10	40	42	39	45	21	197		
Proposals submitted	7	4	5	. 8	8	6	38		
External funding requested ²	\$315	\$1,171	\$1,476	\$1,320	\$2,401	\$496	\$7,179		
Proposals funded	6	4	3	3	3	3	22		
External funding received ²	\$167	\$1,171	\$120	\$243	\$610	\$100	\$2,411		
¹ Through April 1, 1997 ² In \$1,000s.	1.		·		-	1			

(b) Evaluation of a Current Cost/Benefit Basis.

In evaluating the current cost/benefit basis of the Center for Intelligent Chemical Instrumentation the Committee chose to compare the "cost" to the University (defined as the sum of the overhead returned to the Center plus equipment grants) to its "benefit" to the University (defined as research expenditures at Ohio University). Unfortunately, the research expenditure numbers were not available from the Office of Sponsored Research. As an alternative, the Committee decided to use the dollar amount of research awarded as an approximation of research expenditures. The relevant numbers can be found in Table 2. On the basis described above, the cost/benefit ratio over the review period is calculated to be 0.074. This means that for each \$1.00 overhead returned to the CICI, the CICI generates \$13.59 in research awards. The Review Committee finds this cost/benefit ratio to be acceptable.

Table 2. CICI Income and Expenditures.							
Year	Awards ^{1,2}	Allotments ^{1,3}	Expenditures ¹				
FY 1992-93	\$ 327,875.00	\$ 4,953.00	\$ 0.00				
FY 1993-94	354,042.00	16,602.00	14.25				
FY 1994-95	193,114.00	23,109.00	2,117.51				
FY 1995-96	334,623.00	29,105.00	15,302.84				
FY 1996-97 (through 04/15/97)	105,274.00	22,968.00	25,430.37				
Totals	\$ 1,314,928.00	\$ 96,737.00	\$ 42,864.97				

¹Data obtained from Office of Research and Sponsored Programs.

²Total costs awarded for expenditure at Ohio University (excludes internal Ohio University funding, State of Ohio funding, portions of grants/contracts directed to other organizations, and funding increments in multi-year grants/contracts yet to be awarded.

³All CICI funding was obtained through the return of indirect costs. No other Ohio University funds were requested or received.

(c) Evaluation of Potential Future Viability.

A recent review of doctoral programs in the State of Ohio conducted by the Ohio Board of Regents has resulted in the designation of two areas of focus for the doctoral program offered by the Department of Chemistry at Ohio University. The two areas of focus are *Chemical Analysis and Structure* and *Chemistry of Biological Systems and Processes*. The CICI falls within the first area of focus thereby making it an important part of future doctoral research in the Department of Chemistry.

The Director of the CICI has reported that eight proposals have been planned for FY 1997-98 submission representing combined direct costs of \$1,700,000. All current faculty associated with the work of the CICI appear to be dedicated to the work of the Center. This would indicate that, at worst, the CICI would continue onward at its current pace for the next five years.

As this report is being written, a search is underway for a new senior-level faculty member for the Department of Chemistry. It is anticipated that this new faculty member would work within the Center for Intelligent Chemical Instrumentation and that, in fact, the presence of the CICI could act as an attractant for the new faculty member. The addition of a new senior-level faculty member would help to ensure a critical mass of researchers in the CICI and would provide an instant increase in level of effort and visibility.

The Review Committee also feels that the CICI could enhance future viability by sponsoring symposia and/or workshops, either at national meetings of here in Ohio. Making an effort to promote the identity of the CICI at national meetings and providing workshops for industry serves to enhance the reputation of the center and also to forge long-term associations with colleagues from other institutions and make key industrial ties.

(d) Evaluation of Future Cost/Benefit Basis.

The Review Committee does not anticipate significant changes in the cost/benefit ratio during the next five-year period. The CICI is not currently in debt to anyone. Its responsible management of its resources bodes well for the future.

(e) Recommendation Regarding Increased Support, Continuation at Current Level, Reduction or Elimination of the CICI.

As a result of the review process, the Review Committee recommends that the Center for Intelligent Chemical Instrumentation be continued with support at its current level. The Committee recommends that the Center publish a promotional brochure, pay attention to a systematic process of technology transfer, and consider seating a CICI advisory committee that includes industrial membership.

The Review Committee is concerned that needs for increased laboratory space and clerical/technician help may lie in the CICI's near future.

Center for Intelligent Chemical Instrumentation (CICI)

Self-Study

April 1, 1997

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Department of Chemistry Ohio University Athens, OH 45701

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An inspection of Table I reveals that the CICI researchers have been extremely successful in attracting external funding. Over \$2.4 million in total funding has been obtained, and 58% of submitted proposals have been funded. Given the extremely competitive funding environment currently being encountered, we feel that these successes clearly establish the viability of CICI and demonstrate the importance and fundability of the research being performed. The increasing numbers of publications and presentations being generated also help to confirm the viability of the research activities occurring in CICI.

Table II provides a breakdown of the sources of the \$2.4 million in acquired funding. The percentages from industrial, Federal, State, and Ohio University sources are 14.4, 77.2, 7.5, and 0.9%, respectively. These values confirm that greater than 99% of the funding attracted by CICI has originated from outside of Ohio University, and that approximately 92% of the funding has originated from Federal and industrial sources. Each of the industrial funding arrangements has produced research collaborations between the faculty and student researchers in CICI and their industrial counterparts. Similar relationships have been established in the context of the work funded by the Department of the Army, the Department of the Air Force, and the Department of Energy. Also of note is the successful participation by CICI members in two inter-university consortia formed under the Board of Regents Investment Fund program.

Current Research Activities

The data presented in Tables I and II and expanded in Appendices I-VI illustrate that a variety of research activities are currently underway at CICI. Presented below is a synopsis of the current research activities of the faculty participants.

Anthony R. J. Andrews

- Chemical sensors based on chemiluminescence
- High-speed gas chromatography

Howard D. Dewald

- New strategies in electrochemical detection in chromatography
- Applications of chaos theory in the study of electrochemical processes
- Development of chemically modified electrodes for drug interaction studies
- Voltammetric sensors for environmental field-testing of toxic and hazardous materials

Peter de B. Harrington

- Expert systems and neural networks for automated chemical analysis
- New methods for chromatographic fingerprinting
- New data analysis strategies for use in protein sequencing
- Material characterization by mass spectrometry

CICI Participants

Gary W. Small, Professor of Chemistry and Director of CICI

Anthony R. J. Andrews, Assistant Professor of Chemistry

Howard D. Dewald, Associate Professor of Chemistry

Peter de B. Harrington, Associate Professor of Chemistry

Objectives

An essential component of the technology base of the United States is the development of state-of-the-art devices for detecting and quantifying chemical compounds in a variety of environments. For example, the competitiveness of the American chemical industry is directly dependent on the efficiency of the chemical processes used and on the quality control measures employed in the production of chemical materials. The key to monitoring and optimizing production efficiency, as well as monitoring product quality, is the availability of automated instrumentation that can make real-time quantitative measurements on the reactants and products involved in chemical processes. Just as important, worker safety in industrial settings is dependent on the availability of chemical sensing devices that can be used to detect the presence of hazardous materials.

The need for dedicated chemical measuring devices can be similarly motivated for regulatory monitoring of atmospheric emissions, groundwater monitoring, or monitoring at hazardous waste sites. Automated monitoring of clinically relevant chemical species in hospital settings or home patient monitoring of species such as glucose in blood provide additional examples of the need for state-of-the-art chemical sensors.

Each of the monitoring scenarios described above requires what might be termed "intelligent" chemical instrumentation. In each case, specific chemical species are being monitored in environments in which a variety of other chemical compounds may be present or in which a host of parameters may be changing such as temperature, pressure, or humidity. The term, "intelligent instrument", refers to a new generation of chemical sensors with advanced capabilities for overcoming these environmental effects by a synergistic combination of new measurement hardware and automated data analysis software.

The need for intelligent chemical instrumentation defines a natural interface between the basic research in chemical analysis being conducted in academic settings and the application-driven industrial, regulatory, or hospital settings described above. Motivated by a desire to enhance such collaborations between academic, industrial, and government scientists, the Center for Intelligent Chemical Instrumentation (CICI) was established. The objectives of CICI are to foster industrial-academic and academic-governmental research collaborations in the area of intelligent chemical instrumentation, to provide advanced training for graduate and

undergraduate students, and to seek national and international prominence for Ohio University in this important research area.

History

CICI was formally established by the Ohio University Board of Trustees on April 3, 1992. The founding members of CICI were Professors Gary Small, Howard Dewald, and Peter Harrington, all of whom hold appointments in the Department of Chemistry. In 1995, Professor Anthony Andrews joined the center. Professor Andrews also holds an appointment in the Department of Chemistry.

The development of CICI can be assessed by consideration of standard measures of research productivity. Table I summarizes these accomplishments in the areas of patents, research publications, research presentations, research proposals submitted, research proposals funded, and external funding received. Appendices I, II, III, IV, V, and VI provide more detail on the individual items that are summarized in Table I.

Table I

Summary of CICI Research Productivity

			•				
	1992 [.]	1993	1994	1995	1996	1997 ¹	Total
Patents	0	0	0	3	0	0	3
Publications	~7 :	14	9	. 8	20	-13	71 ·
Presentations	10	40	42	39	45	21	197
Proposals submitted	7	.4	5	8	8	6	38
External funding requested ²	\$315	\$1,171	\$1,476	\$1,320	\$2,401	\$496	\$7,179
Proposals funded	6	4	3	3	3	3.	22
External funding received ²	\$167	\$1,171	\$120	\$243	\$610	\$100	\$2,411

¹Through April 1, 1997. ²In \$1000s.

Gary W. Small

- · Environmental monitors based on passive FTIR remote sensing
- Infrared sensors for determining glucose in blood
- Infrared-based fiber optic chemical sensors for process monitoring/control
- Advanced signal processing and multivariate calibration strategies for chemical analysis

Table II

Sources of Research Funding

Funding Source	Amount			
Industrial				
Dow Chemical Co.	\$5,000			
National Biscuit Co.	\$50,000			
Battelle Memorial Institute	\$105,936			
Selfcare, Inc.	\$128,103			
Shell Development Corp.	\$57,500			
Federal				
Department of the Army	\$872,579			
Air Force Office of Scientific Research	\$43,137			
National Institutes of Health	\$911,675			
Department of Energy	\$35,000			
State of Ohio				
Board of Regents Investment Fund	\$180,050			
Ohio University	· · · · ·			
Ohio University Research Committee	\$7,000			
Ohio University Postdoctoral Fellowship	\$14,789			
Total	\$2,410,769			

Future Plans

As documented above, the first five years of development of CICI have been extremely successful in terms of demonstrated research productivity and the acquisition of significant external research funding. As we look toward the next five years, two areas of growth are most important. First, we must seek additional collaborative efforts with researchers in other departments at Ohio University. The researchers in CICI have established strong collaborative efforts with scientists in industrial and government laboratories, but no collaborations with Ohio University faculty outside of the Department of Chemistry have been established. Collaborations may also be possible with other University centers and institutes. For example, researchers in the Center for Geotechnical and Environmental Research may share mutual interests in the development of chemical sensors.

Second, increased efforts need to be made to establish contacts with industry. While over 14% of the external funding acquired by CICI has been obtained from industrial sources, very little of that funding has derived from Ohio industry. One possible mechanism for increasing our ties to local industry is the development of workshops or short courses that could be attended by industrial researchers. These are popular vehicles for continuing education at many companies. The resident expertise in CICI in the development of computer-based algorithms for the analysis of sensor data represents a logical focus area for this activity. The proposed enhancement of the conference facilities on campus may be of significant value in helping to achieve this goal.

Funding Status

When CICI was established, no funds were requested from the Center Revolving Fund. It was anticipated that sufficient funding for use in support of the activities of the center would be obtained through the incentive fund (i.e., through return of indirect costs). Since the inception of CICI, funding of \$73,629 has been obtained from the incentive fund. Expenditures have totaled \$20,113, leaving an unobligated balance of \$53,516 as of February 28, 1997. Categories of expenditures have included equipment, matching funds for the successful Board of Regents Investment Fund proposals, and faculty and student travel to scientific meetings. We propose to continue funding the center through the incentive fund.

Appendix I

Patents of Faculty Participants Since Inception of CICI

United States Patents

Gary W. Small and Mark A. Arnold, "Method and Apparatus for Non-Invasive Determination of Physiological Chemicals, Particularly Glucose", U.S. Patent 5,459,317, issued 10/17/95.

Peter de B. Harrington and Hans P. Whittenberg, "Gas Chromatography Sample Injector and Apparatus Using Same," U. S. Patent 5,472,670, issued 12/5/95.

International Patents

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Gary W. Small and Mark A. Arnold, "Method and Apparatus for Non-Invasive Determination of Physiological Chemicals, Particularly Glucose", PCT Patent Application PCT/US95/01556 (filed 2/7/95), published 8/17/95 as International Publication No. WO 95/22046.

Appendix II

Publications of Faculty Participants Since Inception of CICI

(Updated)

J. G. Bruno, S. B. Collard and A. R.J. Andrews, "Further Characterization of Tunicate and Tunichrome Electrochemiluminescence," *J. Bioluminescence and Chemiluminescence* in press.

Lu, G; Zhou, X. Arnold, M. A.; Small, G. W.; Multivariate Calibration Models Based on the Direct Analysis of Near-Infrared Single-Beam Spectra; *Applied Spectroscopy* **1997** in press.

Shaffer, R. E.¹; Small, G. W.; Learning Optimization from Nature: Genetic Algorithms and Simulated Annealing; *Analytical Chemistry* **1997** in press.

P.B. Harrington, E. Reese¹, P. Rauch¹, L. Hu¹ and D.M. Davis, "Interactive Self-Modeling Analysis of Ion Mobility Spectra" *Applied Spectroscopy* **1997** in press.

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¹Ohio University graduate student.

²Ohio University undergraduate student.

Appendix III

Presentations of Faculty Participants Since Inception of CICI

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Ding, Q.¹; Small, G. W.; Application of Genetic Algorithm-Based Wavelength Selection to Quantitative Near-Infrared Spectroscopy; 1997 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA. March, 1997.

Cingo, N. A.¹; Small, G. W.; Determination of Glucose in Biological Matrices by Nonlinear Modeling of Bandpass Filtered FTIR Interferogram Data; 1997 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1997.

Koehler, F. W.¹; Small, G. W.; Design of Calibration Transfer Protocols for Automated FTIR Remote Sensing Measurements; 1997 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1997.

Lu, G.; Arnold, M. A.; Small, G. W.; Experimental and Computational Design Strategies for Developing Path Length Insensitive PLS Calibration Models from Near-Infrared Spectra; 1997 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1997.

Kroutil, R. T.; Combs, R. J.; Knapp, R. B.; Small, G. W.; Bangalore, A. Sl; Passive Trichloroethylene Remote Detection by Direct Analysis of FTIR Interferograms; 1997 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1997.

Idwasi, P. O.¹; Small, G. W.; Environmental Monitoring by FTIR Remote Sensing: Recognition of Volatile Organic Compounds by Analysis of Digitally Filtered Interferogram Data; American Chemical Society Central Regional Meeting, Midland, MI, to be presented May, 1997.

Small, G. W.; Data Analysis Strategies for FTIR Remote Sensing Measurements; 29th American Chemical Society Central Regional Meeting, Midland, MI, to be presented May, 1997.

E. Wiley² and A. R. J. Andrews, "Quick Screening for Drugs of Abuse by Fast Gas Chromatography," presented at the Pittsburgh Conference on Analytical Chemistry, Atlanta, March 1997.

G. P. Jackson¹ and A. R. J. Andrews, "Chlorinated Pesticide Determination by Solid-Phase Microextraction and Fast Gas Chromatography," presented at the Pittsburgh Conference on Analytical Chemistry, Atlanta, March 1997.

V. J. North¹ and A. R. J. Andrews, "A Simple Separation for Opiates using HPLC with Chemiluminescent Detection," presented at the Pittsburgh Conference on Analytical Chemistry, Atlanta, March 1997.

A. R. J. Andrews, "Fast GC of Drugs and Pesticides - The way of the future?," presented at Upper Ohio Valley ACS meeting, Mariatta OH, February 1997.

A. R. J. Andrews, "The Need for Speed - Fast GC of Drugs of Abuse and Pesticides," presented at West Virginia Wesleyan College WV, February 1997.

A. R. J. Andrews, "The Need for Speed - Fast GC of Drugs of Abuse and Pesticides," presented at St. Vincent College PA, February 1997.

Rhode, M. A.; Thomas, J.; Rollins, R. W.; Dewald, H. D., 'Controlling Chaos in an Electrochemical Cell Using a Learning Algorithm," Dynamic Days Arizona-16th Annual International Conference, Tempe, AZ, January 1997.

Petrovic, S. C.¹; Dewald, H. D., "Voltammetric Detection of Lead and Cadmium Separated by Thin-Layer Chromatography from a Matrix Containing Humic Acid," 48th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, Abstr. No. 784, March 1997.

Kariuki, S.¹; Dewald, H. D., "Electrochemical Oscillations of Gallium(III) and Indium(III) at a Dropping Mercury Electrode," 48th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectrscopy, Atlanta, GA, Abstr. No. 1182, March 1997.

P.J. Rauch¹, P.B. Harrington, and D.M. Davis, "Making a Smart Instrument: Chemometric Resolution of Mixture Components by Ion Mobility Clear Down Rates" presented at The 1997 Pittsburgh Conference, Atlanta, GA, March, **228**.

E.S. Reese¹, D.M. Davis, and P.B. Harrington, "Detection of Diazinon on Apples Using an Ion Mobility Spectrometer" presented at The 1997 Pittsburgh Conference, Atlanta, GA, March, **489**.

C. Wan¹ and P.B. Harrington, "Analysis of Gasoline Contaminated Water with a Membrane Interfaced Ion Mobility Spectrometer" presented at The 1997 Pittsburgh Conference, Atlanta, GA, March, **552P**.

L. Hu¹, C. Cai¹, and P.B. Harrington, "Two-Dimensional Fourier Transform Compression of Ion Mobility Spectra" presented at The 1997 Pittsburgh Conference, Atlanta, GA, March, **071**.

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Ding, Q.¹; Small, G. W.; Quantitative Analysis of Volatile Organic Compounds in Water Samples by Near-Infrared Spectroscopy; 1996 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1996.

Cingo, N.¹; Small, G. W.; Quantitative Determination of Volatile Organic Compounds by Passive FTIR Remote Sensing Measurements; 1996 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1996.

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V. North¹ and A. R. J. Andrews, "A Simple Screening System for Opiates using HPLC with Chemiluminescence Detection," presented at the 23rd Federation of Analytical Chemistry and Spectroscopy Societies Conference, Kansas City, October 1996.

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A. R. J. Andrews, "Seeing the Light and the Need for Speed," presented at Tyndall Air Force Base, Florida, July 1996.

E. Amiott² and A. R. J. Andrews, "Improvements to the Determination of Morphine by HPLC and Chemiluminescence Detection," presented at the Pittsburgh Conference on Analytical Chemistry, Chicago, March 1996.

W. Li¹ and A. R. J. Andrews, "The Use of Inert Metal Tubing in High-Speed Gas Chromatography," Poster Presentation, at the Pittsburgh Conference on Analytical Chemistry, Chicago, March 1996.

A. R. J. Andrews, "Application of Novel Separation Methods to Problems in Forensic Chemistry," presented at St. Thomas More University, Kentucky, February 1996.

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P.B. Harrington and J.Y. Tong, "Drugs of Abuse Detection with Ion Mobility Spectrometry" presented at The 1996 Pittsburgh Conference, Chicago, IL, March, **894**.

P.R. Rauch¹, P.B. Harrington, and D.M. Davis, "Food for Thought: Food Freshness Using an Ion Mobility Spectrometer" presented at The 1996 Pittsburgh Conference, Chicago, IL, March, **508**.

E.S. Reese¹, J.Y. Tong, P.B. Harrington, D.M. Davis, "Pesticide Detection with Ion Mobility Spectrometry" presented at The 1996 Pittsburgh Conference, Chicago, IL, March, **484**.

P.B. Harrington, P. Zheng¹, and D.M. Davis, "Automatic Fourier Transform Deconvolution in Quantitative Analysis of Ion Mobility Spectra" presented at The 1996 Pittsburgh Conference, Chicago, IL, March, **39**7

L. Hu¹, P.B. Harrington, and D.M. Davis, "Quantitative Analysis of Ion Mobility Spectra Using Chemometric Data Expansion" presented at The 1996 Pittsburgh Conference, Chicago, IL, March, **395**.

Dewald, H. D.; Chen, J.², "Cyclic Voltammetry of Cobalt Sepulchrate Incorporated in Nafion Films," 47th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, Abstr. No. 1002, March 1996.

Lorenz, C. R.¹; Dewald, H. D.; Lemke, F. R., "Electrochemistry of Hexacoordinate Porphyrinatosilicon(IV) Complexes of the Type (Por)SiX₂ (Por-TTP, TPP, OEP, T(CF₃P)P; X=F, CI, O₃SCF₃)," 29th Organosilicon Symposium, Evanston, IL, Abstr. No. B17, March 1996.

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Arnold, M. A.; Small, G. W.; Noninvasive Clinical Chemistry with Near Infrared Spectroscopy; 1996 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1996.

Small, G. W.; Data Analysis Strategies for Chemical Sensors Based on Infrared Spectroscopy; University of Iowa, Iowa City, IA, July, 1996.

Small, G. W.; Environmental Monitoring Techniques Based on Fourier Transform Infrared Remote Sensing Measurements; University of Iowa, Iowa City, IA, September, 1996.

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Bangalore, A. S.¹; Small, G. W.; Detection of Trichloroethylene by Direct Analysis fo Interferogram Data from Open-Path FTIR Remote Sensing Measurements; 1995 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, New Orleans, LA, March, 1995.

Mattu, M. J.¹; Small, G. W.; Quantitative Analysis of Remote Sensing FTIR Interferogram Data; 1995 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, New Orleans, LA. March, 1995.

Shaffer, R. E.¹; Small, G. W.; Spectral Preprocessing Tools for Quantitative and Qualitative Multivariate Analysis; 1995 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, New Orleans, LA, March, 1995.

Schweitzer, R. C.¹; Small, G. W.; Chemical Shift Retrieval and Model Building Strategies for¹³C NMR Spectrum Simulation; 1995 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, New Orleans, LA, March, 1995.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Instrumental Requirements for Measuring Clinical Blood Analytes with Near-Infrared Spectroscopy; 107th Annual Meeting of the Iowa Academy of Science, Wartburg College, Wartburg, IA, April, 1995.

Shaffer, R. E.¹; Small, G. W.; GERM: Genetic Exploration for Optimal Regression Models; Ohio Aerospace Institute Neural Networks Symposium and Workshop, Athens, OH, August, 1995.

Egolf, D. S.; Small, G. W.; Simulation of ¹³C-NMR Spectra for Cyclic Lignan Compounds; Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October, 1995.

Cingo, N. A.¹; Small, G. W.; Effect of Spectral Resolution on the Determination of Glucose in Biological Matrices by Fourier Transform Near-Infrared Spectroscopy; Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October, 1995.

Mattu, M. J.¹; Small, G. W.; Signal Processing Methods for the Quantitative Analysis of Passive Remote Sensing FTIR Interferogram Data; Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October, 1995.

Ding, Q.¹; Small, G. W.; Determination of Volatile Organic Compounds in Water by Near-Infrared Spectroscopy; Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October, 1995.

P. Zheng¹ and P.B. Harrington, "Quantitative Analysis of Volatile Organic Compounds Using Ion Mobility Spectrometry and Cascade Correlation Networks" presented at The 22nd Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October 16, 1995.

P.B. Harrington, "Temperature Constrained-Cascade Correlation Neural Networks" presented at The 22nd Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October 16, 1995.

P.B. Harrington, "Temperature Constrained-Cascade Correlation Neural Networks" presented at the Ohio Aerospace Institute Neural Networks 1995 Symposium, Athens, Ohio, August 21, 1995.

P. Zheng¹ and P.B. Harrington, "Quantitative Analysis of Volatile Compounds Using Ion Mobility Spectrometry and Cascade Correlation Neural Networks" presented at the Ohio Aerospace Institute Neural Networks 1995 Symposium, Athens, Ohio, August 21, 1995.

P.B. Harrington, "Making the Connection Between Neural Networks and Mass Spectrometry" presented at University of Whales, Swansea, United Kingdom, August 18, 1995.



P.B. Harrington, P. Zheng¹, and Dennis Davis, "Automatic Deconvolution-Temperature Constrained Cascade Correlation Neural Networks for Ion Mobility Data Analysis" presented at The Fourth International Workshop on Ion Mobility Spectrometry, Cambridge, United Kingdom, August 7, 1995.

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P.B. Harrington, P. Zheng¹, P. Tandler¹, and B. Wabuyele¹, "Making the Connection: Neural Networks and Chemistry" presented at the National Center for Toxicological Research, Little Rock, AR, April 7, 1995.

P.B. Harrington, P. Zheng¹, P. Tandler¹, and B. Wabuyele¹, "Making the Connection: Neural Networks and Chemistry" presented at Northern Kentucky University, KY, March 20, 1995.

L. Hu¹, E. Saulinskas, P. Johnson, and P.B. Harrington, "Evaluation of a Computerized Peptide Sequence Identification System" presented at The 1995 Pittsburgh Conference, New Orleans, LA, March 1995, **890**.

P.B. Harrington and B. Wabuyele¹, "Fuzzy Optimal Associative Memory for Background Prediction of Spectra" presented at The 1995 Pittsburgh Conference, New Orleans, LA, March 1995, **711**.

P.J. Tandler¹, J.A. Butcher, and P.B. Harrington, "Calibration of a Chemometric Detector for Plastic Recycling" presented at The 1995 Pittsburgh Conference, New Orleans, LA, March 1995, **707**.

P.J. Rauch¹ and P.B. Harrington, "Algorithms for Mass Spectral Verification of Chemical Arms Treaties" presented at The 1995 Pittsburgh Conference, New Orleans, LA, March 1995, **550**.

P.B. Harrington and P. Zheng¹, "Making the Connection: Neural Networks and Chemistry" presented at The Dayton Section of the Society of Applied Spectroscopy October Meeting, Dayton, OH, February 22, 1995.

Parmananda, P.; Johnson, G. A.; Rollins, R. W.; Dewald, H. D., "Stabilization of Steady States in an Electrochemical Cell," Dynamic Days Texas, Houston, TX, January 1995.

Dewald, H. D.; Laughlin, J. B., Jr.¹, "Voltammetric Analysis of Biochanin A," 46th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, New Orleans, LA, Abstr. No. 076, March 1995.

Lorenz, C.¹; Dewald, H. D.; Lemke, F. R., "Electrochemistry of the Six-Coordinate Tetrakis(p-Tolyl)-Porphyrinatosilicon(IV) Complex (TTP)SiX₂ (X = CI, F, O₃SCF₃)," 210th ACS National Meeting, Chicago, IL, Abstr. No. INOR 536, August 1995.

Lorenz, C. R.¹; Dewald, H. D.; Lemke, F. R., "Electrochemistry of the Six-Coordinate Tetraarylporphyrinato)-silicon(IV) Complexes (P)SiX₂," 22nd Federation of Analytical Chemistry and Applied Spectroscopy Societies Meeting, Cincinnati, OH, Abstr. No. 456, October 1995.

Petrovic, S. C.1; Dewald, H. D., "Modified Mercury Electrodes and Ultramicroelectrodes for

Voltammetric Determination at a Mercury Film Ultramicroelectrode of Metallic Analytes Separated by Thin Layer Chromatography," 22nd Federation of Analytical Chemistry and Spectroscopy Societies Meeting, Cincinnati, OH, Abstr. No. 466, October 1995.

Kariuki, S.¹; Dewald, H. D., "Evaluation of the Diffusion Coefficients of In(III) and Ga(III). 22nd Federation of Analytical Chemistry and Spectroscopy Societies Meeting, Cincinnati, OH, Abstr, No. 467, October 1995.

Dewald, H. D.; Aldstadt, J. H.¹; Petrovic, S. C.¹, "Modified Mercury Electrodes and Ultramicroelectrodes for Potentiometric and Voltammetric Stripping Analysis," 22nd Federation of Analytical Chemistry and Spectroscopy Societies Meeting, Cincinnati, OH, Abstr. No. 591, October 1995.

Small, G. W.; Determination of Glucose in Biological Matrices by Near-Infrared Spectroscopy; Society for Applied Spectroscopy Indiana Section. Indianapolis, IN, January, 1995.

Small, G. W.; Arnold, M. A.; Analytical Chemistry and Medical Science: A Powerful Partnership in Biomedical Applications of Near Infrared Spectroscopy; 1995 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, New Orleans, LA, March, 1995.

Small, G. W.; Chemical Sensors Based on FTIR Spectroscopy; Westminster College, New Wilmington, PA, April, 1995.

Small, G. W.; Quantitative Analysis of Passive FTIR Remote Sensing Data; EWA, Inc., Tysons Corner, VA, May, 1995.

Small, G. W.; Automated Detection of Acetone and Trichloroethylene by FTIR Remote Sensing; U. S. Army Night Vision Laboratory, Fort Belvoir, VA, May, 1995.

Small, G. W.; Determination of Glucose in Biological Matrices by Near-Infrared Spectroscopy: Signal Processing Methods for Enhancing Selectivity and Sensitivity; Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Cincinnati, OH, October, 1995.

Small, G. W.; Environmental Monitoring by FTIR Remote Sensing; Ball State University, Muncie, IN, November, 1995.

A. R. J. Andrews, "Forensic Chemistry, the View from Athens," presented at Miami (OH) University, July 1995.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Spectrometric Determination of Glucose in Whole Blood Using FT-NIR, Society of Applied Spectroscopy Chicago Section, Villa Park, IL, February, 1994.

Egolf, D. S.; Small, G. W.; Simulation of Carbon-13 Nuclear Magnetic Resonance Spectra of Lignans; American Chemical Society National Meeting, San Diego, CA, March, 1994. (poster)

Schweitzer, R. C.¹; Small, G. W.; Atom Subsetting Techniques for C-13 NMR Spectrum Simulation; American Chemical Society National Meeting, San Diego, CA, March, 1994. (poster)

Kroutil, R. T.; Combs, R. J.; Knapp, R. B., Small, G. W.; An Implementation of Pattern Recognition Methods for Passive FTIR Remote Sensing; 1994 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1994.

Mattu, M. J.¹; Small, G. W.; Quantitative Analysis of Fourier Transform Infrared Interferogram Data; 1994 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1994.

Shaffer, R. E.¹; Small, G. W.; Collective Optimization of Piecewise Linear Discriminants: Application to FTIR Remote Sensing; 1994 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1994.

Bangalore, A. S.¹; Small, G. W.; Optimized Digital Filter Designs for FTIR Interferograms: Application to Remote Sensing Measurements; 1994 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1994.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Progress Toward a Noninvasive Glucose Sensor; 106th Annual Meeting of the Iowa Academy of Science, St. Ambrose College, Davenport, IA, April, 1994.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; NIR Spectrometric Analysis of Glucose in Whole Blood; American Chemical Society Iowa Section, Grinnell, IA, May, 1994 (poster).

Schweitzer, R. C.¹; Small, G. W.; Performance Enhancement of Database Retrieval Techniques for Carbon-13 NMR Spectrum Simulation; 21st Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies, St. Louis, MO, October, 1994.

Mattu, M. J.¹; Small, G. W.: Application of Multivariate Calibration Techniques to Quantitative Analysis of FTIR Interferogram Data; 21st Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies. St. Louis, MO, October, 1994.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Glucose Determination in Biological Matrices Using Near Infrared Spectroscopy; 21st Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies, St. Louis, MO, October, 1994.

Bangalore, A. S.¹; Small, G. W.; Model Building Strategies for Computing Bandpass Digital Filters from FTIR Interferogram Data: 21st Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies, St. Louis, MO, October, 1994.

Shaffer, R. E.¹; Small, G. W.; Genetic Algorithms for Optimization of Piecewise Linear Discriminants: Application to FTIR Remote Sensing; 21st Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies, St. Louis, MO, October, 1994.

Bangalore. A. S.¹; Small, G. W.; Evaluation of Digital Filter Design Characteristics in the Analysis of Open Path FTIR Interferogram Data; Eastern Analytical Symposium, Somerset, NJ, November, 1994. (poster)

Shaffer, R. E.¹; Small, G. W.; Comparison of Optimization Algorithms for Piecewise Linear Discriminant Analysis: Application to FTIR Remote Sensing; Eastern Analytical Symposium, Somerset, NJ, November, 1994. (poster)

P.B. Harrington, "Making the Connection: Neural Networks and Chemistry" presented at The Cleveland Section of the American Chemical Society/Society of Applied Spectroscopy October

Meeting, Cleveland, OH, October 16, 1994.

P.B. Harrington, "Making the Connection: Neural Networks and Chemistry" presented at John Carrol University, Cleveland, OH, October 26, 1994.

P.B. Harrington and P. Zheng¹, "Quantitative Analysis of Volatile Organic Compounds Using Ion Mobility Spectra and Cascade Correlation Neural Networks" presented at The Third International Workshop on Ion Mobility Spectrometry, Galveston, TX, October, 1994.

P.B. Harrington, "Evaluation of Cascade Correlation Neural Networks" presented at The 21st Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, St. Louis, MO, October 14, 1994.

P.B. Harrington, "Chemometrics: New Approaches to Solving Old Problems" presented at Xavier University, Cincinnati, OH, September 16, 1994.

P.J. Tandler¹, T. Hu, J.A. Butcher, and P.B. Harrington, "A Chemometric Detector for Plastic Recycling" presented at The Fourth Hidden Peak Symposium on Computer-Enhanced Analytical Spectroscopy, Snowbird, UT, June, 1994.

D.A. Wuersig¹, B.W. Wabuyele, and P.B. Harrington, "Cascade Correlation Neural Networks" presented at the Eastman Kodak Company, Rochester, NY, June 3, 1994.

D.A. Wuersig¹ and P.B. Harrington, "Cascade Correlation Neural Networks" presented at The 11th Annual Quality and Productivity Research Conference, Rochester, NY, June 2, 1994.

H. Whittenburg¹, D. King, and P.B. Harrington, "Characterization of Pathogenic Microorganisms Using Pyrolysis High Resolution Gas Chromatography" presented at The 1994 Pittsburgh Conference, Chicago, IL, March 1994, **814**.

D. Wuersig¹ and P.B. Harrington, "Quantitative Spectra-Retention Relationships" presented at The 1994 Pittsburgh Conference, Chicago, IL, March 1994, **792**.

B. Wabuyele¹ and P.B. Harrington, "A Filter for Spectrochemical Data with an Autoassociative Backpropagation Neural Network" presented at The 1994 Pittsburgh Conference, Chicago, IL, March 1994, **791**.

L. Hu¹, E. Saulinskas, P. Johnson, and P.B. Harrington, "An Intelligent Algorithm for Peptide Sequence Identification" presented at The 1994 Pittsburgh Conference, Chicago, IL, March 1994, **790**.

P. Zheng¹, D. Davis, and P.B. Harrington, "Comparison of Backpropagation and Counterpropagation Neural Network for Quantitative Analysis of Ion Mobility Spectra" presented at The 1994 Pittsburgh Conference, Chicago, IL, March 1994, **641**.

P.B. Harrington, "Optimal Fuzzy Decision Making" presented at The 1994 Pittsburgh Conference, Chicago, IL, March 1994, 640.

Aldstadt, J. H.¹; King, D. F.; Dewald, H. D., "Determination of Trace Heavy Metals by Flow Injection Voltammetric and Potentiometric Stripping Analysis," Sixth Winter Conference on Flow Injection Analysis, San Diego, CA, Abstr. No. P-3, January 1994. Aldstadt, J. H.¹; King, D. F.; Dewald, H. D., "Field Portable Trace Heavy Metal Determinations Using Potentiometric Stripping Analysis," 8th International Forum Process Analytical Chemistry and 2nd International Conference On-Site Analysis, Houston, TX, Abstr. No. O-068, January 1994.

Aldstadt, J. H.¹; Dewald, H. D., "Determination of Lead in Blood by Flow Injection Potentiometric Stripping Analysis. 45th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, Abstr. No. 1033, February 1994.

Dewald, H. D.; Parmananda, P.; Rhode, M. A.; Johnson, G. A.; Rollins, R. W.; Markworth, A. J., "Control of Chaos and Stabilization of the Steady State in an Electrochemical System," 21st Federation of Analytical Chemistry and Spectroscopy Societies Meeting, St. Louis, MO, Abstr. No. 784, October 1994.

Arnold, M. A.; Small, G. W.; Methods for Measuring Glucose in Biological Matrices by FT-NIR Spectroscopy; 1994 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, March, 1994.

Small, G. W.; Environmental Monitoring by Fourier Transform Infrared Remote Sensing; Northern Kentucky University, Highland Heights, KY, March, 1994.

Small, G. W.; Chemical Sensors Based on Infrared Spectroscopy; Marietta College, Marietta, OH, March, 1994.

Small, G. W.; Recent Advances in Signal Processing Techniques for Open-Path FTIR Spectroscopy; EWA, Inc., Tysons Corner, VA, May, 1994.

Small, G. W.; Recent Advances in Signal Processing Techniques for Open-Path FTIR Spectroscopy; U. S. Army Night Vision Laboratory, Fort Belvoir, VA, May, 1994.

Small, G. W.; Determination of Glucose in Biological Fluids Using Near-IR Spectroscopy"; 1994 Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Baltimore, MD, November, 1994.

Small, G. W.; Arnold, M. A.; Data Analysis Methods for the Determination of Glucose in Biological Matrice's by Near-Infrared Spectroscopy; American Chemical Society National Meeting, Washington, DC, August, 1994.

Small, G. W.; Chemometrics and Noninvasive Spectroscopy--Lessons Learned from Near-Infrared Glucose Studies; Nellcor Inc., Pleasanton, CA, December, 1994.

Schweitzer, R. C.¹; Small, G. W.; Automated Modeling Techniques for ¹³C NMR Chemical Shift Prediction; 1993 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1993.

Small, G. W.; Development of Digital Filtering Techniques as Preprocessing Tools for Multivariate Calibration; 1993 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1993.

Tucker, M. D.; Small, G. W.; Hammaker, R. M.; Fateley, W. G.; Data Analysis Methods for the

Detection of Benzene by Remote Fourier Transform Infrared Spectroscopy; 1993 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, March, 1993.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Temperature and the Near Infrared Spectroscopic Measurement of Glucose in Aqueous Solutions; 105th Annual Meeting of the Iowa Academy of Science, Luther College, Decorah, IA, April, 1993.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Temperature and the Near Infrared Spectroscopic Measurement of Glucose in Aqueous Solutions; American Chemical Society Iowa Section, Grinnell, IA, May, 1993 (poster).

Hazen, K. H.; Arnold, M. A.; Small, G. W.; NIR Spectrometric Analysis of Glucose in Whole Blood; American Chemical Society National Meeting, Chicago, IL, August, 1993 (poster).

Mattu, M. J.¹; Small, G. W.; Quantitative Analysis of Fourier Transform Infrared Interferogram Data; 25th American Chemical Society Central Regional Meeting, October, 1993.

Bangalore, A. S.¹; Small, G. W.; Detection of Methanol by Direct Analysis of Interferogram Data from FTIR Remote Sensing Measurements; 25th American Chemical Society Central Regional Meeting, October, 1993.

Shaffer, R. E.¹; Small, G. W.; Experimental Design Study of Parameters Involved in Digital Filter Generation Used in FTIR Remote Sensing Data Analysis; 25th American Chemical Society Central Regional Meeting, October, 1993.

Hazen, K. H.; Arnold, M. A.; Small, G. W.; Development of a Noninvasive Blood Glucose Monitoring System Using Near-Infrared Spectroscopy; 28th American Chemical Society Midwest Regional Meeting, Columbia, MO, November, 1993.

Rollins, R. W.; Parmananda, P.; Sherard, P.; Dewald, H. D., "Controlling Chaos in Highly Dissipative Systems," Dynamic Days Arizona-12th Annual International Conference, Tempe, AZ, January 1993.

Parmananda, P.; Sherard, P.; Rollins, R. W.; Dewald, H. D., "Experimental Control of Chaos in an Electrochemical Cell," Dynamic Days Arizona-12th Annual International Conference, Tempe, AZ, January 1993.

Aldstadt, J. H.¹; Dewald, H. D., "Potentiometric Stripping Analysis Using Polymer-Modified Electrodes," 44th Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta, GA, Abstr. No. 227, March 1993.

Dewald, H. D.; Parmananda, P.; Sherard, P.; Rollins, R. W., "Control of Chaos in an Electrochemical Cell," 1993 International Electroanalytical Symposium, Indianapolis, IN, Curr. Sep. 1993, 12(2), 109, Abtra. No. 214, May 1993.

Rollins, R. W.; Paramanda, P.; Sherard, P.; Dewald, H. D., "Recursive Proportional-Feedback and Its Use of Control Chaos in an Electrochemical System," 2nd Experimental Chaos Conference, Arlington, VA, Abstr. No. C3, October 1993.

Dewald, H. D., "Control of Chaotic Oscillations at Copper Electrodes," 1993 Midwestern

Universities Analytical Chemistry Conference, Bloomington, IN, October 1993.

Padture, S. P.; Mehta, B. V.; Ingram, D. C.; Moore, R.; Dewald, H. D., 'Experimental and Analytical Study of a Knee Prosthesis," 15th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Diego, CA, Abstr. No. 539, October 1993.

P.B. Harrington, "Spectroscopic Uses of Machine Learning: How to Make Computers Take the initiative" presented at The Ohio Section of the Society of Applied Spectroscopy, Cincinnati, OH, December 21, 1993.

P.B. Harrington, "Spectroscopic Uses of Machine Learning: How to Make Computers Take the Initiative" presented at Indiana University of Pennsylvania, Indiana, PA, October 22, 1993.

P.B. Harrington, "Temperature Constrained Neural Networks: Applications to Quantitative Analysis" presented at The 20th Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Detroit, MI, October 19, 1993, **217**.

P.B. Harrington, "Optimal Fuzzy Decisions for Problems in Analytical Chemistry." presented at the Midwestern University Analytical Chemistry Conference, Indiana University, Bloomington, IN, October 15, 1993.

P.B. Harrington, "Spectroscopic Uses of Machine Learning: How to Make Computers Take the Initiative." presented at The Indiana Section of the Society for Applied Spectroscopy, Butler University, Indianapolis, IN October 13, 1993.

P.B. Harrington, "Neural Networks Applied to Analytical Chemistry" presented at the Ohio University ΣX May Meeting, Athens, OH May 1993.

J.S. Siegel² and P.B. Harrington, "Identification of Hair by Pyrolysis Gas Chromatography" presented at the Regional Undergraduate Chemistry Poster Competition, Lexington, Kentucky, April 1993, **17**.

P.B. Harrington, "Constrained Learning Algorithms for Backpropagation Neural Networks: Local Temperature Maximization: Simulated Annealing Approach" presented at the 205th ACS National Meeting, Denver, CO, March 1993, **32**.

H. Whittenburg², D. King, B.W. Wabuyele¹, and P.B. Harrington, "Characterization of Food Oils Using High Resolution Pyrolysis-Gas Chromatography" presented at the 1993 Pittsburgh Conference, Atlanta, GA, March 1993, **746**.

B.W. Wabuyele¹ and P.B.Harrington, "Applications of Butterfly Neural Networks to Nonlinear Principal Component Analysis" presented at the 1993 Pittsburgh Conference, Atlanta, GA, March 1993, **371**.

P.J. Tandler¹ and P.B. Harrington, "Optimization of Neural Network Configurations by Experimental Design" presented at the 1993 Pittsburgh Conference, Atlanta, GA, March 1993, **369**.

P.B. Harrington, "Constrained Learning Algorithms for Backpropagation Neural Networks: Local Temperature Maximization" presented at the 1993 Pittsburgh Conference, Atlanta, GA, March 1993, **368**.

P. Zheng¹ and P.B. Harrington, "Cluster Analysis of Secondary Ion Mass Spectra" presented at the 1993 Pittsburgh Conference, Atlanta, GA, March 1993, **039**.

Kroutil, R. T.; Combs, R. J.; Knapp, R. B.; Small, G. W.; Remote Infrared Vapor Emission Measurements: The Optically Thick Emission Case: 1993 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Atlanta. GA, March, 1993.

Small, G. W.; Detection of Volatile Organic Compounds by Direct Analysis of Interferogram Data from FTIR Remote Sensing Measurements; American Chemical Society National Meeting; Denver, CO, April, 1993.

Small, G. W.; Development of a Noninvasive Sensor for Blood Glucose; Athens Lions Club, Athens, OH, June, 1993.

Kroutil, R. T.; Small, G. W.; Combs, R. J.; Knapp, R. B.; FTIR Passive Remote Sensing; 23rd International Symposium on Environmental Analytical Chemistry, Jekyll Island, GA, June, 1993.

Small, G. W.; Development of a Noninvasive Sensor for Blood Glucose Based on Infrared Spectroscopy; Society for Applied Spectroscopy, Burlingame, CA, July, 1993.

Small, G. W.; Chemometric Methods for Fourier Transform Infrared Spectroscopy: Applications to Environmental and Clinical Analyses; Chevron Research and Technology Co., Richmond, CA, July, 1993.

Kroutil, R. T.; Combs, R. J.; Knapp, R. B.; Small, G. W.; Remote Infrared Vapor Detection of Volatile Organic Compounds; 9th International Conference on Fourier Transform Spectroscopy, Calgary, Alberta, Canada, August, 1993.

Arnold, M. A.; Small, G. W.; Digital Filters to Enhance the Measurement of Glucose in Blood by Near-Infrared Spectroscopy; 1993 Eastern Analytical Symposium, October, 1993.

Small, G. W.; Arnold, M. A.; Data Analysis Methods for the Determination of Glucose in Blood by Near-Infrared Spectroscopy; Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies, Detroit, MI, October, 1993.

Kroutil, R. T.; Small, G. W.; Combs, R. J.; Knapp, R. B.; Remote Infrared Vapor Sensing -Rejection of the Background Spectral Signature; Optical Sensing for Environmental Monitoring Conference, Atlanta, GA, October, 1993.

Kroutil, R. T.; Knapp, R. B.; Combs, R. J.; Small, G. W.; Passive Remote Infrared Chemical Vapor Sensing in a Mobile Environment: 1992 Conference on Optical Remote Sensing and Applications to Environmental and Industrial Safety Problems, Houston, TX, April, 1992.

Tucker, M. D.; Small, G. W.; Hammaker, R. M.; Fateley, W. G.; Automated Detection of Benzene by Fourier Transform Infrared Remote Sensing; American Chemical Society Midwest Regional Meeting, Lawrence, KS, November, 1992.

Small, G. W.; Determination of Glucose in Blood by FTIR Spectroscopy; Virginia Commonwealth University, Richmond, VA, April, 1992.

Small, G. W.; Determination of Glucose in Blood by FTIR Spectroscopy; University of Michigan, Ann Arbor, MI, April, 1992.

Small, G. W.; Application of Digital Filtering Techniques to Problems in Quantitative FTIR Spectroscopy; 1992 Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies. Philadelphia, PA, September, 1992.

P.B. Harrington, "Minimal Neural Networks: Temperature Jump Training" presented at FACSS XIX, Philadelphia, PA, September, 1992.

P.B. Harrington, "Minimal Neural Networks" presented at Compana-1992, Jena, Germany, August 25, 1992.

P.B. Harrington and B.W. Pack², "FLIN: Fuzzy Linear Interpolating Network" presented at Chemometrics in Analytical Chemistry-1992, Montreal, Quebec, Canada, July 1992.

Parmananda, P.; Dewald, H.; Rollins, R. W., "Mixed-Mode Oscillations Found During Anodic Dissolution of Copper in an Acetate Electrolyte," 1992 Gordon Research Conference on Aqueous Corrosion, New London, NH, July 1992.

Parmananda, P.; Dewald, H.; Rollins, R. W., "Mixed-Mode Oscillations Found During Anodic Dissolution of Copper in an Acetate Electrolyte, " Complexity and Chaos Conference, Bryn Mawr, PA, August 1992.

¹Ohio University graduate student.

²Ohio University undergraduate student.

Appendix IV

Research Support Received Through CICI Since Inception

<u>Current</u>

Supporting Agency: Department of the Army Project Title: "Advanced Signal Processing and Pattern Recognition Methods for Passive Infrared Remote Sensors" Princ. Invest: Gary W. Small Amount funded: \$634,747 (total costs) Period: April 1, 1993 to September 30, 1997

Supporting Agency: National Institutes of Health Project Title: "Near Infrared Chemical Sensors for Diabetes and Hemodialysis" Princ. Invests: Mark A. Arnold (Univ. of Iowa), Gary W. Small, William Sivitz (Univ. of Iowa) Amount funded: \$450,053 (total costs) Period: July 1, 1996 to June 30, 2000

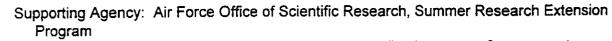
Supporting Agency: Ohio Board of Regents Investment Fund Project Title: "Ohio Micromachined Analytical Chemistry Consortium" Princ. Invest: Gary W. Small and Peter de B. Harrington Amount Funded: \$130,050 (Ohio University component) Period: July 1, 1996 to June 30, 1998

Supporting Agency: Ohio Board of Regents Investment Fund Project Title: "A Center of Excellence for Surface and Thin Film Analysis" Principal Investigator: Peter B. Harrington, Wim van Ooij (Univ. of Cincinnati) Amount Funded: \$50,000 (Ohio University component) Period: July 1, 1997 to June 30, 1999

Supporting Agency: US Army ERDEC Broad Agency Announcement Project Title: "Development of an Intelligent Ion Mobility Spectrometer for Counternarcotics Operations" Principal Investigator: Peter B. Harrington Amount Funded: \$200,000 (total costs)

Period: June 1, 1995 to June 1, 1997

Supporting Agency: Ohio University Research Committee
Project Title: "Development of an Inlet System for High Speed Gas Chromatography Using no Expendable Cryogen,"
Principal Investigator: Anthony Andrews
Amount Funded: \$7,000
Period: January 1, 1997 - December 31, 1997



Project Title: "Development of Multianalyte Electrochemiluminescence Sensors and Biosensors With Spectral Capabilities" Principal Investigator: Anthony Andrews Amount Funded: \$43,137 Period: January 1, 1997 - December 31, 1997

<u>Past</u>

Supporting Agency: Selfcare, Inc. Project Title: "Noninvasive Blood Glucose Measurements" Princ. Invest: Gary W. Small Amount Funded: \$29,623 (total costs) Period: January 1, 1996 to December 31, 1996

Supporting Agency: Ohio University Post Doctoral Fellowship Program Project Title: "Methodology for the Noninvasive Determination of Blood Glucose by Near-Infrared Spectroscopy" Princ. Invest: Gary W. Small Amount Funded: \$14,789 (total costs) Period: September 1, 1995 to August 31, 1996

Supporting Agency: Selfcare, Inc. Project Title: "Noninvasive Blood Glucose Measurements" Princ. Invest: Gary W. Small Amount Funded: \$28,528 (total costs) Period: January 1, 1995 to December 31, 1995

Supporting Agency: National Institutes of Health Project Title: "Noninvasive Chemical Sensor for Blood Glucose" Princ. Invests: Mark A. Arnold (Univ. of Iowa), Gary W. Small, William Sivitz (Univ. of Iowa) Amount funded: \$461,622 (total costs) Period: January 1, 1993 to December 31, 1995

Supporting Agency: Department of Energy/University of Chicago Project Title: "SAGE Software Workbench" Princ. Invest: Gary W. Small Amount Funded: \$35,000 (total costs) Period: May 5, 1994 to September 30, 1995

Supporting Agency: Battelle Memorial Institute, Columbus Division Project Title: "Determining Fruit Ripeness from Near Infrared Spectra" Princ. Invest: Gary W. Small and Peter de B. Harrington Amount Funded: \$55,641 (total costs) Period: July 1, 1994 to August 31, 1995

Supporting Agency: Selfcare, Inc. Project Title: "Noninvasive Blood Glucose Measurements" Princ. Invest: Gary W. Small Amount Funded: \$28,915 (total costs) Period: January 1, 1994 to December 31, 1994 Supporting Agency: Shell Development Corporation Project Title: "An Integrated ¹³C NMR Data Interpretation System" Princ. Invest: Gary W. Small Amount Funded: \$57,500 (total costs) Period: January 1, 1990 to December 31, 1993

Supporting Agency: Selfcare, Inc. Project Title: "Near-Infrared Spectroscopic Measurements of Glucose" Princ. Invest: Gary W. Small Amount Funded: \$24,015 (total costs) Period: January 1, 1993 to December 31, 1993

Supporting Agency: Superior Sensors, Inc. Project Title: "Near-Infrared Spectroscopic Measurements of Glucose" Princ. Invest: Gary W. Small Amount Funded: \$17,022 (total costs) Period: January 1, 1992 to December 31, 1992

Supporting Agency: Department of the Army Project Title: "FTIR Interferogram Data and the Development of Matrix Filters and Multiple Discriminant Analysis Pattern Recognition Coefficients" Princ. Invest: Gary W. Small Amount Funded: \$12,832 (total costs) Period: August 1, 1992 to September 30, 1992

Supporting Agency: Battelle, RTP NC Project Title: "Evaluation of Mass Spectral Identification Algorithms" Principal Investigator: Peter B. Harrington Amount Funded: \$50,295 Period: August 8, 1993 to March 31, 1993

Supporting Agency: National Biscuit Company Project Title: "On-line Flavor Monitoring" Principal Investigator: Peter B. Harrington Amount Funded: \$50,000 in equipment donation Period: 1992

Supporting Agency: US Army CRDEC Project Title: "Chemical Biological Mass Spectrometer / Data Analysis" Principal Investigator: Peter B. Harrington Amount Funded \$25,000 (total costs) Period: September 1, 1992 to March 31, 1993.

Supporting Agency: Dow Chemical Company Project Title: "Prediction of Polymer Properties by Pattern Recognition/Spectroscopic Probes" Principal Investigator: Peter B. Harrington Amount Funded: \$5,000 (direct costs) Period: 1992

Appendix V

Pending Research Proposals Submitted Through CICI

Supporting Agency: US Army ERDEC Broad Agency Announcement Project Title: "Development of Intelligent Ion Mobility Spectrometers" Principal Investigator: Peter B. Harrington Amount Requested: \$336,431 (total costs) Period: June 1, 1997 to June 1, 2000

Supporting Agency: Cottrell Scholars Program, Research Corporation
Project Title: "An Intelligent High Speed Gas Chromatography System for Drugs of Abuse in Body Fluids"
Principal Investigator: Anthony Andrews
Amount Requested: \$50,000
Period: July 1, 1997 to June 30, 1999

Supporting Agency: Society of Analytical Chemists of Pittsburgh Project Title: "Development of Multianalyte Electrochemiluminescence Sensors for Metal Ions" Principal Investigator: Anthony Andrews Amount Requested: \$10,000 Period: July 1, 1997 to June 30, 1999

Appendix VI

Unfunded Research Proposals Submitted Through CICI

Supporting Agency: National Institutes of Health Project Title: "Implantable Near-Infrared Glucose Sensor" Principal Investigator: Gary W. Small, Mark Arnold (Univ. of Iowa), William Sivitz (Univ. of Iowa) Amount Requested: \$1,130,950 Period: July 1, 1995 - June 30, 1999

Supporting Agency: National Institutes of Health Project Title: "Implantable Near-Infrared Glucose Sensor" Principal Investigator: Gary W. Small, Mark Arnold (Univ. of Iowa), Mark Sisson (TechnoLink) Amount Requested: \$765,316 Period: July 1, 1996 - June 30, 1999

Supporting Agency: Department of Defense AASERT Program Project Title: "Robust Data Analysis Methods for the Detection of Airborne Pollutants by

Passive Infrared Remote Sensing" Principal Investigator: Gary w. Small Amount Requested: \$225,657 Period: June 1, 1995 - May 31, 1998

Supporting Agency: DARPA

Project Title: "Proposal for the Development and Field Demonstration of a Prototype Chemical Detection System for Landmines and Shallowly Buried Unexploded Ordinance" Principal Investigator: Peter Harrington, John Brokenshire (Graseby Dynamics, Inc.) Amount Requested: \$420,000 (Ohio University component) Period: June 1, 1997- June 1, 2000

Supporting Agency: United States Environmental Protection Agency Project Title: "Development of a Smart Portable Sensor for Ozone and Air Toxics" Principal Investigator: Peter B. Harrington Amount Requested: \$581,380 Period: September 1, 1996 - August 31, 1999

Supporting Agency: United States Environmental Protection Agency

 Project Title: "Development of an Intelligent Solid-Phase Microextraction Fast Gas Chromatographic System for Continuous On-line Monitoring of Organic Water Contaminants"
 Principal Investigator: Anthony Andrews
 Amount Requested: \$449,967
 Period: Submitted March, 1996

 Supporting Agency: Society for Analytical Chemists of Pittsburgh Starter Grant
 Project Title: "The Synthesis and Characterisation of Calixarene Containing Stationary Phases for Gas and Liquid Chromatography"
 Principal Investigator: Anthony Andrews
 Amount Requested: \$10,000

Period: Submitted March, 1996

Supporting Agency: Ohio University Research Committee Project Title: "High Speed Gas Chromatography" Principal Investigator: Anthony Andrews Amount Requested: \$7,000 Period: Submitted February, 1995

Supporting Agency: National Science Foundation Project Title: "The Synthesis and Characterisation of Calixarene Containing Stationary

Phases for Gas and Liquid Chromatography" Principal Investigator: Anthony Andrews Amount Requested: \$287,964 Period: Submitted October, 1995

Supporting Agency: Society for Analytical Chemsits of Pittsburgh Starter Grant Project Title: "The Application of Supercritical Fluid extraction and Chemiluminescence Detection to the Determination of Morphine in Hair"

Principal Investigator: Anthony Andrews Amount Requested: \$10,000 Period: Submitted March 1995

Supporting Agency: Ohio University Research Committee Project Title: "Determination of nalbuphine by HPLC with Chemiluminescence" Principal Investigator: Anthony Andrews Amount Requested: \$7,000 Period: Submitted October, 1995

Supporting Agency: National Institutes of Health Project Title: "An Intelligent Fast GC System for Drugs in Body Fluids" Principal Investigator: Anthony Andrews Amount Requested: \$329,552 Period: Submitted March 1996

Supporting Agency: Centers for Disease Control-Department of Health and Human Services Project Title: "Lead in Blood by FIA-Polymer Modified Electrode PSA" Principal Investigator: Howard Dewald Amount Requested: \$147,613 Period: Submitted August 1992

Appendix VII

Student Involvement in CICI Activities

Former Ph.D. Students

- Joseph Aldstadt¹, "Development and Characterization of a Cellulose Triacetate Dialysis Membrane-Covered Mercury Film Electrode for Voltammetric and Potentiometric Stripping Analysis," (Ph.D. 1993), (Director: Howard Dewald).
- Busolo Wabuyele^{1,2}, "Application of Associative Memories for Background Correction of Spectra," (Ph.D. 1995), (Director: Peter Harrington).
- Peng Zheng^{1,2}, "Application of Chemometric Tools for Ion Analysis in Time of Flight Secondary Ion Mass Spectrometry and Ion Mobility Spectrometry," (Ph.D. 1996), (Director: Peter Harrington).
- 4. Ronald E. Shaffer^{1,2}, "Optimization Methods for the Multivariate Analysis of Infrared Spectral and Interferogram Data," (Ph.D. 1996), (Director: Gary Small).
- S. S. Bangalore^{1,2}, "Data Analysis Strategies for Qualitative and Quantitative Determination of Organic Compounds by Fourier Transform Infrared Spectroscopy," (Ph.D. 1996), (Director: Gary Small).
- Mutua Mattu^{1,2}, "Quantitative Analysis of Bandpass-Filtered Fourier Transform Infrared Interferogram Data: Application to Remote Sensing Measurements and the Determination of Glucose in Biological Matrices," (Ph.D. 1996), (Director: Gary Small).
- Robert C. Schweitzer^{1,2}, "Automated Carbon-13 Nuclear Magnetic Resonance Spectrum Simulation Based on Database Direct Retrieval and Model Building Techniques," (Ph.D. 1996), (Director: Gary Small).

Current Ph.D. Students

- 1. Peter Tandler^{1,2}, Ph.D. candidate, 6th year, (Director: Peter Harrington).
- 2. Lijuan Hu^{1,2}, Ph.D. candidate, 5th year, (Director: Peter Harrington).
- 3. Paul Rauch^{1,2}, Ph.D. candidate, 4th year, (Director: Peter Harrington).
- 4. Ndumiso Cingo^{1,2}, Ph.D. candidate, 4th year, (Director: Gary Small).
- 5. Qing Ding^{1,2}, Ph.D. candidate, 4th year, (Director: Gary Small).
- 6. Steven Petrovic^{1,2}, Ph.D. candidate, 3rd year, (Director: Howard Dewald).
- 7. Frederic Koehler^{1,2}, Ph.D. candidate, 3rd year, (Director: Gary Small),
- 8. Patrick Idwasi^{1,2}, 2nd year, (Director: Gary Smail).
- 9. Chungsheng Cai^{1,2}, 2nd year, (Director: Peter Harrington).
- 10. Chuanhao Wan^{1,2}, 2nd year, (Director: Peter Harrington).
- 11. Jianping Qi¹, 1st year, (Director: Gary Smail).

Former M.S. Students

- 1. Deborah Wuersig^{1,2}, "Quantitative Spectra-Retention Relationships", (M.S. 1994) (Director: Peter Harrington).
- 2. Hailin Yin³, "Quantitative Analysis of Formaldehyde by Ion Mobility Spectrometry" (M.S. Environmental Science, 1997), (Director: Peter Harrington).
- 3. Wenhai Li¹, non-thesis, (M.S., 1997), (Director: Anthony Andrews).

Current M.S. Students

- 1. Cheryl Hammer^{1,2}, 2nd year, (Director: Gary Small).
- 2. Neal Thathapudi¹, 2nd year, (Director: Gary Small).
- 3. Eric Reese^{1,2}, 1st year, (Director: Peter Harrington).
- 4. Cheryl Pape¹, 1st year, (Director: Anthony Andrews).
- 5. Glen Jackson¹, 1st year, (Director: Anthony Andrews).

Current Undergraduate Students

- 1. Jay Stotz, 1997-present, (Director: Peter Harrington).
- 2. Jennifer Meuller, 1997-présent, (Director: Peter Harrington).
- 3. Erin Wiley, 1996-present, (Director: Anthony Andrews).
- 4. Kelly Navoney, 1997-present, (Director: Anthony Andrews).
- 5. Megan Macnaughtan, 1996-present, (Director: Gary Small).

Former Undergraduate Students

- 1. Eric Reese, 1994-1996, (Director: Peter Harrington).
- 2. Hans Wittenburg, 1994-1996, (Director: Peter Harrington).
- 3. Tara Worthington, 1995-1996, (Director: Gary Small).

¹Supported by Department of Chemistry Teaching Associateship.

²Supported by a Research Associateship funded through external grants/contracts.

³Other Ohio University support.

Note: CICI funds have not been used for graduate student support to date due to the availability of sufficient external funding.

Appendix VIII

CICI Income and Expenditures

Year	Expenditures ¹	Allotments ^{1,2}	
FY 1992-1993	\$0	\$4,953.00	
FY 1993-1994	\$14.25	\$16,602.00	
FY 1994-1995	\$2,117.51	\$23,109.00	
FY 1995-1996	\$15,302,84	\$29,105.00	
FY 1996-1997 (as of 4/15/97)	\$25,430.37	\$22,968.00	
Total	\$42,864.97 ³	\$96,737.004	

¹Data obtained from Office of Research and Sponsored Programs.

²All CICI funding was obtained through the return of indirect costs. No other Ohio University funds were requested or received.

³The figure of \$20,113 previously reported on p. 7 of the Self-Study was in error, as it did not reflect the total over all five fiscal years.

⁴The figure of \$73,629 previously reported on p. 7 of the Self-Study was in error, as it did not reflect the total over all five fiscal years.

Appendix IX

Planned Proposals to be Submitted Through CICI

Supporting Agency: National Institute on Drug Abuse Project Title: "A Fast GC System for Drug Screening in Body Fluids" Principal Investigator: Anthony Andrews Amount Requested: \$100,000 (direct costs) To be Submitted: June, 1997

Supporting Agency: National Science Foundation

Project Title: "Synthesis and Characterization of Electrochemiluminescence Sensors for Metal lons"

Principal Investigator: Anthony Andrews Amount Requested: \$150,000 (direct costs) To be Submitted: July, 1997

Supporting Agency: Office of Naval Research Project Title: "Synthesis and Characterisation of Electrochemiluminescence Sensors for Metal Ions" Principal Investigator: Anthony Andrews

Amount Requested: \$150,000 (direct costs) To be Submitted: Fall, 1997

Supporting Agency: United States Environmental Protection Agency Project Title: "Synthesis and Characterisation of Electrochemiluminescence Sensors for Metal Ions" Principal Investigator: Anthony Andrews

Amount Requested: \$150,000 (direct costs) To be Submitted: Fall, 1997

Supporting Agency: National Institute of Justice

Project Title: "Application of Handheld Ion Mobility Spectrometers for Detection of Contraband Narcotics and Explosives"

Principal Investigator: Peter Harringtion Amount Requested: \$400,000 (direct costs) To be Submitted: May, 1997

Supporting Agency: Idaho National Engineering Laboratory Project Title: "Data Analysis Methods for Laser-Induced Breakdown Spectroscopy" Principal Investigator: Peter Harrington Amount Requested: \$50,000 (direct costs) To be Submitted: May, 1997

Supporting Agency: Department of the Army Project Title: "Signal Processing and Pattern Recognition Methods for Infrared Remote Sensing" Principal Investigator: Gary W. Small Amount Requested: \$400,000 (direct costs) To be Submitted: Fall, 1997 Supporting Agency: Department of Energy Project Title: "Screening lethods for Detection of Volatile Organic Compounds in Water by Near-Infrared Spectroscopy" Principal Investigator: Gary W. Small Amount Requested: \$300,000 (direct costs) To be Submitted: Fall, 1997

Ohio University

Interoffice Communication

Date: September 22, 1997

To: Carol Blum, Interim Director, Office of Research and Sponsored Programs

From: Leslie Flemming, Dean, College of Arts and Sciences //AF

Re: Institute for Health and Behavioral Studies

The Institute for Health and Behavioral Studies is being discontinued. The Institute is no longer necessary as Department of Psychology faculty members Thomas Creer and Harry Kostes have retired.

Cc: Roger Rollins, Assoc. Dean Ray Lorion, Chair, Psychology

Office of the Dean

College of Health and Human Services Grosvenor Hall 014 nens OH 45701-2979 614-593-9336 phone 614.593.0285 fax



OHIO UNIVERSITY



June 2, 1997

To:

T. Lloyd Chesnut, Vice Presiden Research and Graduate Studi From: Barbara Chapman, Dean College of Health and Services

Review of Institute for the College of Health Re: and Human Services

The Review of the Institute for the College of Health and Human Services has been completed in accordance with the Procedure for the Review of Centers and Institutes. Enclosed is a copy of the self-study document prepared by the Executive Director, Dr. Ann Also enclosed is the review committee report Teske. and recommendations.

There are a number of significant activities and accomplishments of the Institute during the past five years. The Institute is fulfilling its mission and is an integral part of the College of Health and Human Services.

The self-study and review committee reports are thoughtful and thorough. I have no additional information to share and am in agreement with the conclusions and recommendations.

I am adding one more recommendation at the request of the review committee and the Executive Director. That is to change the name from Institute for the College of Health and Human Services to Institute for Health and Human Services. The rationale for the change is in the attached memorandum from the Executive Director, Dr. Ann Teske.

If you have questions or need additional information, please do not hesitate to contact me.

May 30, 1997

Dr. Barbara Chapman, Dean, College of Health and Human Services

From:

To:

College of Health and Human Services Institute Review Committee Keith Ernce (Chair), Kathie Will, Marleen McClelland, and Mark Weinberg

Re:

Review Committee Report for Institute for the College of Health and Human Services.

Introduction:

The Institute for the College of Health and Human Services was initiated in 1980 to provide the basis for the following four purposes: 1) to provide an organizational home for newly proposed academic programs; 2) to promote off campus and on campus clinical site development; 3) to foster disciplinary research projects; 4) to generate grant writing activities designed to access state, federal, and private funding. One of the recommendations made in the last review committee report was to fund a full time position to direct the Institute. Dr. Ann Teske became the first full time executive director of the Institute in 1994; prior to this appointment the Institute was operated as an assigned responsibility of the Dean's staff. The emphasis for hiring a full time director became a reality when the O'Bleness Foundation and the University were willing to jointly fund a position that could provide leadership and direction for the development of a retirement community to be known as High Pointe Village. Under the executive director's leadership the Institute developed a mission statement, goals and organizational structure and identified an advisory committee for the first time.

Evaluation of current viability of the Institute

The Review Committee defined viability as effectiveness to accomplish its intended purposes'. It is obvious the Institute as a multiple prong organization has benefitted from the leadership of a full time executive director. The Institute has made notable progress and contributions well beyond activities identified in the last two five year Institute review reports. The Committee believes this is a strong indication of what can be accomplished when one person's full time responsibility is to meet the Institute's intended function within the College. Several projects are meeting community outreach needs and are providing opportunities for faculty and students, at least on an initial level. Accomplishments the Committee would highlight include: Kids On Campus, High Pointe Village, Health Policy Certificate, Partnership with ILGARD and the addition of an advisory committee to assist in providing future direction and focus for the Institute in learning and research opportunities.

Under the leadership of the executive director, the Institute has continued to move the High Pointe Village project forward to the point of unit pre-sales in order to begin construction.

Evaluation of potential future viability

The Committee considers the potential for future viability to be very positive. There has been considerable time, effort and energy devoted to the successful projects cited in this report. Most of this was required to move these projects from conceptual ideas to realities. All the projects cited can now truly be considered vehicles for research, student learning experiences and programming. The Committee strongly believes better communication and promotion of the Institute's current activities, its role in the College and the opportunities and future potential opportunities must be accomplished for it to fully meet its intended goals. This appears to be a critical need to move the Institute forward as an important asset within the College.

Evaluation of future cost/benefit basis

Future costs seem largely dependent upon a number of variables beyond the ability of the Committee to speculate regarding future directions of the Institute. The Institute has just recently developed projects that required staff funding. Outcomes cited in this report justify the decision that has deemed to have been a good financial decision given the results.

Future costs could include additional support staff to the Institute or project managers of ongoing projects that are identified as programs important to the College, Institution or Community. It would be expected that these positions would become part of the built-in cost of support, secured from external sources. (soft money)

Recommendations

1. Continuation of funded position at the current level for the executive director and staff

It is anticipated that the executive director's time commitment with High Pointe Village and Kids On Campus will be reduced as those projects move on to their next phase of development, freeing up the director to pursue other projects that could partially support this position in the future.

2. Importance of communication

There is a need to better promote the role of the Institute, current successes of its effort, and opportunities for faculty and students to become involved in specific kinds of research, programming and/or student learning experiences.

3. Professional Development, Workshops and Conferences, and Consulting

These are activities that are already being conducted in varying degrees by the individual Schools in the College. The members of the Committee recommends that any future development along these lines by the Institute be carefully coordinated with the School activities to prevent duplication or impacting potential revenue sources that are currently providing support in the Schools.

The collaborative relationship with ILGARD and all the partnerships required to make the High Point project a reality are also strong indicators that the Institute has been instrumental in projects that will benefit the community and region-at-large, and create opportunities for faculty and students to participate in future projects related to their educational experience and their future careers.

As the High Pointe Village becomes a reality there exists the potential for research, faculty and student involvement in programming and student opportunities for clinical, internship or practicum experiences that relate directly to missions and purposes of the College. There is initial evidence of interdisciplinary projects through ILGARD and the rural health research partnership of regional universities to address health issues in rural Appalachia.

As an organizational home for academic programs, the Gerontology Certificate program continues to show an increase in enrollment, primarily at the undergraduate level. A new brochure has been developed for promotion and marketing reasons.

The University Board of Trustees approved a new graduate Health Policy Certificate during the 1996-97 academic school year and a certificate advisory committee has been formed. The first students will begin enrolling in the fall of 1997.

By far, the most recent project by the Institute that has resulted in addressing a critical nutritional health and educational need in the community has been the Kids On Campus program. Program evaluation feedback from children and parents, staff members, community leader and sponsoring organizations has been overwhelmingly positive. Its success has assisted in securing additional funding resources that will allow the program to increase enrollment from 300 in 1996 to 350 in 1997. There still exists an unmet need of around five hundred eligible children , but the enrollment is largely driven by the dollars generated by the funding resources.

Evaluation on a current cost/ benefit basis

The largest single cost has been the staff salary for the executive director and thirty percent secretarial support out of the Dean's office. Twenty percent of the executive director's salary is supported by grants and funds for Kids On Campus. This fund support was included in grant proposals and it should be considered a normal expense of the grant as would be in any program which requires personnel to direct the program focus of a grant. The evidence that 80% funding from the Dean's office that might be available for other uses in the College appears to be well spent, as documented by earlier reference to what the Institute has been able to accomplish with a full time executive director, compared to years prior with no full time person.

4. Future projects

It does appear to the Committee that given the Institute operates largely on 1.30 FTE, that the ability to plan, organize, develop and direct initiatives or on-going projects through the Institute has its human resource limits. There is a strong possibility that coordinating too many activities simultaneously could limit the progress or success of all activities. The executive director is encouraged to establish priorities and identify faculty or Schools that may be able to provide support or willingness to take up projects that may be sitting in the wings.

5. Evaluation of future cost/benefits

It is recommended that the Institute maintain a record of faculty, student, and community members participation with Institute activities over the next five years that could provide some basis for responding to this portion of the next review.

6. Advisory committee

The advisory committee should assist in providing strategies, resources, and future initiatives associated with the five recommendations above and others which they may identify.

INSTITUTE FOR THE COLLEGE OF HEALTH AND HUMAN SERVICES

Self-Study Review Spring, 1997

Executive Director:

Ann E. Teske, Ph.D.

MISSION STATEMENT AND GOALS

The Institute is college-wide and has interdisciplinary research, academic, and service projects as its major foci. The Institute fosters interdisciplinary research by both faculty and students with an emphasis on applied research in all areas of health and human services. The Institute of Health and Human Services will work collaboratively with other institutes and centers at Ohio University, with other universities and colleges, as well as with community agencies to promote the sharing of information and expertise to further the professional knowledge base. Among its responsibilities are to fulfill the role of an information clearinghouse for grant, association, and foundation moneys, to propose research and service projects to the schools within the College, to serve as a sounding board for ideas being considered by faculty, to be a liaison between the College and the Office of Research and Sponsored Programs of the University, and to monitor the progress of interdisciplinary projects within the Institute, and to assist in writing the responsive reports to the funding agencies.

Academically, the Institute can assist in the development of new programs which lead to a degree for the College of Health and Human Services. The Institute also can develop and offer multidisciplinary certificate programs. These processes could involve the development of needs assessments and feasibility studies, course outlines and content identification, gaining approval through the University Curriculum Committee, and in the case of degree and certificate programs, Board of Trustees approval, and the approval of the Board of Regents for degree programs.

In addition, the Institute develops and participates in service projects for the University, the College, and the community at large which provide research, and internship experiences for students. The Institute provides market feasibility information on proposed projects to evaluate need and cost/benefit ratios. It can provide a framework in which to develop consulting services, continuing education programs, and serve as a resource of information to professional and community groups. In addition, the Institute may be directly involved in the development and on-going operations of service programs which support the mission of the university and are determined to be of lasting value to the community.

INSTITUTE STRUCTURE

The Institute of Health and Human Services has three areas of focus as defined by its mission statement: externally funded interdisciplinary research, development of new academic programs, and the administration and development of service programs. Interdisciplinary and collaborative programs may often contain components of each of the areas of focus. Thus, a service program may have a research component and an experiential/internship component. The following structure represents the current programs within the Institute. The structure should be viewed as adaptable to the changing academic environment nationally and at this university.

COLLEGE OF HEALTH AND HUMAN SERVICES

Dean of the College

INSTITUTE ----- Advisory Committee

Executive Director

<u>Research</u>

Academic Programs

Rural Health Research Partnership with Ilgard.

A fluid grouping of multidisciplinary researchers studying rural health issues. Certificate of Gerontology (undergraduate & graduate)

Certificate of Health Policy (graduate)

Service Programs

Highpointe Village research practicums service

Kids on Campus research practicums work-study student opportunities service

Professional Development Workshops and Conferences Consulting

The supporting personnel for this structure consists of an Executive Director and an advisory committee for the Institute. Each certificate program has a certificate coordinator and a multidisciplinary advisory committee.

Advisory Committee

The advisory committee oversees the general programming of the Institute and will advise the disbursement of indirect cost moneys which are awarded from research and demonstration projects to the Institute. This committee has a representative from each of the six academic schools within the College and the coordinators for the two certificate programs. Members are selected by the Dean for their active interest in research and demonstration projects, in consultation with the Executive Director.

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Current Members of the Institute Advisory Committee:

Ann Teske, Chair	Dean's Office
Sue Bullard	Recreation and Sports Sciences
Linda Collins	Hearing and Speech Sciences
Sharon Denham	Nursing
Mark Doherty	Wellworks
Margaret King	Human and Consumer Sciences
Tootie Overby	Physical Therapy
Ruth Waibel	Health Sciences, Coordinator, Certificate in Health Policy
Beth VanDerveer	Coordinator, Certificate in Gerontology, Recreation and
	Sports Sciences
betti valiberveer	

The Institute Advisory Committee meets quarterly unless there is a need for additional meetings.

<u>HISTORY</u>

The Institute for the College of Health and Human Services was created in 1980 to provide a structural organization to promote the development of new academic programs such as the graduate program in Health Services Administration, undergraduate concentration in Long Term Health Care Administration, undergraduate concentration in Independent Living Rehabilitation, and Physical Therapy, to support off-campus and on-campus clinical site development, to foster interdisciplinary research projects, and to seek and obtain external research grant funding. The first Executive Director was Michael Harter, Associate Director for Planning and Development of the College and he continued in this position until 1990. During his tenure, Dr. Harter served the College as Associate Dean for Planning and Development, Associate Dean, and then Dean.

The last five year review was submitted in November, 1991. At this time the Institute was organized into three divisions, each with a director:

Division on Aging (1983) Dr. Gari Lesnoff-Garavaglia-last director Division of Health Promotion and Research (1986) Dr. Richard Hedges-last director

Division of Health and Safety Management, Research and Training (1988) Dr. Cliff Houk-last director and retired.

Among the recommendations in the 1991 Institute Review Committee Report was that each of the schools within the College of Health and Human Services as well as the Dean's office make a commitment of funds to the Institute. To date, none of the schools have committed funds to the Institute. In 1991, at the time of this recommendation, Ohio University experienced universal budget cuts. This resulted in base budget cuts in each school and in the Dean's office and thus, there were not the funds available to support the Institute. Since this time, there has been a gradual restoration of funds to the schools and the Dean's office. During this same period, from 1991 to 1996, enrollment in the college has increase by 27.6%, from 1785 students to 2464 students. This increase in student enrollment has required funds to remain within the respective schools. At this time, financial support is being provided by the Dean's office.

In September, 1994, the Institute was re-structured by Ann Teske, Executive Director and Dean Barbara Chapman with the approval of the advisory committee, to

represent the three functional areas of endeavors: academic programs, interdisciplinary research, and community service programs to better reflect current programming activities. Please refer to page two of this self-study.

PRIORITY OF ACTIVITIES

The leadership of the Institute of Health and Human Services has rested with the Executive Director since August of 1994. Priorities of goals and commitments are reviewed at six month intervals. During 1994-1995, the primary focus of time and effort (85%) was expended on the Highpointe Village project. As the developers, Just Like Home and later Tipton and Associates, Inc. became more involved in the real estate development of the project, the time commitment by the Executive Director was reduced to between 30-35%. The years 1995-1996 and 1996-1997 have focused primarily on the Kids on Campus program development and funding. The Executive Director with the support of the Dean has been responsible for the funding of the project. The time commitment for the Kids on Campus project during the past two years have ranged from 70-90%. In addition, there has been on-going work on the Certificates of Gerontology and Health Policy as well as administration of the Rural Health Research Partnership.

It is the goal of the Executive Director to establish the two community service programs in such a way that they only require on-going administrative support to provide educational practicum and research opportunities for faculty and students and that the operations and on-going funding requirements become the responsibility of another individual or group external to the University. In the case of Highpointe Village, upon occupancy of tenants, all fiscal and operational responsibilities will rest with the developer and the management company. With regard to the Kids on Campus project, the board of advisors is evolving into a "working" board which is taking a more active role in local fundraising and the chairperson, Barry Oches, a curriculum specialist in the Federal-Hocking School District, has written several proposals to the Ohio Department of Education and to local superintendents to secure committed funding. There will probably always be a need for both private and public moneys to support this program. Private moneys could support an endowment which would provide a more stable source of funding. When these two projects become financially secure, there will be time available to address new areas of interest such as a certificate of early intervention, a masters degree program in public health, and a Center on Aging.

STATUS OF GOALS AND OBJECTIVES

The Institute's programming is designed to be responsive to the dynamic conditions of the health care industry and thus is reflected in yearly goals and objectives, some of which are long-term goals such as the two current service projects.

STATUS OF 1996-1997 GOALS AND OBJECTIVES

1. ACADEMIC PROGRAMS

A. Support and manage the certificate in gerontology and to provide a plan for wider dissemination on the Athens campus.

With the resignation of Gari Lesnoff-Caravaglia effective January 1, 1997, a new coordinator, Beth VanDerveer, Associate Professor in the School of Recreation and Sport Sciences, has begun review of the certificate program by establishing the number of times a course is offered during an academic year to facilitate student completion of the certificate requirements in a timely manner. Dr. VanDerveer has also sent an inquiry to all schools which might offer courses with a gerontology focus to ascertain if new courses have been developed which should be made available within the certificate guidelines. The coordinator and advisory committee are seeking to add new courses to the interdisciplinary certificate program in order to expand the study of adult aging. This expanded curriculum would address the dynamics and scope of the impact of this aging population on our society and in the world.

When this review process by the coordinator and by the certificate advisory committee is completed, new brochures will be made available. The current brochures have been sent to the Admissions office and to the schools or departments from which students historically have been recruited to the certificate program.

There are currently about 125 undergraduate students and about 9 graduate students enrolled in our Gerontology Certificate Programs. A survey is being developed by the coordinator and reviewed by the advisory committee, to assess from graduates of both the graduate and undergraduate certificates programs if the certificate in gerontology was of value in obtaining a job. In addition, the survey will assess the quality of information gained from the course work, especially if the graduates are currently working in a position where gerontology is the focus.

This survey will be sent to those alumni who can be identified by the registrar's office and whose current addresses are known to Alumni Relations. This survey will be sent during spring quarter.

There is increasing need in the academic community and for professionals to have information on our aging society. The demographic shift will impact all aspects of our country. By the year 2030, more than 21% of the U.S. population will be age 65 and over and the 65+ and older population is the fastest-growing group in the country.

Additional projects by the coordinator and committee involve designing a home page for the internet, updating the awarded certificate, involving seniors in Athens with the community partnership initiative, Kids on Campus, to promote intergenerational programs, sponsoring gerontology scholars to campus, and promoting multidisciplinary research on aging with external funding sources.

B. Complete the process for Curriculum Council approval for the graduate certificate in health policy, select a certificate coordinator, and begin implementing the program.

The University's Board of Trustees approved the graduate certificate in health policy at their February, 1997 meeting. Ruth Waibel, Assistant Professor in the School of Health Sciences, is the certificate coordinator. At a February 28th meeting between Ruth Waibel, Lee Cibrowski, Gordon Schanzenbach, and Ann Teske, a plan for admission procedures for degree-seeking and non-degree seeking students was created.

A review of the current availability of courses has taken place and it has been noted that the College of Business is no longer offering BUSL 560. The College of Business has agreed to withdraw the course and Richard Hedges, Ph.D., J.D., in the School of Health Sciences will develop a health law course to include in the elective courses for the certificate.

With the report in The Post and The Athens Messenger newspapers of the approval of the health policy certificate program, Ms. Waibel has received inquires from interested individuals. The certificate advisory committee is being formed and the admittance process should be defined and implemented by summer quarter, 1997.

C. Explore the opportunities for providing professional development conferences and identify at least one area of study to pursue.

Within the College of Health and Human Services there are various bachelor and graduate degree students who upon graduation will need to obtain continuing education hours in order to retain their licenses. Discussions have focused on expertise within the Institute that is of a multidisciplinary nature to begin such a program. It was decided by the Institute Advisory Committee that the first professional development conference would focus on several aspects of aging and take place in the proposed "retirement center" Highpointe Village. Topics for consideration (not exclusive) are health and fitness--emotional, spiritual, and physical, updates in the health care industry and how it affects older citizens, research in healthy aging, role of nutrition in preventing dementia, drug therapies, and universal access design in residential living space. Programs designed for the public could include estate planning and considerations when choosing a retirement community. Highpointe Village is proposed to begin occupancy during the fall quarter of 1998.

D. Assess the marketability of a certificate in early intervention with an emphasis on multidisciplinary teams.

The possibility of offering a certificate in early intervention was discussed by the Institute advisory committee. There was much interest expressed in such a certificate and in creating an advisory committee for such a program to include not only faculty from other colleges and schools within the university but to also include representatives from related public agencies.

The following individuals have indicated their wish to participate in a committee to pursue the development of a certificate in early intervention:

Sharon Denham Nursing, Chairperson Physical Therapy Tootie Overby Margaret King Human and Consumer Sciences Caroline Tice Social Work Mark Doherty Wellworks Linda Collins Hearing and Speech Sciences Linda Phillips Athens County Family First Council Dee Dee Dransfield Director, Special Education Resource Services Institute

Ann Teske

Sharon Denham has expressed interest in incorporating distance learning into the certificate program to promote this certificate to professionals engaged in early intervention work throughout the State of Ohio.

2. <u>RESEARCH</u>

A. Enhance the College's ability to acquire internal and external funding for research and service projects which emphasize multidisciplinary approaches and which provide practicum experiences for students.

The major commitments for the Executive Director of the Institute during the past two and one half years have focused on the development of Highpointe Village and the Kids on Campus program. Both of these programs require large amounts of external funding and offer opportunities for multidisciplinary practicum and research experiences.

The Highpointe Village project is estimated to cost \$11.5 million and this funding has been secured through a private developer from Cincinnati, Ohio, Tipton Associates, Inc. When constructed and occupied, this project will offer opportunities for limited research (respecting privacy and self-determination of residents) and student practicum experiences. Students with majors in long-term care administration, physical therapy, nursing, hearing and speech sciences, exercise physiology, therapeutic recreation, interior design, medical education, health education, marketing, business, social work, food service management, and others will be interested in practical experiences at Highpointe Village. The Institute will provide the liaison between Highpointe Village's operations management personnel and residents, and faculty and students wishing to pursue academic and research opportunities.

Kids on Campus provides work-study students with summer employment to earn funds to continue their education, practicum experiences for students who are pursuing majors that involve working with children and their families, and for several research projects. Two on-going research projects include one by Dr. Claudia Hale and her graduate students concerning communication patterns between children and between children and their parents. The second project is data gathering of health status information about low income children by the Colleges of Health and Human Services and Osteopathic Medicine. There results of the first year's physical assessment data were reported in the Philliber Research Report, February, 1997. It is the goal of the Institute to involve more faculty and students of varying interests and expertise in the program to broaden the scope and diversity.

B. To support faculty and administrative staff efforts of grant proposals by assisting in the development of the concepts, identification of one or more funding sources, or by influencing (if possible) the positive acceptance of the proposal.

The Executive Director with the assistance of a graduate student provide some monitoring of requests for proposals at the state, federal, and private foundation level. When potential opportunities are identified, these are immediately forwarded to school directors or individual faculty members.

The executive director provides some limited counseling to faculty in preparing proposals. Time commitments do not permit on-going critiquing and editing of

proposals. The Institute currently does not have the funding to employ a grant writer.

C. Provide leadership in conjunction with ILGARD to the Rural Health Research Partnership.

Ann Teske and Mark Weinberg partnered to develop and currently co-chair the Rural Health Research Partnership which encourages multidisciplinary research at Ohio University: The partnership has an informal structure to match expertise with specific projects. The partnership developed a survey questionnaire which was sent to all faculty and administrative staff in December, 1995. Respondents provided information on their expertise, past experience in multidisciplinary research, research interests, and any past or present external research funding. This information has been compiled into a database which is housed at Ilgard and is available to all faculty and administrative staff at Ohio University. In addition, the partnership has been developing a web page for the internet. There have been three multidisciplinary research proposals submitted to the Ohio Department of Health. Two of the proposals were rejected (grants were made only to urban areas of study), and one is still pending with Chris Simpson, DO, of the medical school, as lead investigator.

D. Submit at least two applications for multidisciplinary research studies.

1) The Institute is currently engaged in developing a proposal to respond to an RFA from the National Institutes of Health, "Educational Workshops in Interdisciplinary Research." The principal investigator will be Averell (Tootie) Overby. Proposal is due April 25, 1997. Our program title is:

INTERDISCIPLINARY RESEARCH METHODS ON HEALTH ISSUES IN RURAL APPALACHIA: AN EDUCATIONAL WORKSHOP

The following institutions have agreed to participate with Ohio University in this series of educational workshops. Each university will have a select group of junior faculty, doctoral students, and medical students who will commitment to the series of workshops.

University of Kentucky University of Louisville West Virginia University Marshall University

The two major workshops in December of 1996 and in March 1997, will be hosted on the campus of Ohio University. The programming for the two-part workshops will include presentations from researchers involved in multidisciplinary health research, identification of methodologies of various disciplines and how they can be integrated into a research study, meetings with federal, state, and private research funders who will critique the preliminary drafts. These workshops are "working" programs in which participants will bring their research proposals to the beginning sessions and be matched with researchers with similar interests. In addition, each participate will attend two of six one-day weekend workshops held on the campuses of the participating universities. Each of these one-day sessions will be

on specific topics such as maternal-child health or gerontology issues. At the conclusion of the workshops, the goal is to have several multidisciplinary teams ready to edit their drafts and be prepared to submit their proposals for external funding.

2) Dr. Rosalind Hickenbottom and Dr. Marleen McClelland, Assistant Professors in the School of Physical Therapy, are co-principal investigators of a proposed multidisciplinary team consisting of Ohio University faculty and representatives from several public

agencies which provide early intervention services in Athens and surrounding counties. The proposed study is to conduct a needs assessment to determine the existing needs of families of infants and toddlers with special needs in this region of Southeastern Ohio. This research project is part of a larger proposed study in which early intervention and integrated program effectiveness will be determined on a number of levels. There are few longitudinal studies of functional outcomes associated with early intervention, and even fewer studies that are concerned with the effectiveness with which families' needs are met on issues of infants with special needs.

Members of the committee include:

Rosalind (Po) Hickenbottom, Assistant Professor, Co- Principal Investigator Marleen McClelland, Assistant Professor, Co-Principal Investigator Sharon Denham, Assistant Professor, School of Nursing.

Susan Lawrence, DO, Pediatrician and Clinical Faculty in the College of Osteopathic Medicine.

Margaret King, Professor, School of Human and Consumer Sciences and Director of the Ohio University Child Development Center

Averell Overby, Professor, Director of School of Physical Therapy Carolyn Tice, Associate Professor and Chair of the Department of Social Work Melane Barlow, Parent of a special needs child.

Deborah Clayton, Superintendent Beacon School

Suzanne Roberts, Coordinator of Early Intervention Services for Athens County. Linda Phillips, Director, Athens County Family and Children First Council Norman Garber, Associate Professor, School of Hearing and Speech Sciences Mary Ann Skerl, Early Intervention Specialist

Dee Dee Dransfield, Early Education, SEO SEERC

Ann Teske, Executive Director, Institute of Health and Human Services

The project has just received funding from the Ohio University Clinical Research Steering Committee for the early intervention needs assessment project in which data will be gathered from at least nine counties in Southeastern Ohio. This advisory committee has responded to this initiative in its commitment to prepare one or more externally funded grant proposals for a future expanded research study.

E. Develop a process for becoming a clearinghouse for grant funding opportunities to the six schools to keep them informed and hopefully motivated to pursue external funding grants. Communication can be through e-mail, copies of RFPs, and through faculty meetings.

The Institute advisory committee has considered several means to accomplish this goal. There have been in-depth discussions as to the most efficient methods in both time and effort. A newsletter has been discussed but no one on the committee is prepared to take the leadership role knowing that this type of communication requires a significant time commitment. We have decided that e-mail is probably our $\frac{90}{90}$

best approach. Susan Sheppard, secretary to the Dean, is preparing a master list of all faculty and administrative staff in the College of Health and Human Services. This will probably be the vehicle for communication. The person or persons responsible for organizing the information and sending it to faculty and staff has not been designated at this time.

3. <u>SERVICE PROGRAMS</u>

<u>Highpointe</u> Village

A. Facilitate the development of Highpointe Village by Just Like Home, Inc. and their development contractor, Tipton and Associates.

In June of 1995, the Highpointe Village Advisory Committee, a committee of the Athens Area Chamber of Commerce met with Dick and Betty Conard of Just Like Home, Inc. of Bradenton, Florida to discuss the project. In September, 1995 a 60 day agreement was signed between the Chamber of Commerce and Just Like Home, Inc. to work exclusively with them. This agreement was terminated by the terms of the agreement in November. In December, 1996, following an in-depth market study by Just Like Home, Inc., they exercised an option to purchase 855 acres from Horace Karr (85 acres have been set aside for Highpointe Village).

Since the fall of 1995, Just Like Home, Inc. has provided our project with three different project directors--none of whom are currently with the company. However, the last project director, Rich Fratianne, introduced Tipton and Associates to the project. Tipton and Associates of Cincinnati, Ohio is a well known and well respected developer who is interested in our project. During this past year, the roles were defined as Tipton and Associates as developer and Just Like Home, Inc. as the management company. Tipton and Associates have worked closely with the city to obtain utilities and road infrastructure with the developer receiving a property tax abatement which is then paid to the city as a service fee for these improvements.

Tipton and Associates, Inc. has also contracted with PMT architects in Cincinnati to provide the architectural work. The site plan includes an 82 unit three-story apartment building with 62 units for purchase and 20 units for rent. This building complex includes a 10,000 SF community building which will house the administrative offices of the management company, dining rooms, kitchen, lounge, lobby, mail room, and laundry room, and on the second floor there is a meeting room for 100 individuals, an arts and crafts area, recreation room, and work-out room. In addition to the apartment building, there will be two 26-unit assisted living facilities; one for individuals with special physical needs and one for individuals with special mental needs. The assisted living facilities provide a month-to-month rental program. The site also has 24 duplex units for purchase.

Highpointe Village is unique to Ohio in that it has no endowment or entrance fees and it is based on universal access design. All residential and community space is handicap accessible.

It is the hope of Tipton and Associates to begin marketing by May, 1997 and to begin construction by August or September, 1997, with occupancy during the fall of 1998.

The community advisory committee is to be commended for their tremendous personal support of this project. Committee members have spent hundreds of hours 91

in meetings to review marketing materials, architectural plans, meetings with developers, walking the site, and planning for the marketing of the project.

B. Actively market the project to the community and the university.

The Executive Director is working closely with the Executive Committee and the Community Advisory Committee of the Athens Area Chamber of Commerce to facilitate the development of Highpointe Village. Tipton and Associates has agreed to provide a full-time professional real estate and marketing staff member for the project when it is ready for marketing. The community advisory committee members have agreed to provide marketing support to host informational gatherings at the Ohio University Inn and to staff the telephones in a temporary office and to set up appointments.

C. Begin developing a programming format in which university faculty and students can be afforded opportunities for practicums/internships and research at Highpointe.

This programming will begin with the occupancy of Highpointe Village.

<u>Kids on Campus</u>

A. Coordinate and work with the Advisory Board of Kids on Campus to provide a high quality out-of-school enrichment experience for the children who participate and to meet the goals and objectives for this program.

Kids on Campus is an out-of-school educational and leadership enrichment and nutrition program which is sponsored through a partnership initiative of the five local school districts (Alexander, Athens City, Federal Hocking, Nelsonville-York City, and Trimble Local), parents, community, Hocking College, and Ohio University for 375 children. This community partnership initiative is the first of its kind in this county to involve these entities in a working relationship in which the direction for programming is determined by the local school districts, teachers, and parents, while drawing on the resources and expertise of the community and the university. The purpose of Kids on Campus is to provide for the nutritional, educational, personal, physical, and recreational needs of underserved at-risk children in grades one through sixth in Athens County while providing leadership and job training for high school students, college students, and low-income parents.

Since its inception, the community advisory board, has increased its responsibility to provide for funding this program as well as actively engaging in hiring of staff. In addition, it continues to oversee the program and to make policy decisions. The community advisory board consists of 16 members:

Ohio University--2 OU (Health and Human Services)--1 Hocking College--1 Athens County/community--3 Parents--2 Agency--2 Each School District --1 (5 total: Alexander, Athens, Federal Hocking, Nelsonville-York, and Trimble)

On the university's campus, learning teams of 25 children, a certified teacher, two parent teacher aides, and one high school student participate in innovative hands-on learning activities. Weekly themes are integrated into reading, writing, math, science, fine arts, swimming, and sports. Children also engage in peaceful problem solving, conflict resolution, healthy decision-making, and career exploration. Some sessions will be held on the campus of Hocking College in Nelsonville as well. Several one day programs are planned during the school year at elementary schools to provide continuity and encouragement. It is through working collaboratively and sharing resources, that Kids on Campus has become a reality.

MEETING KIDS ON CAMPUS PROGRAM OBJECTIVES

Each objective, in abbreviated form, will be addressed based on our first summer session of 1996.

1. To provide adequate nutrition to children who receive federally subsidized meals during the school year.....Children who are hungry will not be able to develop to their full potential.

Kids on Campus qualified for the Summer Food Service Program through the US Department of Agriculture and administered through the Ohio Department of Education. The University's food service department provided nutritious hot breakfasts and lunches with generous servings and very appetizing food. The program provided additional fruits, vegetables, and milk as well as second helpings which were not covered by the federally subsidized allocation. The additional cost of the meals was financed through the Bob Evans Farms grant.

Three weeks prior to the beginning of the out-of-school enrichment program, the Ohio Department of Education indicated that the Summer Food Service Program would not provide the afternoon snacks. The Kroger Company and their distributors came to our aid and provided snacks and drinks for the eight weeks for the children and staff. The estimated value of this food is \$12,000.

To break the cycle of poverty and domestic violence by providing active learning programs which promote self-esteem, wellness, problem-solving, anger management, and conflict resolution, and prevent drug and alcohol abuse by children of elementary school age.

During the first hour of the day, half of the children ate their breakfasts while the other half participated in a life skills program and then they switched activities. For the first four weeks of the summer session, Bob Maher, a teacher from the Federal-Hocking School District lead the group in peaceful problemsolving, conflict resolution, and peer mediation. Bob has had extensive training in these areas of interest and has held numerous workshops with teachers and with children. Bob then joined one of the learning teams as the certified teacher for the balance of the program but continued to work with the other teachers and parents to provide additional learning experiences for the other teams.

In addition to the formal curriculum which Bob provided, we found many of the staff engaged in conflict resolution and peaceful problem-solving. For instance, one of our fifth grade boys was physically abusive to other children when he

became angry or frustrated. In fact, his first response was to hit other boys in the face (backhand). His teacher and Dee Stamper-Zesiger, program director, had to discipline him concerning his behavior and then spent time counseling him on how to deal with his emotions in a more positive way. This young man was counseled on what behaviors had to be displayed in order for him to remain at Kids on Campus. After the first one and one half weeks, his behavior was modified to more acceptable levels. It was our interpretation that this child was not trying to be bad, but rather that he was displaying treatment that he received at home. We had several conversations with parents of camp participants who indicated their children had intervened in family conflicts at home based on their training at Kids on Campus. This was also observable as the children interacted with each other.

During the second four weeks of the summer session, the children participated in healthy decision-making activities lead by nursing students of our own college student staff. The subjects ranged from good nutrition, to personal safety, and to healthy behavior habits. The healthy behavior habits included lessons on exercise, saying no to drugs, alcohol and smoking, and good study habits. Behavioral modification and prevention of harmful behaviors in these areas requires a longer term assessment. However, this program provided the foundation of knowledge for these children and parents.

3. To broaden the children's horizons to create more expanded goals and to introduce them to additional educational opportunities which are available to them for a more productive future through nearby educational institutions....

During the summer session of Kids on Campus, the children participated in handson learning experiences related to a specific weekly theme. These themes were:

- Week 1 I am Special, I am Safe
- Week 2 Community, Friends, and Careers
- Week 3 Patriots
- Week 4 Animals
- Week 5 Nature, Biomes
- Week 6 Olympics
- Week 7 Diversity including Appalachian and Native American Cultures of SE Ohio
- Week 8 Energy Conservation

The learning activities developed by the certified teachers, working with their parent teacher aides and high school and college staff, were complemented by volunteers in the community who shared their time and expertise with the children. Presentations ranged from the city mayor, officers of the Ohio Department of Natural Resources, an anatomy professor with a strong interest in dinosaurs (Dr. Dinosaur), native Americans, a journalism professor and his family who dress up in civil war uniforms and present the role of music to communicate in battle, a state representative, and employees of utility companies.

Children learned through doing. They harvested vegetables from the university's organic gardens and then a father working as a parent aide made salads from the produce for the children. Children learned about math and science through experiments and simulations. They learned to work math problems in a variety of ways including: the use of a computer, educational games, calculators, and paper and pencil problems.

Teachers and parents read to the children frequently during the day. All of the children visited the children's section of Alden Library several times a week. They learned to look up information, they researched their topics and wrote reports. One example took place during Olympic week. Each learning team adopted one or two countries for the Olympics. On opening day, each team presented their "country" with a flag (some made theirs in art class), a song or sharing the native language (the children representing Spain counted to 20 in Spanish)(the group representing Australia shared names of common items and phrases), and took turns describing their country and what it is like to be a child from that country.

In other instances the children learned about topics from games. One game was called Migration Headache. It involved a green space, paper plates as wetlands, and a lot of birds. Needless to say, the birds experienced droughts, hurricanes, and oil spills. They also had a very rainy season which allowed more birds to hatch which brought children back into the game. The children also talked about decreasing numbers of animals and birds, and the difference between being endangered and being extinct.

We have already received calls from additional community members and schools within the university who want to participate in Kids on Campus this 1997 summer. One of our goals which was not realized was to include faculty and students from Hocking College and Tri-County Vocational School in the program. There was not enough time to set this in place. However, we have already been in contact with the nursing program at Hocking College and they are very enthusiastic about assisting with the programming for summer 1997.

4. To engage certified teachers and parents in the design, implementation, and evaluation of Kids on Campus to promote the highest quality educational and self-development programs and to encourage the benefits gained during the summer program to be continued

Ten certified teachers and twenty parent teacher aides participated in the program this summer. The teachers, parent teacher aides, and high school staff worked in teams of four with a learning group of 30 children. They worked together in designing and implementing the educational activities. Teachers and parents often brought materials from home or bought materials (for which they were reimbursed) since they were coming up with ideas faster than the program director was able to order and secure supplies. One parent, Beth Arbaugh, brought her hedgehog during animal week. By snack time, most of the children had gotten to meet Edgar and pet him with one finger while Edgar was sound asleep in his cage. Another parent offered to bring farm animals for a petting zoo but we were not sure what to do with a goat when the children were in swimming. Stephanie Paese, also a parent teacher aide, designed all of our staff hats and provided face painting at one of the Friday sing alongs.

During the summer session, communication between all staff members took place between written memos, staff meetings, and one-to-one interactions with the two directors and within the learning teams. These communications addressed program progress, suggested changes, and contributed ideas and suggestions which enabled us to adjust the programming and operations as needed.

Dee Stamper-Zesiger, the program director, is in the planning stages for programs during the academic year. Our greatest challenges are geography and transportation. Most of our children do not have their own transportation to a program. Therefore, the programs must be planned at their schools <u>during</u> the school day, or we will need to provide bus transportation to and from the activity. One of the school districts, Federal-Hocking Local Schools, covers 450 square miles.

It is our goal to include as many of the teachers and parent teacher aides as possible in these programs. Depending on the formats, we may try to include all parents. The enrollment process for next year will give priority not only to those children who meet the federal qualifications for poverty but also those who participated on a regular basis during 1996. This summer's program had a significant impact on the children who came but we believe the greatest changes in academics and personal development will be in children who are provided with the opportunity to come year after year.

Teachers and parents met with the program director weekly during the breakfast period to discuss the program and to make recommendations for modifications. Our motto was creativity and flexibility. All staff members were encouraged to take ownership of the program and to be responsible to foster the best possible program which we could produce. Parent teacher aides were active in all phases of the design, implementation, and evaluation of the programming.

5. To engage parents actively in planning, implementing, and evaluating the effectiveness of the educational and leadership enrichment experiences of their children.

Parents were invited to parent meetings held in all five school districts prior to the application and enrollment process. Short presentations by the program and project directors preceded question and answer sessions. Parents asked insightful questions about operations, and made recommendations for the operations and programming of Kids on Campus. Parents were also encouraged to come to "camp" to share their talents and interests. We would like to maximize parental involvement.

On the application form, there were places for parents to indicate information about their child which would help the staff create the most meaningful experiences. Parents were also asked to complete profiles on their children.

Parents and grandparents contacted the staff through phone calls and notes, they attended "camp" with their children throughout the eight weeks, and received weekly newsletters written by the learning teams. Parents frequently called the office or spoke to parent teacher aides on the buses concerning special needs of their children.

At the end of the program, an evaluation form was sent home to be completed concerning the strengths and weaknesses of Kids on Campus. All program staff, which included parent teacher aides, also completed evaluation forms.

6. To provide low income high school students to work with certified teachers to design and implement age appropriate educational activities for children....To participate in a one year mentorship program through a partnership between the Athens Chamber of Commerce and the College of Business Administration.

Ten low income high school students worked as staff members with the learning teams during the summer session. They attended one week of orientation where they were able to become CPR and First Aid certified, participated in leadership training exercises, and learned about the operations of Kids on Campus and their

responsibilities. Six of the students were funded through Tri-County Community Actions' federal school to work grant. Four of the students were funded through our Appalachian Regional Commission grant.

Due to the delay in school closings, some of our high school students only had a week off for "vacation" prior to beginning the new school year. They voted to postpone their leadership week to involve weekends during the school year. This worked out well for our program in that the planned mentorship program had not been developed as required due to the resignations of the Dean of the College of Business and the President of the Athens Chamber of Commerce, Economic Development. These two individuals had agreed to develop the mentorship program. Both positions have recently been filled so that we will try to implement this program as soon as possible.

The high school students displayed high energy levels and enthusiasm. They were good at interacting with the youngsters since many of them have siblings at home. Many of the students exhibited maturity beyond their years and in some areas were better able to maintain the necessary energy levels than the adults.

7. To provide internships for work-study college students.....

The eleven work-study college students did an excellent job this summer. They were assigned to specific activities based on their knowledge and skills.

visual fine arts	one student
performing arts	one student
sports and recreation	four students (one was a volunteer)
computer labs	two students
swimming	four students (two job shared) all were certified
	water safety instructors

The college students created, implemented, and evaluated much of the curriculum in the fine arts, swimming, and sports and recreation programs in consultation with the certified teachers. Although the students were knowledgeable about their subject areas, they needed guidance about child development and age appropriate activities. With few exceptions, the activities planned by the college students met with great enthusiasm. They were solely responsible for the Olympic games and the award ceremonies, and did an excellent job.

One college student, Jim Burger, a senior in electrical engineering, stated that he had such a wonderful summer—the best ever—that if he had the experience earlier in his college career, he would have been tempted to change majors.

Our volunteer college student, Jeff Thierauf, did not meet the financial need requirements for work-study. Instead, he volunteered 40 hours per week for five weeks of the program. The children loved him! Jeff is majoring in social work and has eight siblings. These students were excellent role models for the children and exhibited a caring attitude while challenging the children toward new experiences and skills.

8. To become a demonstration project, with documented outcomes, which can be duplicated by other educational institutions and community programs.

The evaluation data on the Kids on Campus program has been very positive. It is goal to share this with other communities and schools to encourage them to form community partnerships. The concept of Kids on Campus can take place on any campus; whether a church campus, high school campus, or a park. Each community can bring together individuals and groups to work in collaboration and to share resources in order to create a program that far exceeds what any single partner can provide.

The project director, Ann Teske, has already offered several presentations to state and regional concerning the development of community partnerships. The federal office of Appalachian Regional Commission would like to share our program with other states. The Center on Hunger at Tufts University is highlighting Kids on Campus as one of two national models.

In addition, we would like to share our program's success through professional journals and dissemination of our materials and video.

Those of us associated with Kids on Campus are proud of what we have accomplished in only one year and are challenged to improve and expand upon this enriching program. It had a profound impact on all individuals who were involved. This program has united school districts and communities which have never worked together before. Kids on Campus has brought together numerous individuals, social and fraternal organizations, and businesses to provide the resources for a quality program. Our goal is to expand this base of support. It is essential to the long term welfare of Kids on Campus that the total county community embraces this out-of-school enrichment and nutrition program and takes ownership and responsibility for its continuance.

B. Provide the support and resources as necessary for the planning, implementation, and evaluation of this program as well as assist in establishing adequate funding for the continuance of the program.

* In only one year, a community partnership was formed that developed and implemented a summer enrichment and nutrition program for 300 underserved children. This partnership was formed and worked collaboratively while removing political, social, cultural, economic, and geographic barriers.

* All of the objectives for 1996 were accomplished.

* Essential funding, over \$370,000 in cash and in-kind services and products, was obtained for the first year and several agencies and foundations have made multi-year commitments.

- * Due to the Appalachian culture, the partnership had been advised that few parents would permit their children to come to Athens, much less to a university. Over 600 children applied for the 300 positions during the first year. Each school district was provided with equal numbers of student positions distributed over the six grade levels. Children qualifying for free and reduced meals were given first priority for acceptance.
- * Evaluations from superintendents, principals, teachers, parents, and program staff have been very positive.
- * Anecdotal reports indicate multiple instances in which Kids on Campus has had a significant impact on children in their schools.
- * The Philliber Research Report found that the children who attended Kids on Campus were less likely to "back-slide" during the summer months, and had greater increases in scores between spring and fall academic sessions in math, science, and reading.
- * Parents reported numerous children who improved their relationships with family members, have improved behavior at school, and have implemented their peaceful problem-solving and conflict management skills.
- * The College of Osteopathic Medicine at Ohio University, after participating in Kids on Campus, is developing an academic and career enrichment program for 150 ninth-grade students in Southeast Ohio. This will be held as one-week residential programs for 50 students at a time beginning in 1997.
- * The current funding status of Kids on Campus is that approximately \$20,000 still needs to be raised to support a program of \$514,000 for 375 children for the summer 1997 session and the sessions during the academic year.
- * An assistant program director, Angie Cantrell, has been hired. Angie is a teacher at The Plains Elementary School and will focus 50% of her time on curriculum development.

1997 GOALS AND OBJECTIVES

1. To engage certified teachers and parents in the design, implementation, and evaluation of Kids on Campus to promote the highest quality educational and self-development programs and to encourage the benefits gained during this summer program to be continued throughout the following school year. By viewing children being successful in alternative learning environments, teacher and parental perceptions will be modified and thus their interactions with these children will be positively enhanced.

Measurable Outcomes:

a. Comparison of school reports between spring and fall sessions.

b. Evaluations by parents of children's performance.

c. Comparison of student profiles completed by teachers before and after the intensive summer program.

2. To engage parents actively in planning, implementing, and evaluating the effectiveness of the educational and leadership enrichment experiences of their children.

Measurable Outcomes:

a. Attendance at parent-directors conferences prior to the beginning of the summer program.

b. Active parent participation of most of the parents of participating children in the evaluation processes.

c. Hiring parent teacher aides for all of the out-of-school enrichment programs and their active participation in the decision-processes.

d. Increased parent participation in schools through self-reports following their children's participation in Kids on Campus.

e. Inclusion of three parents on the Community Advisory Board.

3. To broaden the children's horizons to create more expanded goals and to introduce them to additional educational opportunities which are available to them for a

more productive future through nearby educational institutions: Ohio University, Hocking College, and Tri-County Joint Vocational School.

Measurable Outcomes:

a. Field trips and programming provided by these institutions.

b. Notations of expanding horizons in children's journals and/or in their weekly newsletters to parents.

4. To become a demonstration project, with documented outcomes, which can be duplicated by other community partnership initiative programs.

Measurable Outcomes:

a. Measurable outcomes data will be collected which indicate effectiveness of the program.

b. The program will design and implement a plan for dissemination of information on Kids on Campus.

5. To provide adequate nutrition to children of whom up to 85% receive federally subsidized meals during the school year but who are often undernourished during the summer months. Children who are hungry will not be able to develop to their full potential.

<u>Measurable Outcome:</u> Two nutritious meals will be served daily during summer program for each participating child and high school student.

6. To break the cycle of poverty and domestic violence by providing active learning programs which promote self-esteem, wellness, problem-solving, anger management and conflict resolution, and the prevention of drug and alcohol abuse to children of elementary school age.

Measurable Outcomes:

a. Observed examples of children using peaceful problem-solving and conflict management during out-of-school programs.

b. Reports by parents of increased positive behaviors in relating to family members and peers.

c. Decreased incidents of disciplinary actions required at the elementary schools of children participating in Kids on Campus.

7. To provide low income high school staff members with leadership training and team building while enhancing skills in communication, conflict management, and responsibility while engaging in summer employment.

Measurable Outcomes:

- a. Hire one high school student per learning team.
- b. Provide high school student with leadership training, conflict management, and personal responsibility training.
- c. Provide high school students with CPR and First Aid Training.
- d. Include student in staff meetings and solicit their ideas and suggestions.
- 8. To provide internships for college students to work with certified teachers in designing and implementing age appropriate educational activities for children, which are based on active learning and promote inquiry, discovery, and the love

College students must qualify for financial need and display a love of learning and a desire to work intensively with children.

Measurable Outcomes:

a. Hire college students to support the computer labs, swimming and sports programs, and the fine arts programs.

b. Include students in orientation and training week.

c. Meet with college students weekly for discussions on strong and weak areas in program and consider their recommendations.

d. Interactions between certified teachers, parents, and college students in preparing the learning activities in which they participate.

e. Students will provide written and verbal evaluation reports of their program areas at the conclusion of each session.

<u>Center on Aging</u>

A. Explore the feasibility of establishing a Center on Aging in conjunction with Highpointe Village.

B. Define what areas of study would be most relevant to our resources and our rural setting and would not duplicate other competing centers such as the Scribbs Center of Gerontology at Miami University.

C. Make recommendations for programming and funding such a center to the Dean.

The Institute Advisory Committee decided in the fall of 1996 to table this set of objectives until the time when the Highpointe Village is ready for occupancy. A Center on Aging has been discussed with several areas for consideration such as multidisciplinary research (while protecting the rights and privacy of residents), educational practicums, senior conferences on a variety of topics from health to finances, and forums and publications on rural health in older adults and universal

access design in adult residential communities. Several faculty members have expressed interest in a Center on Aging which could include faculty and staff from several colleges at Ohio University.

FUTURE

The Institute of Health and Human Services has unlimited potential to foster and support multidisciplinary educational offerings, research projects, and community service projects which have educational and/or research components. In reviewing federal requests for proposals, there is an increasing emphasis on multidisciplinary research and educational approaches. In fact more and more public and private funding sources are requiring collaboration and sharing of expertise and resources to meet their criteria for acceptance. Community service projects such as Highpointe Village and Kids on Campus are excellent examples of leadership roles and collaboration in community partnerships which provide both educational and research opportunities while providing a needed service to the larger community. It is the goal for the Institute to initiate and develop community partnerships and projects which then become self-sustaining. In the case of Highpointe Village, the developer, Tipton Interests, Inc., has assumed all financial, legal, and operational responsibilities. For Kids on Campus, the community advisory board may wish to explore the creation of a non-for-profit corporation to sustain the program.

In addition, faculty members have discussed the need for continuing education conferences and workshops. A variety of health care professionals who hold licenses require yearly continuing education credits as well as professionals in sports administration, industrial hygiene, environmental health, and recreational and sports sciences.

A goal discussed by the Institute Advisory Committee is the exploration of the potential to provide consulting services to private and public agencies. These consulting services could be provided by individuals or groups of faculty/ administrators with a mutual expertise or interest. The faculty in the College of Health and Human Services, working collaboratively with faculty from other colleges and schools within the university, can provide a wealth of knowledge and skills.

In addition, the Institute Advisory Committee has decided to engage in a needs assessment to determine the feasibility of developing a Masters of Public Health degree program. The area of specialization with this program would be identified as part of the needs assessment process. This assessment will take place during the 1997-1998 academic year.

The health care field is in a very dynamic and rapidly changing state due to technological advances which are occurring at a geometric rate, welfare reform, managed care mandates, tremendous demographic shifts, economic re-sizing efforts by industry, and increasing government regulation of health care. This industry is the most volatile in the United States. It will take a collaborative and concerted effort by Ohio University faculty and administrative staff to prepare our students to be competent professionals and leaders in their chosen fields.

FUNDING COMMITMENTS AND NEEDS

The current funding of the Institute of Health and Human Services consists of the following:

Executive Director--salary and benefits.

The first two years of this position, August 1, 1994 to June, 30, 1996, were provided jointly by Ohio University and the O'Bleness Foundation in order to facilitate the development of Highpointe Village retirement center. The university also provided \$10,000 for the marketing study.

The position in year three, 1996-1997, has been financed by the university.

Funding for the 4th year, 1997-1998, will be shared: 80% by the Dean's Office and 20% by Kids on Campus. The Dean's financial support has provided funding to a rotary account to provide the salary and benefits of the Executive Director position for years 1997-1998 and 1998-1999. The intent is to gradually move a portion of this position from the rotary account to the college operating funds. The balance of the position would need to be funded through external sources, most often as indirect fees of research, consulting, and conferences.

30% Secretary--salary and benefits

This individual's salary and benefits is part of the base budget for the Dean's office. This is a shared position between the Institute, the Assistant Dean of Recreation and Wellness, and the Assistant Dean for Development and Alumni Affairs.

Graduate Student--Tuition Waiver and \$6,000 yearly stipend. This position is part of the Dean's office and the Dean has assigned a graduate student to the Institute.

Operational Funds were provided this year, on a one-time only status, to provide marketing and newsletters for Highpointe Village, professional journals, and general offices expenses. These funds are provided by the Dean's Office of the College of Health and Human Services. Indirect funds from externally funded research throughout the College have generated less than \$500.

With the decreasing time commitments for Highpointe Village and Kids on Campus within the next two years, a goal of the Executive Director is to pursue continuing educational programs, a Center on Aging, and multidisciplinary research projects which will provide indirect funding to support the Executive Director position. Therefore, the current funding is adequate.

<u>SUMMARY</u>

The Institute for the College of Health and Human Services was created in 1980 to provide a structural organization to promote the development of new academic programs, to foster interdisciplinary research, and to work collaboratively with public and private agencies to develop community service projects which have either educational and/or research components. From 1980 to 1991, new academic programs were developed: a graduate program in Health Services Administration, an undergraduate concentration in Long Term Health Administration, an undergraduate concentration in Independent Living Rehabilitation, an undergraduate program in Physical Therapy, and a Certificate in Gerontology. The undergraduate Certificate in Gerontology program began in 1982 and a graduate Certificate program was initiated

in 1993. From its inception until 1994, either the Dean or Associate Dean of the College provided the leadership.

In August of 1994, an Executive Director was hired for the Institute with primary responsibilities to develop a community retirement facility. During the past two and one half years, the following accomplishments have been made:

1. The structure of the Institute has been changed to a functional organization to reflect its three areas of concentration:

Research

Academic Programs

Service Programs

- 2. A graduate Certificate of Health Policy has been approved by the University's Board of Trustees and enrollment will begin in the fall of 1997. This program offering has been created in response to the tremendous changes that the health care industry is currently undergoing. The certificate program is composed of courses from the College of Health and Human Services, the College of Arts and Sciences, and the College of Business. This program is being offered to both degree seeking and non-degree seeking students. This is the first time a certificate program at Ohio University has been offered to non-degree seeking students, thus enabling professionals, who are not currently in a graduate program, to access this knowledge and skill base.
- 3. The Executive Director has served as the project director for Highpointe Village, the proposed adult residential community for Athens. At this time, a model of the project has been developed, a market study completed, a site has been selected, a developer committed, and a site and architectural plans developed. The next stages are the marketing of the project to individuals and the construction. The total cost of Highpointe Village is estimated to be \$11.5 million and will create about 30 permanent jobs for the Athens community.
- 4. The Institute has been the initiator and coordinator of a community partnership project: Kids on Campus. This partnership has brought about the collaboration and sharing of resources between the five local school districts, the community-at-large, Hocking College, and Ohio University. The Institute has provided the leadership and fundraising efforts. During the first year, 1996, over \$370,000 of public and private money was raised to support a program for 300 impoverished children. The goal for 1997, is to raise \$514,000 to support a program for 375 children with a six week summer session and several at-school programs during the school year. To date, pending receipt of approval for three federal programs, the program has raised all but \$20,000. Kids on Campus provides Ohio University with educational practicum experiences for students, research opportunities for faculty and students, and summer employment for work-study students.
- 5. The Institute for the College of Health and Human Services has joined with the Institute of Local Government and Regional Development (Ilgard) to provide the leadership base for the formation of the Rural Health Research Partnership. This collaborative effort identifies faculty and administrators with similar rural health research interests, assists in identifying externally funded research grants, and provides limited database support for grant proposals and research projects.
- 6. The Institute is working with Dr. Averell Overby, School of Physical Therapy, as principal investigator and in collaporation with Dr. Carol Blum, Research

and Graduate Studies to design a series of workshops that address methodologies of multidisciplinary research studies. The proposal will be submitted for National Institutes of Health funding on April 25, 1997. The educational workshops are being designed for pre-and post-doctoral students, medical students, and junior faculty. We have already had interest and support expressed by the University of Kentucky, University of Louisville, West Virginia University, Marshall University, and various schools and colleges within Ohio University. If this proposal is not funded by NIH, the principals are prepared to submit proposals to additional external funding agencies.

7. As a primary partner, the Institute for the College of Health and Human Services is an active participant in the multidisciplinary efforts to form an Institute of Managed Care. This proposed Institute would address the following issues: escalating costs of health care, the impact of changes in the delivery systems on access and quality of health care, supply and demand of health care professionals, and ethical dilemmas facing medicine and managed care.

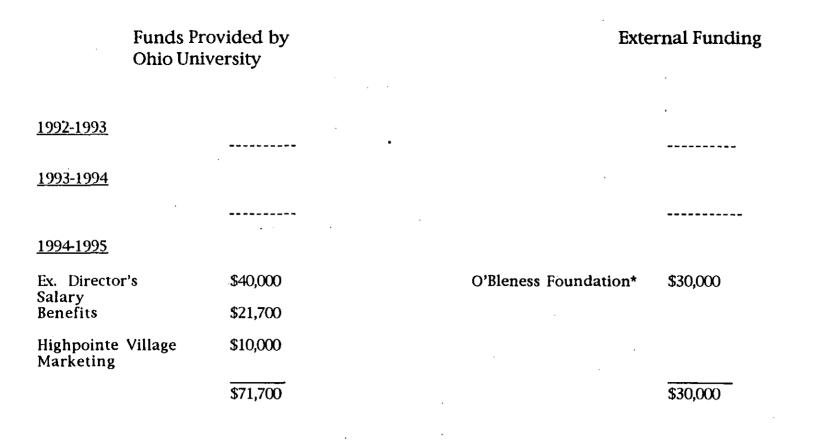
In evaluation of the worthiness of the Institute, this report has provided numerous examples of significant goals and objectives which have been achieved during the past five years. These goals and objectives have been achieved at a cost to the university for the Executive Director's salary and \$5,000.00 operating funds from the Dean's office. No additional operating funds are requested. The Institute will increase its external funding for the Executive Director position during the next year with 20% of salary and benefits as part of the Kids on Campus budget. These funds have already been approved by The Danforth Foundation. The Executive Director will seek additional external funding for the position. In addition, a portion of the salary and benefits will need to be obtained on a more permanent funding basis at the university through the College of Health and Human Services.

The Institute for the College of Health and Human Services provides a structural organization to promote multidisciplinary research, academic programs, and service programs which have research and/or educational experiences as components. Although most faculty and administrators are interested in multidisciplinary educational, research, and service opportunities, there is a tendency to remain focused within one's own specialization. The Institute provides a supportive system to foster discussions and collaborations to actualize these potential opportunities.

The current and proposed areas for multidisciplinary research studies, academic programs, and community service programs with educational and/or research components address the dynamic changes in our economic, social, political, and health care systems. The current and proposed programming of the Institute for the College of Health and Human Services justifies its continuing existence.

BUDGET FOR THE INSTITUTE OF HEALTH AND HUMAN SERVICES

from 1992-1997



* O'Bleness Foundation provided \$30,000 a year for two years to fund this position

Page 2

<u>1995-1996</u>

	Ex. Director's Salary	\$42,800	O'Bleness Foundation	\$30,000	
	Benefits	\$22,568	KOC Funding-Multiple Sources	\$296,461	
	Highpointe Village Marketing	\$ 3,000			
	College of HHSKOC** (in-kind and matching)	\$20,300	,	•	
	College of MedicineKOC (in-kind)	<u>\$19,200</u>	· · ·	• •	
		\$107,868	·	\$326,461	
	<u>1996-1997</u>				
	Ex. Director's Salary	\$75,712		,	
	Benefits	\$23,470			
	Highpointe Village Marketing	\$ 3,000	KOCMultiple Sources	\$423,470	
	College of HHSKOC (in-kind and matching) (\$6,000 for Grad Student)	\$19,000		•	
	College of MedicineKOC <u>\$19,600</u> (in-kind)		<u>\$19,600</u>		
		\$120,782		\$423,470	

KOC**--Kids on Campus, Community Partnership Initiative Hosted by Ohio University and Hocking College

ATTACHMENT A

KIDS ON CAMPUS

COMMUNITY ADVISORY BOARD MEMBERS

KIDS ON CAMPUS ADVISORY BOARD MEMBERS - Last Update: 4/23/97

Angie Cantrell The Plains Elementary 90 Connett Road The Plains, OH 45780 (614) 797-4572 FAX: (614) 797-3450

Ken Carmack Parent 1 South Street The Plains, OH 45780 (614) 797-9189

Elaine Dabelko Director of Instructional Services Hocking College 3301 Hocking Parkway Nelsonville, OH 45764 (614) 753-3591, Ext. 2272 FAX: (614) 753-4097

Tammy Hall York Elementary 1 Buckeye Drive Nelsonville, OH 45764 (614) 753-5145 FAX: (614) 753-1968

Nancy Nottke, Secretary Trimble Elementary 18500 Jacksonville Road Glouster, OH 45732 (614) 767-2810 FAX: (614) 767-4901

Barry Oches, Chair Federal Hocking Middle School P.O. Box 117 Stewart, OH 45778 (614) 662-3006 FAX: (614) 662-5065

Dave Palmer WATH Radio 300 Columbus Road Athens, OH 45701 (614) 593-6651 FAX: (614) 594-3488 Sharon Parsons Chauncey Elementary P.O. Box 225 Chauncey, OH 45719 (614) 797-4588

Linda Phillips Governor's Family and Children Council P.O. Box 1046 Athens, OH 45701 (614) 592-3061 FAX: (614) 593-3880

Beverly Schumacher 8111 N. Coolville Ridge Road Athens, OH 45701 (614) 592-2280

Dee Stamper-Zesiger Trimble High School One Tomcat Drive Glouster, OH 45732 (614) 767-3434 FAX: (614) 767-4901

Bridget Stephens College of Education - Ohio University 102C McCracken Hall Athens, OH 45701 (614) 593-0874 FAX: (614) 593-0477

Ann Teske College of Health and Human Services 014 Grosvenor Hall - Ohio University Athens, OH 45701 (614) 593-9335 FAX: (614) 593-0285

Steve Trout Southern Consortium for Children Dairy Lane Athens, OH 45701 (614) 593-8293 FAX: (614) 592-4170

Cindy Winner, Vice Chair Alexander Local Schools 5149 Aldon Street Albany, OH 45710 (614) 698-8831 FAX: (614) 698-2038

OHIO UNIVERSITY - TSINGHUA UNIVERSITY INSTITUTE FOR GENETICS AND BIOTECHNOLOGY

RESOLUTION 1997 - 1554

WHEREAS, Ohio University and Tsinghua University have entered into a scientific collaboration to pursue studies on genetics and biotechnology and to provide for commercialization of the results from the scientific collaboration, and

WHEREAS, the two universities will focus initially on the development of the technology and expertise required to transfer generic or generic-like drugs, compounds, and pharmaceutical therapies into the Asian marketplace, and

WHEREAS, the product development role is unique to academic institutions.

NOW, THEREFORE, BE IT RESOLVED that the Board of Trustees establishes the Ohio University and Tsinghua University Institute for Genetics and Biotechnology.



Office of the Provost Cutler Hall Athens OH 45701-2979

OHIO UNIVERSITY 1804

DATE: September 23, 1997

TO: Robert Glidden, President

- **FROM:** Sharon Stephens Brehm, Provost
- SUBJECT: Establishment of the Ohio University--Tsinghua University Institute for Genetics and Biotechnology

The attached request to establish the Ohio University--Tsinghua University Institute for Genetics is one that I support and recommend to you for approval.

This institute will link Tinghua University and Ohio University in a scientific collaboration to pursue studies on genetics and biotechnology and provide for commercialization of the results from the scientific collaboration.

SSB/jt

Office of the Vice President Research & Graduate Studies

Research & Technology Center 101 Athens OH 45701-2979 614-593-0370 phone 614-593-0380 fax



OHIO UNIVERSITY

DATE: September 22, 1997

TO: Sharon S. Brehm, Provost

FROM: Carol J. Blum, Interim Vice President for Research and Graduate Studies

SUBJECT: Establishment of the Ohio University--Tsinghua University Institute for Genetics and Biotechnology

Attached is a copy of a proposal and a resolution for the Board of Trustees regarding the establishment of the **Ohio University--Tsinghua University Institute for Genetics and Biotechnology**. I have reviewed the proposal and recommend taking it to the President and the Board.

The Institute will link Tsinghua University and Ohio University in a scientific collaboration to pursue studies on genetics and biotechnology and to provide for commercialization of the results from the scientific collaboration. The Institute's product development role is unique for academic institutions offering a unique experience for scientists as well as students in other programs across the University.

The research program of the Institute will be co-directed by Dr. Thomas Wagner and Dr. Xiaozhuo Chen, both are affiliated with Ohio University's Edison Biotechnology Institute (EBI). An Advisory Board will serve as the governing organization of the Institute and oversee the activities of the Institute in accordance with the By-Laws of the Institute. Operations of the Institute will be managed utilizing the extensive expertise of EBI and will follow existing procedures and structure of EBI. The Institute will report to the vice president for research and graduate studies through EBI.

bv Enclosures

Proposal for the Establishment of the Ohio University - Tsinghua University Institute for Genetics and Biotechnology

It is proposed that the Ohio University - Tsinghua University Institute for Genetics and Biotechnology ("the Institute") be established to pursue the goals outlined in the Memorandum of Understanding between Ohio University and Tsinghua University and described in the Cooperative Agreement between Ohio University and its Edison Biotechnology Institute and Tsinghua University and its Department of Biological Sciences and Biotechnology dated 12 November, 1996.

- a) <u>Role of the Institute</u> The Institute's role is to link two universities, Tsinghua University and Ohio University, in a scientific collaboration to pursue studies on genetics and biotechnology and to provide for commercialization of the results from the scientific collaboration. The Institute will focus initially on the development of the technology and expertise required to transfer generic or generic-like drugs, compounds, and pharmaceutical therapies into the Asian marketplace. The first product to be developed will be interferon β, currently used in the treatment of multiple sclerosis and certain types of cancers such as non-small cell lung cancer and glioma. Future research will explore areas such as traditional Asian medical practices and native products in an effort to determine the mechanism of action of these therapies and develop analogs that can be manufactured easily. Commercialization of the technology developed by the Institute will be via transfer to the private company sponsoring the research, Huagen Pharmaceutical Co., Ltd.
- b) <u>Necessity for Establishing the Institute</u> The Institute, as defined in the cooperative agreement, is necessary to ensure protection of the unique intellectual property developed by Ohio University's Edison Biotechnology Institute (EBI) and by the Institute, both of which will utilize the facilities of the Konneker Research Center. It is also necessary to ensure that EBI can comply with requirements of existing agreements with the State of Ohio and other state, federal, and private sector partners while maintaining the flexibility of the Institute to respond to international (Chinese) law.
- c) Unique Value of the Institute The Institute will allow Ohio University and EBI to enter and gain expertise in the aggressive product development arena while maintaining EBI's basic research profile. EBI's mission is to pursue basic, applied research in an effort to develop innovative technology and then transfer that technology to the commercial sector. EBI has been extremely successful to date. The Institute, however, will play a product development role unique for academic institutions. It will offer the potential for a unique experience for scientists as well as students in other programs (e.g., College of Business) across the University. In addition, product development offers a mechanism by which the Institute will become self funded (see below).
- d) Personnel and Departments Involved The research program of the Institute will be directed by Dr. Thomas Wagner, Distinguished Professor of Molecular and Cellular Biology, and Dr. Xiao-zhuo Chen. Dr. Wagner's primary affiliation is with EBI. He is also a member of the Molecular and Cellular Biology Program and has a faculty appointment in the Department of Chemistry. Dr. Chen, Assistant Professor in the College of Osteopathic Medicine Department of Biomedical Sciences, is also affiliated with EBI and has an adjunct appointment in the Department of Chemistry. The research performed by the Institute will utilize the scientific staff of EBI and additional staff as required to fulfill the obligations of any sponsored research agreements. These agreements will provide the funds necessary to support all staffing requirements.

- e) <u>Fiscal Resources and Sources of Funding</u> The Institute will be funded initially via sponsored research agreements between Ohio University, Tsinghua University, Van Yu Holdings Inc. and Huagen Pharmaceutical Co., Ltd. The initial agreement provides \$932,827 in funding covering the period from 1 July, 1997 to 30 June, 1999. Funding for the Institute will also be provided via distribution of 50% of the net profits of Huagen Pharmaceutical Co. equally between Tsinghua University and Ohio University as specified in the Memorandum of Agreement dated 19 August, 1997. Funding will be directed to the Institute through the Ohio University Foundation which holds 25% ownership in Huagen Pharmaceutical Co., Ltd. Because of the product development nature of the research efforts, it is anticipated that the Institute will become self-funded within five years.
- f) <u>Space and Equipment Needs</u> The research performed by the Institute will utilize the facilities of the Konneker Research Center where Drs. Wagner and Chen both have their research laboratories and offices. Konneker Research Center also houses EBI and was specifically designed for biotechnology research. Reimbursement for use of facilities and equipment will be provided by the Institute via either direct or indirect funding.
- g) <u>Management and Administrative Control</u> An Advisory Board will serve as the governing organization of the Institute and oversee the activities of the Institute. It will act in accordance with the By-Laws of the Institute adopted 19 August, 1997, Tsinghua University's Policy and Procedures, Ohio University Policies for Centers and Institutes, and the terms of the Cooperative Agreement. Three of the seven members of the advisory board will be appointed by Ohio University. The Vice President for Research and Graduate Studies and Drs. Wagner and Chen currently represent Ohio University.

Operations of the Institute will be managed utilizing the extensive expertise of EBI and will follow existing procedures and structure of EBI. Submission of research proposals will be through EBI. Awards and other funding obtained by the Institute and their expenditure will be managed via consultation between EBI management and the Principal Investigator(s) listed on the funding proposal. Personnel supported with funds provided to support Institute research will be employed as EBI staff members, will have their contracts written by EBI, and where applicable, will be subject to EBI job classification, evaluation, and promotion procedures. Funds obtained by the Institute will be utilized to provide the necessary management support.

The Institute, because of its affiliation with EBI, will report to the Vice President for Research and Graduate Studies through EBI.

C. BOARD ADMINISTRATION COMMITTEE

Board of Trustee Chairman Grover provided a status report to Trustees on the employment of a consultant to assess residence halls facility needs and possible costs of renovation as well as funding solutions. Mr. Grover reported that other trustees had met with the consultant, Ira Fink, Ira Fink and Associates Inc., Berkeley, California, and that a preliminary report should be forthcoming from Mr. Fink prior to the February 1998 Trustee meetings. Mr. Grover commented that the residence hall system is one of Ohio University's strengths and must be sustained.

Committee Chairman Brunner presented and moved the two resolutions before the committee. Mr. Emrick seconded the motion and all voted aye.

Security Agreement Update - Res. 1997 -- 1555

Reauthorization of Ohio University/Muskingum Area Technical College Land Lease -Res. 1997 -- 1556

SECURITY AGREEMENT UPDATE

RESOLUTION 1997-1555

WHEREAS, Ohio University periodically has faculty and staff involved in research activity that requires them to have access to classified information, and

WHEREAS, the United States Government requires that the university obtain security clearance as a precondition of its staff having access to classified information necessary for their research, and

WHEREAS, the university has a Managerial Group, as described in the Industrial Security Manual for Safeguarding Classified Information, consisting of the persons occupying the following positions: Robert Glidden, President; Sharon S. Brehm, Provost; Carol Blum, Interim Vice President for Research and Graduate Studies; and Richard Siemer, Treasurer; and

WHEREAS, the Board of Trustees delegates to this Managerial Group all of its duties and responsibilities pertaining to the protection of classified information under classified contracts awarded to Ohio University, and

WHEREAS, members, as named below, of the Board of Trustees and all officers of the university not named as members of the Managerial Group shall be effectively excluded from access to all classified information in the possession of Ohio University and shall not be processed for personnel clearance, and

WHEREAS, the Managerial Group shall review and approve any classified research proposals at the university.

NOW, THEREFORE, BE IT RESOLVED, that Ohio University, Cutler Hall, Athens, Ohio 45701, authorizes the president of the university to take all necessary steps for designating replacements to the Managerial Group and to indicate replacement members of the Board of Trustees for the herein described Board of Trustees exclusion status: Patricia A. Ackerman; Gordon F. Brunner; Charles R. Emrick, Jr.; N. Victor Goodman; Brandon T. Grover; Thomas S. Hodson; Paul Leonard; M. Lee Ong; and Robert D. Walter.

REAUTHORIZATION OF OHIO UNIVERSITY/MUSKINGUM AREA TECHNICAL COLLEGE LAND LEASE

RESOLUTION 1997 -1556

WHEREAS, Ohio University entered into a twenty-five (25) year lease with the Muskingum Area Technical College (MATC) for 33.063 acres on the Ohio University-Zanesville Regional Campus (OU-Z), and

WHEREAS, the cooperative arrangements between MATC and OU-Z have mutually benefited both institutions over the past twenty-five years, and

WHEREAS, MATC wishes to renew this lease for another twenty-five (25) years, and the Ohio University-Zanesville Regional Campus Coordinating Council has endorsed the renewal.

NOW, THEREFORE, BE IT RESOLVED that the Ohio University Board of Trustees hereby approves the renewal of the lease to MATC for \$1.00 under the same terms and conditions; and the Board of Trustees hereby further authorizes the President or his designee to arrange for the preparation and execution of the lease in accordance with Ohio law.

Ohio University

Interoffice Communication

Date: September 25, 1997

To: President and Board of Trustees

From: John F. Burns, Director, Office of Legal Affairs

Subject: Review of Muskingham Area Technical College Lease On The Ohio University-Zanesville Regional Campus

In March of 1973, Ohio University entered into a twenty-five (25) year lease in accordance with Ohio law to lease 33.063 acres to the Muskingham Area Technical College (MATC). The lease and the cooperative operational and facilities programs between the Ohio University-Zanesville Regional Campus (OU-Z) and MATC has been one of the model cooperative agreements between regional campuses and technical colleges in the state.

Twenty-five (25) years has gone by very quickly and it is time to renew the basic lease to be able to continue these successful cooperative arrangements. The Ohio University-Zanesville Regional Campus Coordinating Council has endorsed the renewal of the lease for another twenty-five (25) years for \$1.00 in accordance with the same terms and conditions.

The lease is a "net lease" with no responsibilities to be assessed by Ohio University other than to assure MATC it has properly entered into the lease. Since the administration has not brought a lease to the board of trustees for awhile, please permit a brief review of the applicable Ohio law. The applicable statute is Section 123.01 A(9) which allows state universities, with the approval of their board of trustees and the Department of Administrative Services (DAS) to lease land up to twenty-five (25) years. It should be noted Section 123.01 (A)(9) does not provide for an automatic renewal, and Section 123.77 ORC, which applies to leases of up to eighty (80) years for commercial developments of state university surplus property can not apply to this type of lease.

A resolution has been prepared for your review and approval to enter into the lease with MATC and the staff will be available to answer any questions at the upcoming meeting.

Thank you.

JFB:vsp

Enclosure

cc: Dr. James Bryant, Vice President for Regional Higher Education Dr. Alan H. Geiger, Secretary to the Board of Trustee

June 25, 1997

Dr. Alan H. Geiger Assistant to the President Cutler Hall Ohio University Athens OH 45701-2979

Dear Alan:

Ron Pratt and I have reviewed the Ohio University/Muskingum Area Technical College land lease which we will be discussing July 11th.

Since there are no changes in either the land configuration or its uses, we don't feel there should be any problem reactivating the lease for another 25 years.

The one change of building location which has happened over the past few years is the construction and location of the joint-use Campus Center building. This building is technically an MATC building, but its location straddles both MATC and OU land.

We can ignore this or engage in an expensive land survey and rewrite that section of the lease. What do you think?

See you July 11th.

Sincerely,

Lynn H. Willett President

baq

Muskingum Area Technical College 1555 Newark Road Zanesville₁ Ghio 43701 (614) 454-2501

Ohio University

Interoffice Communication

Date: September 4, 1997

To: Dr. James Bryant

From: Craig Laubenthal

Subject: MATC Lease Action

During the last two weeks of July, I solicited the votes of all members of the Ohio University-Zanesville Regional Coordinating Council regarding their recommendations on the renewal of Muskingum Area Technical College's (MATC) land lease. The votes were solicited by mail because our next meeting would not be held until October. By unanimous vote, the Regional Council recommended the following to the Ohio University Board of Trustees:

That MATC's land lease for 33 acres on the Ohio University-Zanesville Campus be renewed for \$1 per year for 25 years, commencing March 28, 1998, and ending on the 28th day of March, 2023.

cd1

cc: Charles Love

CADM 0.18

WHEREAS, each public institution of higher learning in Ohio is created as a body politic and corporate by the State Legislature.

BE IT RESOLVED, by the Muskingum Area Technical College Board of Trustees that, in accordance with the authority vested in the Board by the General Statutes of the State of Ohio (e.g., Chapter 3345, R. C., State Universities -General Powers) and by the Ohio Board of Regents and in keeping with the recommendations of <u>The Minute Book of Board Proceedings - Universities</u> issued by the Auditor of the State and by the Bureau of Inspection and Supervision of Public Offices, the Board of Trustees of Muskingum Area Technical College on December 11, 1972, authorized the President, on behalf of the Muskingum Area Technical College Board of Trustees, to enter into a Lease with Ohio University for a portion of the Zanesville Campus and that the attached document entitled Lease be approved. (See attached copy.)

Resolution adopted December 11, 1972. Voting "aye" on the motion were Messrs. Drake, Fulks, Mizer, Watt, and McCall.

12[°]1

R 1973-6

This LEASE made at Columbus and Zanesville, Ohio, this <u>J74</u> day of <u>Manne</u>, 1973, by and between THE STATE OF OHIO, acting by and through the DIRECTOR OF PUBLIC WORKS, Columbus, Ohio, (hereinafter called the Lessor) and THE PRESIDENT AND BOARD OF TRUSTEES OF THE MUSKINGUM AREA TECHNICAL COLLEGE, a political subdivision of the State of Ohio and a body corporate, (hereinafter called the Lessee).

WITNESSETH THAT:

...

1. (a) <u>Premises</u>. In consideration of the rents herein-reserved to be paid by the Lessee to the Lessor and in consideration of the other terms and conditions herein contained to be observed and performed between the parties, and for other good and valuable considerations, the Lessor does hereby lease to the Lessee the premises located on the Ohio University Regional Campus known as Ohio University-Zanesville, Falls Township, Muskingum County, Ohio, as outlined in red on the map attached hereto, initialed by the parties and made a part hereof, said premises being more specifically described

as follows:

Situated in the southeast (4th) guarter of Falls Township (T. 1N., R. BW.), Muskingum County, Ohio. Bounded and described as follows: Beginning at an iron pin in the north right-of-way line of the Newark Road (State Route No. 146), the southwest corner of property now owned by the President and Board of Trustees of Ohio University and common to and with the southeast corner of a tract now or formerly owned by William and L. Woods. Thence N 4 degrees 01 minute E, 1243.85 feet to an iron pin at the northeast corner of the Woods tract; thence N 85 degrees 48 minutes W, 641.02 feet to a stone at the northwest corner of the Maples Subdivision, passing an Iron pin at 156.42 feet; thence N. 85 degrees 46 minutes W, 215.84 feet to a stone at the northwest corner of a parcel now or formerly owned by Peddicord; thence N 4 degrees 03 minutes E, 199.75 feet to a point; mence S 85 degrees 59 minutes E, 1711.4 feet to the west side of a pole line and access road leading to the county dog pourse; thence S.7 degrees 48 minutes W, 1719.0 feet along the west side of the said pole line and road to a point in the north right-of-way line of the aforesaid Newark Road; thence following the said right-of-way line (parallel with and 30 feet off the road centerline) N65 degrees 59 minutes W, 788.8 feet to the place of beginning, containing an area of 33.063 acres, more or less.

Subject to easements and leases which the Ohio University or predecessors in title may have given, including but not limited to Ohio Power Company, Ohio Bell Telephone Company, and Whitman Oil Company, their predecessors, successors, or assigns.

Restricted to and for educational purposes only, but for no other use or purpose whatever. Reference grantors deed at V. 538, p. 799, Muskingum County Records.

Also subject to a restriction for a right-of-way across the northwest portion of the leased premises for the sole purpose of ingress and egress to and from the Lessor's remaining premises with any and all public or private access road or ways adjoining or contiguous to the leased premises. The right-of-way reservation will run north and south across the northwest portion to wit:

From a pin at the northeast corner of the Woods tract; thence N 85 degrees 48 minutes, W 641.02 feet to a stone at the northwest corner of the Maples subdivision, passing an iron pin at 156.42 feet; thence N 85 degrees 46 minutes W 215.84 feet to a stone at the northwest corner of a parcel now or formerly owned by Peddicord; thence N 4 degrees 03 minutes E 198.75 feet to a point; thence S 85 degrees 59 minutes E 856.75 feet; thence S 4 degrees 01 minutes W 201.61 feet to the place of beginning; containing 3.94 acres, more or less.

The right-of-way will not have a specific east-west width, boundary or location; and when it is to be used the Lessor will notify Lessee of Lessor's intention to use the right-of-way and both Lessor and Lessee will agree upon the location, time and manner of use in order that the Lessee's use of the premises will not in any manner be interfered with.

(b) The Lessor further grants to the Lessee, its agents, employees, invitees, licensees and permittees, the right to use jointly with others the public roadways and sidewalks upon the Ohio University Regional adjoining campus for ingress and egress to and from the demised premises.

(c) The Lessor and Lessee further mutually agree and covenant that each shall have the right and privilege to construct upon the Ohio University Regional Campus and the demised premises certain parking area facilities, walks, driveways and other improvements designed to facilitate the joint use of the Lessor and Lessee, premises, the plans and specifications of which will have been approved by a joint planning committee consisting of representatives from the Ohio University, Athens, Ohio; the Ohio University Regional Campus, Zanesville, Ohio; and Lessee, the same being in accordance with existing and future University Regional Campus land use plans and specifications.

(d) The Lessor further grants to Lessee its agents, employees, invitees, licensees and permittees, the right to use and enjoy, together with Ohio University-Zanesville, its agents, employees, invitees, licensees and permittees, all of the parking spaces now or hereafter constructed upon Ohio University Regional Campus including the demised premises. Such use, however, not to unreasonably interfere with the joint and common use and enjoyment of said parking facilities by both Ohio University-Zanesville and Lessee and its respective agents, employees, invitees, licensees, and permittees, and further be subject to all rules, regulations, orders and disciplinary measures as shall from time to time be formulated by Ohio University-Zanesville with respect to use of such parking facilities by Ohio University-Zanesville's agents, employees, invitees, licensees and permittees.

2. <u>Term</u>. The term of this lease shall be twenty-five (25) years, commencing on the 27th day of March , 1973 , and ending on the 27th day of March , 1998 .

3. <u>Rent</u>. Lessee does hereby covenant and agree to pay to Lessor as annual rent for the demised premises the sum of One Dollar (\$1.00); the entire rent for the term, to-wit: Twenty-five Dollars (\$25.00) to be paid in advance upon execution of this lease. The Lessor hereby acknowledges receipt of payment of said Twenty-five Dollars (\$25.00).

4. <u>Taxes</u>. In the event that during the term of this lease real estate taxes or other taxes or assessments shall be levied upon said demised premises, Lessee agrees to pay the same as they fall due.

5. <u>Restrictions on Use</u>.

(a) Lessee shall be permitted to construct such buildings, structures
 and other improvements upon said demised premises from time to time as it shall
 desire and to remove, raze, remodel, alter or add to such buildings, structures,
 and other improvements, provided, however, that in order that such buildings,
 structures, improvements and changes shall not conflict with the design.

architecture, lay-out and contruction standards of Ohio University's Regional adjoining campus, the plans and specifications of any such buildings, structures, improvements or changes shall be first approved by a joint planning committee consisting of representatives of Ohio University-Zanesville, the Lessee and by the Board of Trustees of Ohio University, Athens, Ohio, the same not to be unreasonably withheld.

·. .

(b) The Lessee shall use and occupy the premises in a careful, safe and proper manner for the operation of educational facilities and related activities, and shall not suffer or permit waste to be committed in or upon any portion of the premises. Further, Lessee shall not do or permit to be done any act or thing upon said premises which shall subject the Lessor, Ohio University-Zanesville, or Ohio University, to any liability or responsibility for injury to any person or persons or to property by reason of any activity being carried on upon said premises. Lessee shall indemnify Ohio University-Zanesville and/or Ohio University, Athens, for any liability, damages or responsibility for injury to any person or persons or to property by reason of any activity being conducted upon said demised premises by Lessee, its agents, employees, invitees, licensees, permittees, contractors or other representatives.

(c) Lessee will not use or occupy said premises for any unlawful purpose and will not cause or do anything or permit anything to be done upon the premises in any way tending to create a nuisance; Lessee, at its sole expense, shall comply with all laws, orders and regulations of federal, state, county and municipal authorities and with any direction of any public officer or officers pursuant to law, which shall impose any violation, order or duty upon Lessee with respect to the specific use or

occupation of the demised premises,

(d) Lessee may, at its own risk, lawfully eract exterior signs, relating to Lessee's occupancy, but the design, size and construction of the same shall be consistent with the "signage" used by Ohio University-Zanesville on its adjoining campus and shall be approved by Ohio University, such approval, however, not to be unreasonably withheld. Lessee agrees to maintain said signs in a good state of repair, save Ohio University-Zanesville and Ohio University, Athens, and Lessor harmless from any loss, cost or damage as a result of the erection, maintenance, existence or removal of the same, and shall repay any damage which may have been caused by the erection, maintenance or removal of such sign. At the end of the term or any renewal thereof, the Lessee agrees to remove the same and repair any damage caused thereby.

6. <u>Quiet Enjoyment</u>. The Lessor is seized with good, right and sufficient title to make this lease. The Lessee shall and may peaceably and quietly have, hold, occupy and possess and enjoy the premises for the term hereinabove provided, provided the Lessee pays the rent as set forth above, and keeps, observes and performs all the other covenants and provisions as required in this lease.

7. <u>Assignment: Sublease</u>. Lessee agrees not to assign, mortgage, pledge or encumber this lease nor to sublet the whole or any part of the demised premises without the prior written consent of the Lessor.

8. <u>Repairs</u>. Lessor shall have no obligation to make repairs or maintain the demised premises. Lessee shall at its own expense make all necessary interior and exterior repairs and shall maintain said premises in a good and orderly state of repair.

9. <u>Mechanics Lien Claims</u>, Lessee will save harmless the Lessor in said premises from any and all liens, claims or demands by reason of any repairs or alternations or improvements which may be made by the

said Lessee in said premises.

10. <u>Waiver of Subrogation</u>. The Lessor and the Lessee hereby waive all rights or recovery and causes of action, which either has or may have or which may arise hereafter against the other, whether caused by negligence, misconduct or otherwise, for any damage to the premises, property or business caused by any of the perils which are normally covered under approved Ohio standard clauses of fire and extended coverage building and contents or for which either party may be reimbursed as a result of insurance coverage affecting any loss suffered by it; and further provided that the foregoing waivers do not invalidate any policy of insurance of the parties hereto now or hereafter issued, it being stipulated by the parties hereto that the waivers shall not apply in any case in which the insurance application thereof would result in the invalidation of any such policy of insurance.

11. Surrender of the Premises Upon Termination. The Lessee will deliver up and surrender to the Lessor possession of the premises hereby leased upon the expiration of this lease or its termination in any way in as good condition and repair as the same shall be at the commencement of the said term (loss by fire, risk covered by extended coverage insurance, acts of God and ordinary wear and tear only excepted). Rights acquired under this lease shall not extend beyond the term herein granted and no holding over or continuance in the occupation of the leased premises shall cause or be construed to be an extension of said lease, but in any and all such cases, the Lessee shall be considered a trespasser or tenant at will at the option of the Lessor, subject to removal by said Lessor by summary process and proceedings.

12. <u>Utilities</u>. The Lessee agrees to pay for all public and private utility services rendered or furnished to the Lessee including heat, water, gas, sewer, electricity and all other utilities together with all taxes, levies or other charges on such utility services.

13. <u>Binding Effect</u>. This agreement of lease shall be binding upon the parties, their respective successors assigns.

IN WITNESS WHEREOF, the parties have, in accordance with the statutes provided, by their duly authorized officer, hereunto set their hands the day and year set forth above.

APPROVED:

john J. Gilligan, Governó

State of Ohio MAR 26 1973

WITNESSES:

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THE STATE OF OHIO

Director of Public W

By and Through

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LESSOR

MAR 2 2 1973

PRESIDENT AND BOARD OF TRUSTEES OF THE MUSKINGUM AREA TECHNICAL COLLEGE

LESSEE

WITNESSES:

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OHIO UNIV., ZANESV. (2-924 A.7) 3 OHIO UNIV. ZANESV. W. +L. Woods LEASE MUSK. TECH. pedicord 3^{3.063 A.±} F SE/4 FALLS T.1N., R.8 MUSKINGUM CC SCALE . I'. ROBT H JONES RÉGISTERED Seal SURVEYOR 2HIO NO 3233 R/w

VIII. GENERAL DISCUSSION - CALL OF MEMBERS

Members, in turn, warmly welcomed and congratulated new trustee Robert D. Walter, and new student trustee, Erik Roush. This was the first meeting for these new trustees.

Dr. Ackerman noted she had just hired her first Ohio University graduate and that she was pleased with that individual's performance.

Mr. Goodman congratulated the President on the winning season to date of the Ohio University football team.

Mr. Hodson noted the Trustees continue to be concerned with the number of minority students enrolling and pledged their efforts in support of a solution.

Mr. Kirshman indicated Ohio University now has 69 active alumni chapters and commented the National Alumni Board members were pleased with the combining of our development and alumni activities under Vice President Leonard Raley.

Mr. Roush thanked all for their warm welcome and for making him feel part of the Board of Trustees.

Mr. Walter thanked members for making him feel welcome. He noted this opportunity to serve will enable him to deepen his relationship with the University.

Mr. Emrick complimented Vice Presidents Leonard Raley and Richard Siemer for their excellent starts with their responsibilities.

President Glidden echoed Mr. Emrick's comments and noted he was pleased with the excitement of this weekend's Homecoming activities.

Chairman Grover commented he was leaving the Trustees meeting with a renewed enthusiasm for Ohio University and noted the University had not reached its full potential.

IX. ANNOUNCEMENT OF NEXT STATED MEETING

Secretary Geiger announced the Board of Trustees will meet next on the Athens Campus, Friday, December 12, 1997, for committee/study sessions and Saturday, December 13, 1997 for the formal board meeting.

X. ADJOURNMENT

Determining there was no further business to come before the board, Chairman Grover adjourned the meeting at 3:15 p.m.



XI. CERTIFICATION OF SECRETARY

Notice of this meeting and its conduct was in accordance with Resolution 1975 - 240 of the Board, which resolution was adopted on November 5, 1975, in accordance with Section 121.22(F) of the Ohio Revised Code and of the State Administration Procedures Act.

Brandon T. Grover Chairman

Alan H. Geiger Secretary

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