

SENATE STATEMENT BY WILLIAM S. BICKEL, PROFESSOR OF PHYSICS, FEBRUARY 7, 2000

I am Bill Bickel, Professor of Physics. This statement is about the consistent denial of due process to Regents Professor Marguerite Kay.

On April 30, 1999 the Court ruled that the University administration engaged in "arbitrary and capricious conduct" by circumventing its own rules in dismissing Professor Marguerite Kay. Then the Committee of Eleven passed two unanimous resolutions.

Jerry Hogle joined the Committee to pass the resolutions: one urging President Likins to implement fully Judge Villarreal's decision that the University carry out an official conciliation process in the Marguerite Kay case, and the second to reinstate Dr. Kay immediately. This meant that no sanction, including dismissal, should be in effect before all steps are completed.

Senators Witte, Hogle, Marchalonis, Spece, Medine and others pointed out: Dr. Kay never was dismissed, so she should be fully reinstated to undergo due process. If the process was not finished, the person should not be dismissed. The Judge ruled clearly that Kay's dismissal was arbitrary and capricious. There was ethical misconduct of University Attorneys during the investigative and hearing processes. The general call was for the President to immediately reinstate Kay.

On December 6, President Likins informed the Senate that it was imperative that due process govern in the Marguerite Kay case. He said, "I have instructed the University's General Counsel to immediately contact Dr. Kay's counsel, so that once the Court's decision has been rendered we can attempt to arrive at a mutually acceptable disposition. I have asked that the attorneys meet and confer to resolve any uncertainties regarding due process in Dr. Kay's favor ..".

A Special Senate meeting was called for December 13 to act on the motion for immediate reinstatement. But during that meeting Chair Hogle told the Senators that things had changed since the original motion to immediately reinstate Kay was put forward. He read a letter from President Likins, which stated that on December 10 the University had received a copy of the formal Court ruling. Based on that ruling, the President said, "... further negotiations (starting today) will determine both the timing and the conditions of any reinstatement ... "

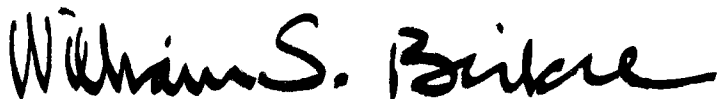
Hogle then offered a substitute motion which began with "The Faculty Senate readily appreciates President Likins' commitment to reinstatement in some status for the duration of this review process in the negotiations now underway in the case of Dr. Marguerite Kay. Senator Gruener moved to table the original motion to reinstate Kay - which was passed. The meeting adjourned. In the meantime, the scheduled January Senate meeting was abruptly canceled.

A letter to the President regarding the status of the alleged "negotiations" between the Administration and Kay remains unanswered. But we have since learned independently that except for a meeting on December 13, referred to as "negotiations" in Likins' letter of December 13, and embraced by Hogle for his substitute motion, **there has been no meeting and negotiation for the past eight (8) weeks between the Administration lawyers and Kay's attorney.**

I ask the Senate and President Likins: **What has happened to the negotiations for Professor Kay to receive her Court-ordered due-process hearing?**

Despite the President's February 4 email with the cryptic conditions for reinstatement of Professor Kay, **what about the latest letter sent by President Likins to Professor Kay dismissing her a second time for not meeting the standards of a University of Arizona faculty member?**

I leave a copy of this statement with Larry Schooley to be included in the Minutes of this meeting.



Arizona Legislative Web Site:

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Student Affairs Policy Committee

Approval of additional text to the Prohibited Conduct paragraph of the Code of Academic Integrity. (Additional text is in bold and italics.)

Prohibited Conduct

Conduct prohibited by the Code consists of all forms of academic dishonesty, including, but not limited to: cheating, fabrication, facilitating academic dishonesty, and plagiarism as set out and defined in the Code of Conduct, ABOR Policy 5-308-E.10; ***submission of work with or without modification for more than one course without the prior permission of the faculty member***, modifying any academic work to obtain additional credit in the same class unless approved in advance by the faculty member; failure to observe rules of academic integrity established by a faculty member for a particular course; and attempting to commit an act prohibited by this Code. Any attempt to commit an act prohibited by these rules shall be subject to sanctions to the same extent as completed acts.

Approvals: SAPC, 7/10/99
 GPSC, 22/11/99

CODE OF ACADEMIC INTEGRITY

Principle

Integrity is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. This principle is furthered by the student Code of Conduct and disciplinary procedures established by ABOR Policies 5-308 - 5-403, all provisions of which apply to all University of Arizona students. This Code of Academic Integrity (hereinafter "the Code") is intended to fulfill the requirement imposed by ABOR Policy 5-403.A.4 and otherwise to supplement the student Code of Conduct as permitted by ABOR Policy 5-308.D.1.

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Student Responsibility

Students engaging in academic dishonesty diminish their education and bring discredit to the academic community. Students shall not violate the Code of Academic Integrity and shall avoid situations likely to compromise academic integrity. Students shall observe the generally applicable provisions of this Code whether or not faculty members establish special rules of academic integrity for particular classes. Failure of faculty to prevent cheating does not excuse students from compliance with the Code.

Faculty Responsibility

Faculty members shall foster an expectation of academic integrity and shall notify students of any special rules of academic integrity established for a particular class (e.g. whether or not a faculty member permits collaboration on homework, use of the same paper in more than one class, etc.) and make every reasonable effort to avoid situations conducive to infractions of the Code. An intentionally false charge of violation of the Code shall be treated as a violation of the Code or of the applicable University rules.

Student Rights

Students have the right to a fair consideration of the charges, to see the evidence, and to confidentiality as allowed by law and fairness to other affected persons. Except in the course of authorized consideration of a charge, faculty shall not reveal the identity of students charged or otherwise involved in a violation. Procedures under the Code shall be conducted in a confidential manner, although a student has the right to be advised but not represented in any proceeding under the Code.

PROPOSED AMENDMENTS TO THE BYLAWS OF THE GENERAL FACULTY OF THE UNIVERSITY OF ARIZONA

BYLAWS

Current wording:

Article IV

Section 9. The Committee on Academic Freedom and Tenure shall be composed of twelve tenured or continuing members of the General Faculty other than deans of any rank, four of whom shall be elected each year by the General Faculty for a term of three years. The slate of candidates presented to the General Faculty shall be selected in the following manner:

- a. The Committee on Committees shall provide a list of names containing not less than three times the number to be elected, giving due consideration to representation from the various colleges. For each person listed, a brief description of relevant experience, qualifications and background will be provided. This information will also appear on the ballot submitted to the General Faculty.
- b. From the list described in (a) above, the Chair of the Faculty and the President of the University shall select a slate of not less than twice the number to be elected. If the Chair of the Faculty and the President cannot agree upon a slate, the President and the Chair shall each select one person alternately, with the President making the first selection, until a slate of twice the number to be elected has been named. The Committee on Academic Freedom and Tenure shall elect its chair from among those of its regular members who have served at least one year. In the event that the committee is of the opinion that the case load is so great that undue delay will be experienced in the hearing and disposition of all cases before it, the committee may direct that temporary members be installed to hear specific cases. Temporary members shall be selected by the presiding officer of the committee by whatever means he or she deems appropriate from a pool of names provided by the Committee on Committees. Such a pool shall contain not less than twice the number of names as there are temporary members to be selected. The Committee on Academic Freedom and Tenure shall select one of its regular members to serve as panel presiding officer in each case. In all cases the tenure of temporary members of the committee shall be limited to the hearing and disposition of the specific case which occasioned their selection.

Proposed wording:

Article IV

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- a. The Committee on Committees ~~shall provide~~ WILL PREPARE a list of names containing not less FEWER than ~~three~~ TWO times the number to be elected. ~~giving due consideration to representation from the various colleges.~~ AFTER CONSULTATION WITH THE CHAIR OF THE FACULTY AND THE PRESIDENT, THE COMMITTEE WILL REDUCE THE LIST TO A SLATE OF TWICE THE NUMBER TO BE ELECTED, GIVING DUE CONSIDERATION TO DIVERSITY. For each person listed, a brief description of relevant ACADEMIC experience, qualifications and background will be provided. This information will also appear on the ballot submitted to the General Faculty ALONG WITH THE NAMES AND COLLEGES OF CONTINUING MEMBERS. IF THE OUTCOME OF AN ELECTION CANNOT BE DETERMINED BECAUSE OF A TIE VOTE, A RUNOFF ELECTION SHALL TAKE PLACE.
- b. ~~From the list described in (a) above, the Chair of the Faculty and the President of the University shall select a slate of not less than twice the number to be elected. If the Chair of the Faculty and the President cannot agree upon a slate, the President and the Chair shall each select one person alternately, with the President making the first selection, until a slate of twice the number to be elected has been named.~~ The Committee on Academic Freedom and Tenure shall elect its chair from among those of its regular members who have served at least one year. In the event that the committee is of the opinion that the case load is so great that undue delay will be experienced in the hearing and disposition of all cases before it, the committee may direct that temporary members be installed to hear specific cases. Temporary members shall be selected by the presiding officer of the committee by whatever means he or she deems appropriate from a pool of names provided by the Committee on Committees. Such a pool shall contain not less than twice the number of names as there are temporary members to be selected. The Committee on Academic Freedom and Tenure shall select one of its regular members to serve as panel presiding officer in each case. In all cases the tenure of temporary members of the committee shall be limited to the hearing and disposition of the specific case which occasioned their selection.
- c. IF AN ELECTED MEMBER OF THE COMMITTEE ON ACADEMIC FREEDOM AND TENURE RESIGNS OR BECOMES INELIGIBLE FOR MEMBERSHIP, THIS MEMBER WILL BE REPLACED FOR THE REMAINDER OF THE TERM OF THE DEPARTING MEMBER WITH THE CANDIDATE WHO RECEIVED THE NEXT HIGHEST NUMBER OF VOTES IN THE SAME ELECTION, WITH TIES BROKEN BY THE CHAIR OF THE FACULTY. IF THERE IS NO ELIGIBLE CANDIDATE, THE CHAIR OF THE FACULTY WILL FILL THE VACANCY BY APPOINTING A MEMBER OF THE GENERAL FACULTY WHO IS OTHERWISE ELIGIBLE FOR MEMBERSHIP ON THE COMMITTEE.

UNIVERSITY of ARIZONA: North Central Association Self Study

Executive Summary

This self-study for the University of Arizona's decennial review by the North Central Association of Colleges and Schools (NCA) was designed to ascertain whether the University satisfies five basic criteria for accreditation. The evidence accumulated in the nearly two-year process of completing this self-study affirms that the University satisfies these criteria.

The significant effort involved in the self-study process has had two additional purposes. First, it provided the opportunity for the University to focus more closely on its purposes, accomplishments, and challenges while engaging in strategic planning for the new millennium. Second, it has been the framework for evaluating the University's progress toward preeminence as a student-centered research university.

NCA accreditation criteria and evidence that the University meets them:

Criterion 1-- The University has clear and publicly stated purposes consistent with its mission and appropriate to an institution of higher education:

The University of Arizona, a state land-grant university and Research I institution, has made impressive progress in articulating, communicating, and implementing its mission and purposes. Its published strategic plan (<http://daps.arizona.edu/daps/pubrec/reports/splan/uastratplan98.pdf>) includes statements of the mission and vision of the University "to be a preeminent student-centered research university" and identifies the goals, objectives, and strategies for accomplishing the mission.

Criterion 2--The institution has effectively organized the human, financial, and physical resources necessary to accomplish its purposes:

Decision making at the University of Arizona involves administrative, advisory, and faculty councils in a shared-governance structure, ensuring the application of human, physical, and financial resources to the University's mission and vision.

Criterion 3--The institution is accomplishing its educational and other purposes:

The highest priority of the University of Arizona is to advance learning through the integration of teaching, research, and service to others. The following accomplishments demonstrate the measure of success attained:

- The University is proceeding with an aggressive plan to enhance instruction, particularly for undergraduate students, that has introduced the new First Year Colloquia and University-wide general education program. The University is engaged in a number of activities that are changing the campus culture in recognizing assessment as critical for improving student learning.
- The University has maintained a high level of research productivity and creative scholarship; it is currently ranked 13th among U.S. public universities, and it has been in the top 20 U.S. universities throughout the 1990s (National Science Foundation research expenditure rankings).
- The University is committed to outreach as an extension of teaching and research/creative activity for audiences outside the University, and to improving the well-being of citizens of the state and the world beyond.

Criterion 4--The institution can continue to accomplish its purposes and strengthen its educational effectiveness:

The University of Arizona has fostered a more participatory and inclusive planning process and developed a more diversified resource base to prepare for the challenges that lie ahead.

Criterion 5--The institution demonstrates integrity in its practices and relationships:

The University promotes integrity and ethical behavior on the part of its students, faculty, and staff through leadership, continual review and updating of policies, and the clear expectation that practice will follow policy.

The major accomplishments of the last decade:

The following accomplishments illustrate the commitments made by the University of Arizona during the 1990s to improve the academic experiences for its students, to integrate research and creative scholarship into the curriculum, to augment evaluation processes, and to enhance the campus environment for all of its constituents:

- The Strategic Planning and Budget Advisory Committee (SPBAC) and policies promoting shared governance have increased the involvement of faculty, staff, and students in University planning and decision making.
- Substantial investments have been made to renovate classrooms, construct new facilities, modify existing buildings, and enhance the campus infrastructure (particularly in telecommunication and information technology). These improvements provide an environment that supports excellence in the instruction and research pursuits of students and faculty, and in the administrative processes that advance the University's educational mission.
- Diversity and access have exhibited positive trends, as illustrated by continued progress in minority student recruitment and retention, modest growth in the numbers of new woman and minority faculty, and attention to salary equity issues for women on the faculty. However, there remains substantial room for improvement in these areas.
- Undergraduate education has benefited from a major refocus, supported by initiatives such as creation of a vice president for undergraduate education position, a new University-wide general education program, a Freshman Year Center, and First Year Colloquia.
- Tenure-track faculty are more involved in teaching undergraduate students, particularly freshmen, and increasingly use new instructional methods and technologies that emphasize active learning.
- Extramural funding for research rose 92% and funding for other awards increased 168% between fiscal 1989 and 1998.
- Graduate Interdisciplinary Programs have expanded in several areas, and their importance in graduate instruction and research has grown. The University's graduate interdisciplinary programs are now among the strongest in the nation.
- Outreach activities are flourishing not only among colleges with rich outreach traditions but in areas where outreach emphasis is comparatively new.
- The establishment of a new branch campus, University of Arizona South, solidified outreach to southern Arizona.
- A reorganized Academic Program Review (APR) process was reinstated in 1995 and prescribes evaluation of each academic program at least every seven years. Each APR must now describe how

the program assesses student learning outcomes and evaluates its educational, research, service, and outreach activities.

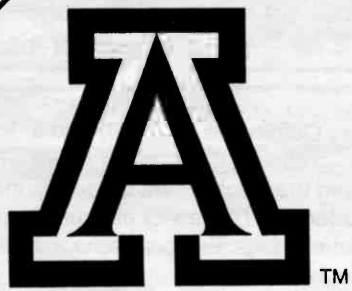
- Assessment is integrated into the planning process, as illustrated by the UA strategic plan's goals, objectives, and measures; the Undergraduate Education Outcome Measures; and SPBAC's 1998 "environmental scan."

Issues and challenges facing the University of Arizona:

- Expand the activities that support the University's vision to become a preeminent student-centered research university.
- Maintain and improve the vitality of academic programs by recruiting and retaining talented faculty, raising faculty salaries to competitive levels, and increasing emphasis on teaching in the faculty reward system.
- Address shortages of space for research and instructional laboratories and for the library.
- Address the issue of enrollment management at both undergraduate and graduate levels, and the balance between quality of education and quality of students in the context of a student-centered research university.
- Plan for significant investments in, and maintenance of, the technology infrastructure to support institutional needs.
- Increase support for student services, especially advising and mentoring.
- Improve financial support for graduate students
- Build on initial efforts to assess the effectiveness of the University's new general education program.
- Improve central coordination, tracking, internal communication, and recognition of various forms of outreach.
- Improve the way in which planning priorities are linked to budgeting processes.
- Continue efforts to strengthen and improve the campus climate.

The University of Arizona: A Student-Centered Research University:

The University has changed significantly since the 1990 NCA accreditation review. Today, campuswide learning – particularly student learning – is given the focused attention that is its due. This involves placing greater emphasis on considering the University from a student perspective and on access by all students, especially undergraduates, to the full learning environment of this major research University. To make fundamental changes in the way the University functions, the faculty, staff, and administration must continually analyze whether student learning and success are enhanced by the University's organizational structure, business practices, teaching methods, curriculum, faculty hiring and promoting procedures, and student support services. Progress as a student-centered research university has paralleled the University's achievements as a prominent research university ranked among the top 20 in the nation. The UA remains committed to creating knowledge, applying this knowledge to the solution of societal problems and needs, and improving the quality of life for all those who attend the University and become lifelong learners. In essence, the University's goal is to foster student learning that is enhanced and deepened by the integration of teaching, research and creative activity, and service.



NCA Accreditation Self Study

THE UNIVERSITY OF ARIZONA®

A Student-Centered Research University

Report 2000

Every ten years the University of Arizona undergoes an institutional accreditation that provides an opportunity for the University to complete a Self-Study Report. Institutional accreditation is granted

by six regional agencies, one of which is the North Central Association (NCA). The accreditation process leads to an NCA evaluation Team visit is scheduled for February 13-16, 2000.

The theme of this Self-Study Report is — The University of Arizona: A Student-Centered Research University.

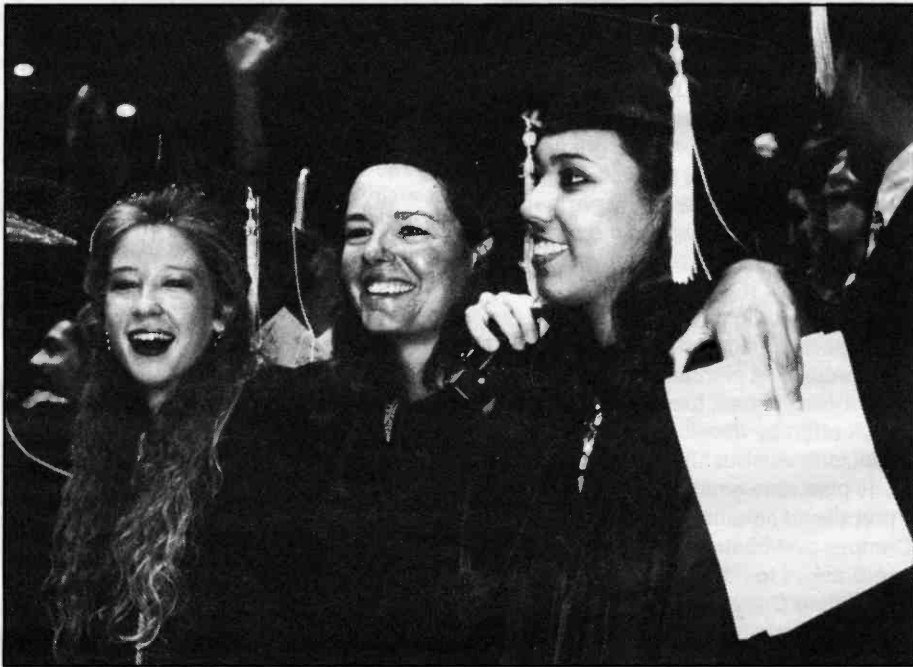
In completing our Self-Study Report we have provided evidence that the UA satisfies and exceeds the five NCA criteria for accreditation and evaluated our strengths and accomplishments since the last reaccreditation visit in 1990. Although we have faced numerous challenges in the last decade, the results of the Report demonstrate

that the University has made significant progress in its teaching, research, and outreach missions. Both the challenges and accomplishments identified in the Report provide useful information with

which to pursue more effectively our vision of becoming a preeminent student-centered research university.

As a community, we must become familiar with this overview of the Report for three reasons: to extract maximum benefit from the reaccreditation process and upcoming site visit; to use the contents of the Report to inform the future direction of the University; and to ensure that the process is of long-term benefit to the University. If you would like a complete copy of the Report, please visit the web site (<http://www.library.arizona.edu/nca/>),

or send an e-mail message to nca2000@U.Arizona.EDU



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- Address shortages of space for research and instructional laboratories and for the library.

- Address the issue of enrollment management at both undergraduate and graduate levels, and the balance between quality of education and quality of students in

NCA Report, from page 1

the context of a student-centered research university.

- Plan for significant investments in, and maintenance of, the technology infrastructure to support institutional needs.
- Increase support for student services, especially advising and mentoring.
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The University of Arizona: A Student-Centered Research University:

The University has changed significantly since the 1990 NCA accreditation review. Today, campuswide learning – particularly student learning – is given the focused attention that is its due. This involves placing greater emphasis on considering the University from a student perspective and on access by all students, especially undergraduates, to the full learning environment of this major research University. To make fundamental changes in the way the University functions, the faculty, staff, and administration must continually analyze whether student learning and success are enhanced by the University's organizational structure, business practices, teaching methods, curriculum, faculty hiring and promoting procedures, and student support services. Progress as a student-centered research university has paralleled the University's achievements as a prominent research university ranked among the top 20 in the nation. The UA remains committed to creating knowledge, applying this knowledge to the solution of societal problems and needs, and improving the quality of life for all those who attend the University and become lifelong learners. In essence, the University's goal is to foster student learning that is enhanced and deepened by the integration of teaching, research and creative activity, and service.

Purposes of the Self-Study Report

The purpose of this report is threefold: First, to establish that the University of Arizona ("the University") meets and can continue to meet the commission's criteria for an outstanding institution of higher education; second, to promote institutional self-improvement; and third, to examine and assess the University's progress toward becoming a preeminent student-centered research university. We believe this report demonstrates that the University not only meets, but surpasses the criteria for accreditation. These criteria are addressed in the chapters of this report. With respect to institutional improvement, we established the following goals in our initial self-study plan:

- To demonstrate that the University of Arizona is academically strong and is preparing to meet the challenges of the next decade.
- To ensure that the reaccreditation process is of long-term benefit to the University.
- To clarify and fulfill our vision of what it means for the University of Arizona to be a "preeminent student-centered research university."

Furthermore, the report contains descriptions, analyses, and evaluations of our institution and demonstrates that we are making gratifying progress toward becoming a preeminent student-centered research university.

Organization of the Report

The report consists of 12 chapters. Chapters 1 and 2 contain the introduction

and institutional overview and provide a context within which to interpret the remainder of the report. Chapters 3 and 4 address Criteria One and Two. Because of the amount of documentation developed on Criterion Three, the topics pertaining to our educational purposes – instruction, research, outreach, and assessment – are presented in four separate chapters, 5 through 8. Chapter 9 provides evidence related to Criterion Four, continued effectiveness. Chapter 10 encourages discussion of our evolution as a student-centered research university – a concept that pervades the report. Chapter 11 deals with Criterion Five, institutional integrity, and Chapter 12 presents our request for continued accreditation.

The Self-Study Process

The University request for continued accreditation officially began in March 1998 when Provost Paul Sypherd appointed Anne E. (Betty) Atwater, Ph.D., associate head, Department of Physiology, and Randall M. (Randy) Richardson, Ph.D., assistant vice president for undergraduate education, as co-chairs of the Self-Study Report Steering Committee. Key partners of the co-chairs in all phases of the project were Edward G. Frisch, assistant vice president for academic resource planning and management, and John E. Lopez, senior research specialist and executive coordinator of the project. A planning group, convened by the co-chairs, focused the reaccreditation effort by developing a committee organizational structure, a timeline, a self-study plan, and goals for using the self-study process to advance the institution.

Campus and community representatives were asked to nominate members for the Steering Committee and working teams. In the early fall of 1998, after consulting numerous University committees and individuals, President Likins appointed 20 Steering Committee members and Provost Sypherd appointed 8 to 12 people to each of the eight working teams. (Members of the Steering Committee, Planning Group, and working teams are listed at the end of this report.) The president recommended building upon existing documents and processes in order to avoid duplication of effort. In addition, he advised the Steering Committee that integrating rather than balancing teaching, research, and outreach would better advance learning – the fundamental purpose of all University activities.

Each working team addressed one of the five NCA Criteria for Accreditation, and in the case of Criterion Three, four separate working teams studied the educational processes of instruction, research, outreach, and assessment. Steering Committee members served on working teams to ensure active communication between the committee and the various teams. Working teams also included other representatives of the University and the community. Over the course of the self-study review, the committee informed University constituents of the process, its focus, and its potential benefits to the University.

Reports written by the eight working teams formed the foundation for chapters of the self-study report. The co-chairs, Steering Committee, and Planning Group reviewed the reports of the working teams, prioritized issues and challenges facing the University, and prepared the self-study report. The findings presented in this report were shared with the University community in campus publications, in meetings of campus organizations and advisory committees, and at campus and community open forums.

Our Vision of Becoming a Preeminent Student-Centered Research University**The Concept of a Student-Centered Research University**

The concept of a student-centered university has several meanings, but principally it requires considering the University from the student viewpoint. At a student-centered university, student learning is paramount. Any assessment of a University

activity must weigh its effect on students' development. For example, we need to ask whether student learning is improved by the way we teach, by the organization of the University, by the structure of the curriculum, and by the actions of faculty and staff.

The concept of a research university affirms that the institution cherishes its role in discovery and exploration. The research university is dedicated to the creation and organization of knowledge, to scholarly and creative endeavor in pursuit of quality of life, and to the preparation of succeeding generations for leadership that is enlightened by continuous learning and problem solving. Thus, the synthesis of student-centered and research attributes gives rise to a particular kind of university – one in which student learning and faculty research and creative activities reinforce and nurture one another.

Progress Toward Becoming a Preeminent Student-Centered Research University

At the University of Arizona, faculty, students, administrators, and staff have embarked on a project to advance the University as a "student-centered research university." Since the latter half of 1994, attention to curriculum revision, student advising and academic support services, faculty development, faculty reward and recognition systems, greater faculty involvement with students, a more hospitable campus climate, and other matters has advanced the institution toward its vision. As we continue to develop, the dynamic role of a student-centered research university remains a subject of collective discourse, study, and debate, and is a destination for constructive change.

University activities most pertinent to the quality of the undergraduate experience have been the primary focus of change. To enhance undergraduate education, the University has strengthened the curriculum, particularly in the area of general education; improved student support services, especially those for freshmen and minority students; added opportunities for active learning and learning through discovery in independent study projects, research activities, and capstone courses; and cultivated a campus climate that imparts a sense of community and fosters caring, equity, and civility. (For details, see Chapter 5.)

Another part of the equation for improving the undergraduate experience is the University's commitment to providing high-quality computing facilities, classrooms, and laboratories. The Integrated Learning Center, now under construction, will include the latest technology in classrooms and lecture halls and feature an information commons connected to the main library and supported by its staff. Major classroom renovations during the past five years have upgraded undergraduate classrooms and equipped them with the teaching technology required by the faculty.

One of the purposes of this Self-Study Report is to justify continued accreditation, which, we feel confident, our record of attainment supports. The other purpose of the report is to identify issues, initiatives, and ideas that will provoke examination and discussion and will ultimately improve the institution. It is our hope that the introduction, institutional overview, and evidence of progress in each criterion will help the institution realize its vision of a preeminent student-centered research university.

Significant Developments at the University of Arizona, 1990-1999

During the 1990s, the University made impressive gains – improving the student academic experience, integrating research and creative scholarship into the curriculum, strengthening evaluation processes, enriching the campus environment, and serving its constituents more effectively in many other ways.

Among the accomplishments of the University since 1990 are the following:

- The Strategic Planning and Budget

Advisory Committee (SPBAC) and policies promoting shared governance have increased the involvement of faculty, staff, and students in University planning and decision making. Two programs that laid the groundwork for more inclusive decision-making procedures during the early 1990s were the Program for the Assessment of Institutional Priorities (PAIP) and Continuous Organizational Renewal (CORE).

- Substantial investments have been made to renovate classrooms, construct new facilities, modify existing buildings, and enhance the campus infrastructure (particularly in telecommunication and information technology). These improvements provide an environment that supports excellence in the instruction and research pursuits of students and faculty, and in the administrative processes that advance the University's educational mission.

- The portfolio of the vice president for campus life was reorganized to include responsibility for human resources, health and wellness, student life, and cultural offerings. The Division of Campus Life strives to work in partnership with students, faculty, and staff from all areas of campus to build a community that is open, inclusive, and diverse.

- Diversity and access have exhibited positive trends, as illustrated by continued progress in minority student recruitment and retention, modest growth in the numbers of new woman and minority faculty, and attention to salary equity issues for women on the faculty. However, there remains substantial room for improvement in these areas.

- Undergraduate education has benefited from a major refocus, supported by initiatives such as creation of a vice president for undergraduate education position, a new University-wide general education program, a Freshman Year Center, and First Year Colloquia. The University also has directed greater support for student retention, advising, and progress toward graduation.

- Faculty are involved, more than ever, in teaching at the undergraduate level, particularly in lower-division courses. Excellence in teaching at all levels is rewarded through University Distinguished Professorships and a variety of teaching awards bestowed by academic programs and colleges.

- The post-tenure review process, now part of each tenured faculty member's annual performance evaluation, assesses and recognizes accomplishments in teaching, research, service, and outreach. Supportive faculty development programs are offered and encouraged for faculty in areas where needed improvements are identified.

- Extramural funding for research rose 92% and funding for other awards increased 168% between fiscal 1989 and 1998.

- The University remains ranked among the top 20 U.S. universities (based on NSF research expenditure rankings), through faculty achievements in research productivity and creative scholarship; and earned improved rankings from other distinguished national organizations in a wide range of disciplines.

- Commitment to the concept of a student-centered research university is exemplified by expanded efforts to integrate research and creative scholarship into the curriculum. Opportunities for students to pursue these activities are available through independent study, undergraduate thesis, and capstone experiences.

- Graduate Interdisciplinary Programs

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(IDPs) have expanded in several areas, and their importance in graduate instruction and research has grown. The University's graduate interdisciplinary programs are now among the strongest in the nation.

- Outreach activities are flourishing not only among colleges with rich outreach traditions but in areas where outreach emphasis is comparatively new. Information-technology and electronic-communication advances have been instrumental in outreach growth.

- The establishment of a new branch campus, University of Arizona South, solidified outreach to southern Arizona.

- Appointment of a new vice president for university advancement demonstrated the high priority placed on effective communication with external constituents (including friends, alumni, and government officials), consolidation of new fundraising initiatives, and promotion of the University throughout the state and beyond.

- A reorganized Academic Program Review (APR) process was reinstated in 1995 and prescribes evaluation of each academic program at least every seven years. Each APR must now describe how the program assesses student learning outcomes and evaluates its educational, research, service, and outreach activities. The program review team now includes a recent graduate and a representative of the public.

- Assessment is integrated into the planning process, as illustrated by the UA strategic plan's goals, objectives, and measures; the Undergraduate Education Outcome Measures; the Annual Report Card of the Arizona University System; and SPBAC's 1998 "environmental scan."

Institutional Issues and Challenges

CHAPTER 3: INSTITUTIONAL MISSION AND PURPOSES

Issues and Challenges

NCA Criterion 1: The institution has clear and publicly stated purposes consistent with its mission and appropriate to an institution of higher education.

The University has made considerable progress during the past ten years toward clarifying and implementing its mission and purposes. The participatory planning process worked effectively to redraft and simplify the University's mission statement and develop a vision statement. The new shared governance process, which facilitates greater communication among faculty and administrative representatives, has promoted campuswide decision making. Shifts in institutional resources and priorities have benefited teaching and undergraduate support programs.

The University confronts the challenges of transformation beyond the year 2000 with confidence that its mission and priorities are sound, its perspective on the higher-education environment better focused, and its operating processes more serviceable and durable. Therefore, the University of Arizona fulfills the requirements of Criterion One.

Nevertheless, more communication among members of the campus community could broaden consensus on the University's mission and purposes in several ways, particularly the four presented below.

- **Integrate the broad institutional mission and purposes of the University while allowing individual University units to emphasize appropriate strategic directions and goals.**

There is ambiguity about how the specific missions of some units of the University support the basic University mission

statement. This year, as the campus community prepares the next five-year strategic plan for the University, there will be many opportunities for broad-based discussions of how individual units contribute in a systemic way to the University's mission, vision, and purposes.

- **Improve the way in which planning priorities are linked to budgeting processes.**

Regular review of University budgeting and expenditures is essential to ensure their alignment with mission priorities and strategic goals. SPBAC, in its capacity as a representative advisory body, should play a leading role in these reviews and in making recommendations to the administration and the University Budget Committee. The results of these reviews should be communicated widely to the University community. Such communications should demonstrate how the mission, purposes, strategic choices, president's prioritization principles, resource allocations, and reward structure complement and reinforce one another.

- **Improve campuswide and off-campus understanding of the University's mission and strategic directions.**

The University's many constituencies naturally reflect both the multifaceted nature of the institution and the changing expectations of higher education in today's society. For example, many at the University of Arizona take pride in the fact that the institution is of Research I stature yet provides liberal access to qualified students in the top 50% of their high school graduating classes. Others take pride in the University's land-grant role and outreach to the state. Still others focus on the quality and diversity of the students and want the University to be more selective in its admission requirements. A wide variety of local and state constituencies have their own opinions about what the University "should be doing."

Tensions among those with differing viewpoints are understandable. Fortunately, such diversity generates interest in expanding discussions about the UA's mission and in publicizing the many contributions University programs make to Arizona and its citizens. The responsibilities of the new vice president for university advancement include broadening communication with constituencies.

CHAPTER 4: HUMAN, FINANCIAL, AND PHYSICAL RESOURCES

Issues and Challenges

NCA Criterion 2: The institution has effectively organized the human, financial, and physical resources necessary to accomplish its purposes.

The University of Arizona fulfills the requirements of Criterion Two by demonstrating that it has effectively organized the human, financial, and physical resources necessary to accomplish its purposes. The administrative and decision-making structures are in place and involve clearly understood processes that are used regularly and appropriately to address campus management and governance issues.

The total number of UA employees has remained relatively stable over the past decade, though employee distribution among categories has changed. All employees receive regular performance evaluations, and outstanding achievement is recognized with awards and/or salary increases, though these remain underfunded.

The UA's financial strength is sufficient in most areas to support current programs and activities, although projected enrollment increases will exacerbate deficits in certain facility and infrastructure categories. Finally, the University's means of obtaining income and its distribution of human, financial, and physical resources reflect the prevalent values among



respected institutions of higher education.

Though it has worked hard during the past decade to improve the organization, management, and effective use of its resources, the University is still struggling to obtain funding for clearly identified needs, including the following.

- **Maintain and improve the vitality of academic programs by recruiting and retaining talented faculty and raising faculty salaries to competitive levels.**

The success and reputation of the University's academic programs depend on outstanding faculty members and their dedicated work. Competitive salaries are essential in retaining and recruiting top-quality faculty members. As noted in Tables 4.2 and 4.3, the University has a high percentage of recruitment and retention failures, as well as below mean salaries at all faculty ranks compared to national averages. Without constant and predictable state funding to support adequate salary levels, the University will be unable to provide sufficient compensation and will continue to lose top faculty and the student opportunities that go with them. Faculty salaries continue to be a top priority in University planning and in budget requests submitted to the legislature.

- **Address shortages of space for research and instructional laboratories and for the library.**

The 1998 UA space inventory identified critical laboratory-space shortages. According to Arizona Board of Regents space guidelines for net assignable square feet (nasf), a shortage of more than one million nasf exists, 50% of it in research laboratories and 20% in class laboratories. These shortages could thwart the institution's efforts to become a preeminent student-centered research university.

Additional library space is essential as well; the 1998 UA space inventory revealed that the second highest shortage in net assignable square feet exists for the University libraries.

- **Plan for significant investments in, and maintenance of, the technology infrastructure to support institutional needs.**

New technologies are driving budgets and are essential to the effective operational infrastructure at an institution the size of the University of Arizona. In spite of increased funding for information-technology equipment and personnel during the past decade, more is needed – to support the purchase of a new student-information system, to refresh and enhance instructional-technology equipment, to upgrade the campus network, and to provide com-

petitive salaries for specialists who manage these systems.

The University has pledged to replace the student-information system first and to install an integrated administrative system (human resources, payroll, and financial management) next.

- **Increase investment in University libraries.**

There is strong campus commitment to increasing access to published material and online library systems. Such improvements will require substantial financial investments in electronic information access, library collections, and support services, however.

- **Improve the financial base for the University.**

The UA has increased its revenue by more than \$253 million during the past decade despite a 6% decline in state appropriations as a share of total revenue. Additional legislative funding must be provided in order for the University to continue its multifaceted contributions to the people of Arizona. The institution must improve relations with the state legislature, emphasizing the University's value to the state, and must continue to improve and diversify its funding base.

Gifts to the University have provided a modest source of revenue in past years. The planned major gift campaign must be organized, launched, and managed in a manner that significantly increases gift revenue and long-term endowment income.

- **Expand the activities that support the University's vision to become a preeminent student-centered research university.**

Central to this vision is enhancing the educational experience of undergraduate students through participatory learning, involvement in research, and improved campus life. Initially, attention was focused on needed revisions in the general education program. As plans evolved and courses were developed for a new general education program that was truly University-wide rather than limited primarily to arts and sciences disciplines, many innovative interdisciplinary courses and learning experiences were created. Opportunities for students to become more involved in research and learn by discovery are characteristic of several of these new courses and projects, and the well-being of students has been placed at the center of many new student-support initiatives. Yet the phrase "student-centered research university" is still understood differently by dif-

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ferent people. Dialogue and communication will continue regarding the meaning of this concept as the UA strives to enhance the undergraduate experience by fostering a collaborative, friendly, and challenging environment that promotes learning through discovery.

CHAPTER 5: THE INSTRUCTIONAL MISSION**Issues and Challenges**

NCA Criterion 3: The institution is accomplishing its educational and other purposes.

During the past decade, the University of Arizona has made significant improvements toward achieving its instructional mission, especially at the undergraduate level. Administratively, it has created a new vice president for undergraduate education position to support its undergraduate mission. On the curricular level it has created a new general education program that is broadly interdisciplinary, inquiry based, and University wide, and has reduced the credit-hour requirement for graduation. The University has committed substantial resources to faculty development, put more than \$10 million into classroom renovation, and begun construction of a \$26 million building dedicated to freshman learning.

At the graduate level, the University assumed the expense of medical coverage for students on assistantships, expanded opportunities for development of graduate assistant teaching skills, and raised assistantship compensation from the 14th to the 44th percentile nationally. Its graduate interdisciplinary degree, a national model, is one of the fastest-growing University programs.

There are, however, a number of remaining challenges to the University's instructional mission. Among these are the issues presented below.

- **Increase emphasis on teaching in the faculty-reward system.**

Teaching has become much more important among promotion and tenure criteria. In some departments, greater emphasis would improve the delivery of instruction. The University is committed to rewarding intellectual excellence and not simply labor. Doing so requires improved measures of intellectual excellence in teaching, as well as greater recognition at the faculty and department levels for teaching contributions that demonstrate scholarly excellence.

- **Increase support for student services, especially advising and mentoring.**

Surveys indicate that advising is crucial for students as they navigate the University. Currently, advising is a college and department responsibility. Students need timely, accurate, and accessible information about degree requirements. A September 1998 white paper (Student Retention, prepared by the offices of undergraduate education and student research) emphasized advising and mentoring, as did a recent University Professional Advisors Committee proposal. The University must improve student access to advising and mentoring through centralized, college, and department-based measures.

- **Expand efforts to engage undergraduates in the research, scholarly, and creative activities of the University.**

A student-centered research university must provide students with access to the full intellectual spectrum of research, scholarship, and creative activity. To improve student participation in these activities, the UA will continue to expand the capstone experiences available in undergraduate majors, allowing students to integrate their educational experiences in the major curriculum.

- **Improve financial support for graduate students.**

Increased funding for graduate scholarships and fellowships is needed to attract outstanding graduate students and to halt the decline that began in 1995 in the number of these awards. Paying for health benefits for graduate assistants and associates is a recent advance, but more generous stipends and more equitable workload assignments are essential in many departments to be competitive with peer institutions.

- **Continue support for learning infrastructure improvements.**

Although the University has made substantial investments in the infrastructure for learning and instruction in the past decade, it is critical that such investments be continued in the areas of classroom renovation, faculty development, the library, and academic support.

CHAPTER 6: THE RESEARCH MISSION**Issues and Challenges**

NCA Criterion 3: The institution is accomplishing its educational and other purposes.

The research and scholarly activities conducted at the University of Arizona by students, staff, and faculty have been remarkable over the last ten years. In many ways, their success has been more impressive than in earlier periods because of the state's challenging fiscal and political environment. The UA has maintained its standing as one of the nation's leading research universities, substantially improved the undergraduate instructional program, and, most important, afforded students the benefits of leading-edge scholarship and excellence as befits a student-centered research university. These accomplishments demonstrate that the University meets Criterion Three with respect to the research mission.

Continuing challenges in research, scholarship, and creative activity include the following:

- **Enhance the infrastructure to support faculty research and scholarly activity appropriate for a Research I university.**

The faculty's success in maintaining the University's status as a leading research university depends upon continued investments in the research infrastructure, including research space, capital equipment, information access, computing technology, and library resources. To remain competitive as a Research I university, the research laboratory space shortage of over 500,000 net assignable square feet – nearly half of the total space shortage on campus – must be addressed. Capital expenditures for special facilities and high-technology equipment must be increased, and building renewal funds are needed in greater amounts to enhance existing space.

The most important research facility at the University is the library. As information services evolve to include a more diverse mix of printed and online formats, continued financial support for the library's information resources must remain a high priority.

- **Improve research, scholarship, and creative activity.**

The University must develop strategic initiatives to increase competitiveness for funding in areas where the greatest opportunities exist, such as biomedical sciences.

Though challenging, it is essential to support highly ranked programs at cur-

rent or higher levels and to enhance the quality and visibility of disciplines not currently ranked in the top one-third nationally.

- **Support the recruitment and retention of high-quality faculty in an extremely competitive national market.**

The University faces intense competition nationally to recruit and retain the most highly qualified faculty. Retention failures are especially expensive to the University in terms of both replacement faculty salaries and startup costs, often many times greater than the annual salary. Faculty salaries must remain an important budget and planning priority.

- **Expand opportunities for undergraduates to fully participate in research and scholarly activities.**

The programs described earlier in this chapter that involve UA undergraduate students in research and scholarly activities are exemplary. However, much work remains to ensure a research/capstone experience for every undergraduate. The UA will expand efforts to design such undergraduate experiences for high-enrollment majors (such as history, political science, and media arts) where one-on-one student-faculty interactions may be otherwise limited.

CHAPTER 7: THE OUTREACH MISSION**Issues and Challenges**

NCA Criterion 3: The institution is accomplishing its educational and other purposes.

The University of Arizona, in keeping with its land-grant mandate, is committed to "improving the quality of life for the people of Arizona and the nation." The University fulfills this part of its mission through the many outreach programs that extend its intellectual resources far beyond campus boundaries. A broad range of teaching, research, and creative activities serve populations not reached by most campus-based University programs.



Though the University's outreach activities are many and diverse, opportunities for improvement exist in key areas. Continued progress in outreach is linked to the following issues.

- **Improve central coordination, tracking, and internal communication of various forms of outreach.**

Outreach planning, management, reporting, funding, and assessment take place within the units responsible for the various activities. In spite of the outstanding quality of individual programs, they do not constitute a united institutional outreach effort. Better coordination and communication could rectify weaknesses in overall outreach effectiveness such as redundant

planning, narrow reporting and assessment, lost opportunities for communication with constituents, and insufficient collaboration among similar programs. Extended University's outreach inventory project is an important first step, but more must be done to improve communication of outreach activities throughout the University and to constituents and legislators.

- **Raise community awareness of outreach activities.**

In 1997-98, enrollments in all Extended University programs numbered more than 37,000. The extent to which members of the community and the state participate in, benefit from, and share in planning University outreach activities beyond those offered by Extended University and Cooperative Extension is not consistently documented, however. Appointment of the new vice president for university advancement demonstrates the high priority placed on improved communication with all external constituents and promotion of the University and its activities throughout the state and beyond.

- **Clarify the definition of outreach for all University personnel and give appropriate recognition to outreach achievements.**

The definition of outreach is inconsistently interpreted among University populations. For example, some faculty view outreach as synonymous with service and exclusive of teaching and research/creative activity. Some believe that community volunteer work constitutes University outreach. Others disagree about whether externally funded endeavors should be considered outreach. Expectations and rewards for outreach activities tend to differ across campus departments and colleges. A commonly held definition of outreach would, in turn, lead to clearer communication of its range of expectations and relative importance within each unit and the University, and would facilitate reporting, tracking, and assessment of these activities. The University should embark on campuswide dialogue to clarify the definition, scope, expectations, and benefits of outreach.

- **Develop University-wide outreach assessment and measurement processes.**

As already noted, many departments, colleges, and divisions contribute to the University's outreach effort. Outreach activities are currently assessed during the individual unit's Academic Program Review. Additional assessments from a University-wide perspective are needed to view particular activities in the context of the University's goals. University-wide benchmarks and measurement tools would improve assessment, goal setting, and reporting. An institutional assessment would identify gaps and duplication in services, preventing some groups from being overserved while others are ignored. It also would ensure that external audiences (apart from University students, staff, and faculty who happen to live in the community) genuinely need the services offered.

CHAPTER 8: ASSESSMENT**Issues and Challenges**

NCA Criterion 3: The institution is accomplishing its educational and other purposes.

The University's student assessment program is progressing well. It has produced valuable changes in University curriculum, teaching, and learning, though, predictably, implementing assessment recommendations across the campus of a large research university has not been easy. Remaining issues and challenges are described below.

- **Expand the number of academic programs that use assessment of student learning outcomes to improve their programs.**

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Several departments have implemented comprehensive student assessment plans. To help those that have not, the University has begun the Assessment Pilot Project consisting of 20 academic units that will form cadres of experienced faculty and support staff within the colleges. They will advise and mentor assessment initiatives within their own units and in other academic programs in their colleges.

• **Build on initial efforts to assess the effectiveness of the University's new general education program.**

The University's new general education program is in its second year. Evaluations of pilot courses and their instructors played an important role in shaping the program, and there are plans to evaluate all Tier One and Tier Two courses regularly. Additional planning is required to assess student learning outcomes and apply the results to further improve the program.

• **Establish a campuswide commitment to the value of assessment for continuous improvement of student learning.**

The University has made progress in developing a culture that understands and appreciates potential gains from assessment activities. A continuing challenge, however, is to use the many existing assessment resources and activities to act on assessment findings and thus improve student learning. The Student Assessment Coordinating Committee (SACC), the University-Wide General Education Committee, the University Strategic Planning and Budget Committee, and the office of the provost must collaborate to oversee and ensure broad-based implementation of the University's Student Outcomes Assessment Plan. In addition, the institution must employ assessment techniques to evaluate progress toward student-centered research university objectives.

CHAPTER 9: CAPACITY FOR CONTINUED EFFECTIVENESS

Issues and Challenges

NCA Criterion 4: The institution can continue to accomplish its purposes and strengthen its educational effectiveness.

The University has developed great agility during the past decade. External and internal change has required new organizational structures, revised procedures, and comprehensive planning. The University must be flexible enough to accommodate Arizona's growth and resulting enrollment increases and to face other challenges and opportunities in the future.

The University is well positioned to meet these challenges. Its solid human, financial, and physical resource base, aided by strong public support, will enable it to fulfill its purposes and strengthen its educational effectiveness well into the future. These attributes, along with the institution's leadership, its advisory structure, and its procedures for informed decision making will help the University to deal with new issues as they arise.

The most important challenges to continued effectiveness are listed below.

• **Address the issue of enrollment management at both the undergraduate and graduate levels, and the balance between quality of education and quantity of students in the context of a student-centered research university.**

The UA Enrollment Management Committee has been meeting for more than two years to plan for projected enrollment increases. The committee's work includes communication with the other schools in the Arizona university system and with the Arizona Board of Regents staff. During 1999, recommendations have included revising the self-imposed UA enrollment cap of 35,000, examining the ABOR policy limiting nonresident enroll-

ment to 25% of the total, and considering several statewide options for accommodating increased enrollments. In addition, enrollment trends at the college and department level present special challenges to provide student access to academic programs. All enrollment-management alternatives must be carefully studied to determine their likely effects at both the undergraduate and graduate levels. The balance between quality of education and quantity of students in the educational and campus life arenas is an essential consideration.

• **Ensure that planning and decision-making processes remain flexible enough to respond to unanticipated changes and opportunities.**

Participation of faculty, staff, students, and other stakeholders in planning and decision making has increased considerably during the past decade largely because of new shared-governance guidelines and the restructuring of SPBAC. In recent years, the University, with input from broadly representative advisory groups, has demonstrated its ability to deal well with a number of unanticipated issues and opportunities, and it must remain capable of such responsiveness in the future.

• **Ensure that informed planning and budgeting processes are used to determine priorities, direct resources, and provide accountability.**

The role of SPBAC in the budget advisory process provides a direct link between strategic planning and resource needs and allocations. As long as University-wide and college-level advisory councils remain broadly representative, thoroughly informed, and able to give direct advice, their contributions to planning and decision making should continue to be productive.

• **Continue efforts to inform and strengthen public support.**

The University depends on informed and supportive citizens, through their elected representatives in the Arizona legislature, to provide needed resources for higher education. For Arizonans to support greater funding for the UA, they must be well acquainted with the University and its contributions to economic growth, education, and many other aspects of the well-being of the state's citizens. Therefore, the University must develop more effective ways to communicate its mission, aspirations, and accomplishments to all citizens of the state.

CHAPTER 11: INSTITUTIONAL INTEGRITY

Issues and Challenges

NCA Criterion 5: The institution demonstrates integrity in its practices and relationships.

The University of Arizona fulfills the requirements of Criterion Five by demonstrating integrity and ethical behavior in its practices and relationships. In honoring its commitment to institutional integrity, the University plans to build on the progress it has made in recent years. Certain areas in which opportunities for improvement exist are described below.

• **Improve the ease and coordination of accessing policies.**

Work is under way to gather and index University-wide policies on the Internet under a designated policy coordinator. That effort should be supported and advanced, then broadly publicized so that all employees and students can have ready access to the policies that govern their work and campus activities.

• **Monitor and assess the effectiveness of new University policies.**

Recently adopted policies should be assessed periodically to determine their effectiveness. Examples include policies dealing with research ethics, corporate relations, and shared governance. Established policies are reviewed and revised

as the need arises or as inconsistency between policy and practice becomes evident.

• **Review and revise University grievance procedures to ensure congruence, fairness, and equity.**

There is evidence that grievance policies and procedures have been applied consistently in almost all cases during the past decade. Grievance policies available to the General Faculty, however, contain some inconsistencies that need clarification. Representatives of faculty committees concerned with grievances, led by the Committee of Eleven (an elected committee of the General Faculty), have recently combined to consider revisions that would resolve the inconsistencies. The Faculty Senate has approved seven guiding principles for this work.

• **Continue efforts to strengthen and improve the campus climate.**

As the University strives to improve the campus climate for all members of its community, it will work to improve the "social architecture" of the campus, broaden supervisory training, develop a stronger program of exit interviews, redesign new-employee orientation, and generate greater support for ceremonies honoring the University's best.

The University of Arizona: A Student-Centered Research University

The University of Arizona is engaged in an open discussion, in many settings, about what it means to be a student-centered research university, and about its aspiration to become a preeminent student-centered research university. The University has changed significantly since the 1990 NCA accreditation. It places greater emphasis on considering the University from the student perspective and on access by all students, especially undergraduates, to the full learning environment of this major research University.

To make fundamental changes in the way the University functions, the faculty, staff, and administration must continually analyze whether student learning and success are enhanced by the University's organizational structure, business practices, teaching methods, curriculum, procedures for hiring and promoting faculty, and student support services. Such analysis has already produced many improvements, with many more to come, in students' educational experiences and involvement in the UA's rich research environment.

Development as a student-centered research university has paralleled the University's achievements as a prominent research university, ranked by the National Science Foundation (NSF) 13th among U.S. public universities and in the top 20 of all U.S. universities. The UA is committed to creating knowledge, applying this knowledge to the solution of societal problems and needs, and improving the quality of life for all those who attend the University and become lifelong learners. Because it values learning as its highest priority, the University strives to foster student learning that is enhanced by research, scholarly, and creative activities.

This section provides a brief history of the University's progress during the 1990s as a student-centered research university; includes a draft description (still under discussion) of what it means to be a student-centered research university; presents some of the University's major accomplishments and examples of recognition it has earned; and concludes with a statement of the institution's aspiration to become a preeminent student-centered research university.

Background of the UA as a Student-Centered Research University

The Task Force on Undergraduate Education: 1991-92

At the University of Arizona, the concept of a student-centered research university can be traced to the Task Force

on Undergraduate Education, which was appointed by President Pacheco in 1991 and which issued its report in May 1992. In a memo accompanying the report, President Pacheco wrote, "You will find that the report calls for truly fundamental changes in the way we approach and provide undergraduate education. The Task Force rightly speaks of changing the entire campus culture in ways that affect faculty members, administrators and resources quite as much as they would affect students." Starting in the 1992-93 academic year, the work of implementing many of the recommendations began.

1995 Conference and Position Paper

A major contribution to the discussion of the student-centered research university came in January 1995 when the University of Arizona sponsored a conference titled "Transforming the University: New Realities and Strategies". This conference included a presentation by Ron Cavanagh, vice president for undergraduate studies at Syracuse University, who reported that Syracuse was in the process of a major restructuring based on a student-centered research paradigm. According to the conference summary, major efforts at Syracuse included considerable new funding to support innovative teaching and professional development of faculty. A subtle but important benefit of the campus discussion and debate at Syracuse was a greater sense of cooperation and collegiality among all staff members.

In April 1995, Provost Sypherd distributed a position paper, "Toward a Student-Centered Research University: Phase I Report", to a campuswide audience. This was the first reference to the student-centered research university as both a vision and a commitment of the University. The paper begins, "At the University of Arizona, faculty, students, administrators, and staff have embarked on a project to transform the University into a 'student-centered research university'" and includes the following points:

• The transformation of the University into a student-centered research institution involves far more than curricular change. It involves fundamental rethinking of faculty rewards, of faculty development for teaching, of the advising role of faculty and others, of the responsibilities of students, of the physical environment for teaching, and of the provision for technological teaching assistance.

• There is a tension that must be recognized in the careers of faculty, between the desire to meet requirements for disciplinary recognition for scholarship on the one hand (tied as it is to the external, discipline-based market) and the desire to contribute maximally to a high-quality undergraduate program.

• ...[W]e will know that we have made progress toward a student-centered research university when it can be said accurately that our most distinguished faculty view undergraduate teaching as a privilege, when we honor our most accomplished teachers as we honor our most accomplished researchers, when we no longer...contrast our "teaching loads" with our "research opportunities," and when our obligation to graduate well-educated women and men is perceived to be a responsibility of the entire faculty.

Recommendations in the Provost's April 1995 Position Paper included:

• Creation of a new general education program, one that is for the first time University-wide, based on a broad, interdisciplinary approach that emphasizes both rich content and such skills as critical thinking and communication, especially written and oral expression.

• Creation of a new University College under the vice president for undergraduate education, with a new University-wide gen-

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eral education committee to oversee the development of the curriculum for the new general education program.

- Expansion of faculty development opportunities including faculty summer stipends for curriculum development in the new general education program and a commitment to instructional development in general through a variety of incentives.

- Revision of the guidelines for advising and mentoring for all students, including transfer students.

Recent Publications Relating to the Student-Centered Research University Concept

In the last few years, several University publications have focused on the student-centered research university ideal. These include the University Strategic Plan, the April 1998 report and "environmental scan" prepared by the Strategic Planning and Budget Advisory Committee, and various documents written by President Likins.

University Strategic Plan: The most recent strategic plan for the University, Transformation Beyond the Year 2000 – 1999 Update, contains vision and goal statements that refer to the student-centered research university.

- Vision: "To be a preeminent student-centered research university."

- Goal A. "To enhance educational activities and outcomes at the undergraduate, graduate, and professional levels in a manner consistent with a student-centered research university."

Strategic Planning and Budget Advisory Committee Report: In April 1998, the Strategic Planning and Budget Advisory Committee (SPBAC) issued a report titled The University of Arizona: 2000 and Beyond that describes the results of a comprehensive "environmental scan". The report affirms that "a necessary condition for a student-centered research university is a strong research program, where discoveries are ubiquitous. The University of Arizona fulfills this requirement and can provide students with an education in which they are active participants in the process of discovery." The study concludes that a successful student-centered research university must fulfill several requirements:

- To provide students with access to faculty who deeply care about the education and the well being of undergraduate and graduate students, while being leaders in their research fields.

- To educate students who are active participants in their learning and discovery process.

- To develop clear and consistent guidelines used to recruit and reward students, faculty, staff, academic professionals, and administrators within a student-centered research university, its mission, and goals.

Publications by President Likins:

Shortly after his arrival at the University of Arizona in October 1997, President Peter Likins engaged the campus community in dialogue about his preparation of foundation and operating prioritization principles. The first of the president's operating principles for prioritization is, "The learning experiences that deserve the highest priority are those that best prepare students for a lifetime of learning that will enable them to assume leadership roles in communities and to lead productive and fulfilling lives". Such a principle is clearly student centered.

Description of the UA as a Student-Centered Research University

Although the phrase student-centered research university has been used in association with the University of Arizona since 1995, the phrase may not be widely understood. The words convey the University's intent, and many student learning activities exemplify the integration of teaching and research. This self-study report has demonstrated the many ways in which the University of Arizona is a student-centered research university. Still there are some who do not understand the phrase.

Who should define student-centered research university? Should the definition be abstract or descriptive? Any single definition will be limiting, just as any brief catch phrase or slogan for an institution as large and complex as the University of Arizona will be confining. There are advantages, however, to identifying the University with a phrase that is not precisely defined. It encourages use by discussion, debate, and even disagreement about its meaning. Perhaps most important, it places students at the center of our thinking, our actions, and our conversations at the University.

During the 1998-99 academic year, the SPBAC members engaged in discussions of what it means for the UA to be a student-centered research university. Professor Jerrold Hogle, Chair of the Faculty and a member of SPBAC, drafted a document on this topic that served as a basis for the SPBAC discussions. Rather than defining the phrase succinctly, the committee focused on the characteristics that identify the UA as a student-centered research university. The April 21, 1999, draft version of this document, presented below, is part of the continuing dialogue by SPBAC and the larger University community.

What It Means for the UA to Be a Student-Centered Research University DRAFT, April 21, 1999

The University of Arizona is determined to be a distinguished *student-cen-*

tered Research University. Research and creative activity are vitally important to us; we can claim the extraordinary expertise and resources we offer to all our audiences only by doing the most cutting-edge and professional work we can in the various fields where our base of support makes that possible. At the same time, the totality of the work we do as a whole institution is *primarily* for the benefit of the students who come here to learn from us, even as we also do it for our disciplines, our state, our nation, and the world. Here the administration and the faculty as a whole, as well as all relevant support services, are committed to providing all kinds of students with the finest and most supportive education we can. Moreover, we work to do so in an active and deeply engaged collaboration with students so that they and we can join in *processes of discovery* that can produce lifelong learners and contributors richly enabled to improve the world in which we all live. To these ends, the University of Arizona will:

- foster a climate that welcomes students to an invigorating, as well as challenging, enterprise of discovery in which the focus is on active student learning in and out of the classroom (including engagement with the community) within an atmosphere of mutual respect, cordiality, ethical treatment, and the taking of appropriate responsibility by all parties;

- design and conduct its curricula at all levels toward what students need to learn from them and the competencies we want all students to have for lifelong learning after they leave the University;

- place students, once they attain some basic proficiencies, in consistent contact with faculty who care deeply about the education and well-being of both undergraduate and graduate students while also being leaders in their fields;

- involve students in faculty-driven and student-initiated research and creative activity, so that they can be active collaborators and contributors in the creation, as well as the transmission, of knowledge;

- provide all admitted students with timely and ready access to the counseling, courses, and progress reports they need to proceed steadily toward their learning goals (including, but not limited to, the degrees they seek);

- make certain all students have both the advising and mentoring they need, with the faculty having ultimate responsibility for both, aided by effective staff and technological support, in a manner that enables academic progress and opens avenues to postgraduate possibilities with potentials for lifelong learning in them;

- develop a system of incentives, consequences, and support for faculty that truly rewards and enables devotion to students and effective teaching, right alongside achievement in research and creative endeavor, with especially high rewards for those who do all of these well in a way that combines them to promote student learning;

- ensure a high-quality support structure of friendly office staff, accessible technology, clean and working classrooms and laboratories, and safe and supportive residence halls, all focused on creating a campus life which fosters continuous learning, celebrates diversity, and promotes a sense of community in which each person feels valued and respected; and

- maintain a program of extensive and focused assessment that makes sure all these aims are really being pursued and accomplished.

Accomplishments of the UA as a Student-Centered Research University

The recommendations made in 1992 by the Task Force on Undergraduate Edu-

cation and in 1995 by Provost Sypherd in his position paper, Toward a Student-Centered Research University, formed the basis for fundamental improvements during the past seven years in education for all students, particularly undergraduates. The changes noted below have been supported by reorganization and reallocation of the University's human, physical, and financial resources. Through a more united focus on student learning, the entire campus culture has changed (as President Pacheco predicted in 1992) in ways that affect faculty members, administrators, and resources as much as they affect students.

Significant Actions in Support of a Student-Centered Research University

The University's commitment to becoming a preeminent student-centered research university is exemplified by a number of actions taken during the past seven years:

- Creation in 1994 of a vice provost for undergraduate education and expansion of this position to vice president for undergraduate education in 1996.

- Funding for the classroom renovation project (\$10.8 million from 1995-1999).

- Establishment of the University College in 1996 to administer the general education program and to focus attention on undecided and preprofessional students during their first two years of study by helping them navigate the University system and find appropriate majors.

- Complete revision of the general education program, which is now University wide, inquiry based, interdisciplinary, and writing intensive; approved by the Faculty Senate in spring 1997 and implemented in fall 1998.

- Development of online advising tools such as On Course, Academic Program Requirements Reports (APRRs), and Student Academic Progress Reports (SAPRs).

- Initiation of First Year Colloquia, small seminars taught by senior faculty, to encourage active student involvement in disciplines and topics of interest to them.

- Creation of the Freshman Year Center, with special support for undecided students.

- Significant emphasis on faculty development, including a major state-funded decision package of nearly \$1 million annually for a new-technologies partnership and the new Faculty Center for Instructional Innovation (9,254 net assignable square feet).

- Post-tenure review, instituted in 1998, to annually assess the quality of faculty instruction, among other faculty accomplishments.

- Initiation of the undergraduate preceptorship program to encourage and support involvement by undergraduates in instruction; made possible with funding from the state, the Fund for the Improvement of Postsecondary Education (FIPSE), and the W.K. Kellogg Foundation.

- Major efforts to support assessment of student outcomes for both major programs and the general education program.

- Construction of the state-of-the-art Integrated Learning Center (ILC), with 89,944 gross square feet dedicated to undergraduate education, especially general education at the lower division.

Examples of, and Recognition for, Student-Centered Research Activities

During the past decade, faculty have created numerous learning experiences in which students are active participants in the process of discovery. Many faculty



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have made concerted efforts to link their research interests, activities, and findings with their instruction. In addition to the diverse learning experiences described in Chapter 5, opportunities are available for students to learn by participating in formal and informal research activities. Some research experiences give students a taste of the research process as they participate in course-based investigations and problem-solving exercises. Other opportunities allow students to work under the supervision of faculty members on research projects that are part of funded grants and may result in publications in professional journals. Examples of these research activities are described in chapters 5 and 6. Selected research opportunities for undergraduate students are listed below and on the Self-Study Web page at <http://www.library.arizona.edu/nca/scru.html>.

- **Undergraduate Biology Research Program** – In 1996, this program received a Recognition Award for the Integration of Research and Education (RAIRE) from the National Science Foundation.

- **Student Biology Research Projects** – an online showcase for academic projects created by UA undergraduate students.

- **The URGE – Undergraduate Online Science Journal** – promotes undergraduate science research at the University of Arizona.

- **UA/NASA Space Grant** – an undergraduate research internship program.

- **The Math Center** – offers undergraduate research opportunities.

- **Department of Aerospace and Mechanical Engineering** – undergraduate student projects.

- **Social and Behavioral Sciences Research Institute** – undergraduate research initiative grants.

- **Honors College** – undergraduate research grants.

Achievements as a Student-Centered Research University

For the past three years, the W.K. Kellogg Foundation has supported a series of annual department head retreats. The last two, in August 1998 and 1999, have focused on the concept of the University of Arizona as a student-centered research university. The 1999 retreat began with a presentation describing results of a survey of department heads, conducted to identify activities in each academic unit that exemplify a student-centered research university. Many activities were mentioned, and the categories of those named most frequently are listed below.

- **Student participation in research:** students partnering with faculty, capstone experiences, research showcase presentations

- **Internships:** comprehensive programs, ad hoc programs, community-service programs

- **Advising:** faculty-centered models, faculty/professional staff models, roles for peers and graduates

- **Professional development and career services:** course-based models, event-based models, direct placement assistance

- **Classroom environment:** innovations with technology, interactive learning methods, research-based lecturing

The Student-Centered Research University Theme within the NCA Self-Study Process

The University has been actively

engaged for 18 months in a self-study process in preparation for its decennial NCA review. Members of the Steering Committee and the eight working teams that participated generally agreed that, in fact, the University of Arizona is a student-centered research university. Excerpts from this self study illustrate the way in which the student-centered research university concept characterizes the University.

- **Criterion 1 - Institutional Mission and Purposes (Working Team 1):** "The University's vision statement defines the institution's prevailing challenge: to be a preeminent student-centered research university." (See Chapter 3.)

- **Criterion 2 – Human, Financial, and Physical Resources (Working Team 2):** "The University of Arizona recognizes that people — faculty, administrators, and support personnel — are key to the institution's ability to serve its students." (See Chapter 4.)

- **Criterion 3 – Instruction (Working Team 3):** "In its evolution as a preeminent student-centered research university, the University fosters a climate of discovery and cooperation. Every effort is made to welcome students to an invigorating, challenging educational environment in which the focus is on student learning and where the atmosphere is one of mutual respect, support, and ethical treatment." (See Chapter 5.)

- **Criterion 3 – Research and Scholarly Activity (Working Team 4):** "Developing research and capstone experiences for undergraduates is integral to the University of Arizona's vision of a student-centered research university," and, "Graduate Interdisciplinary Programs (IDPs) at the University of Arizona are among the strongest in the nation and have become, in fact, a hallmark of the University." (See Chapter 6.)

- **Criterion 3 – Outreach (Working Team 5):** "As Arizona's land-grant university, the UA makes extraordinary efforts to share knowledge generated through research and scholarly activity with people outside the University," and, "In the broadest sense, the University's external constituents are 'students' who benefit from its commitment to become a preeminent student-centered research university." (See Chapter 7.)

- **Criterion 3 – Assessment (Working Team 6):** "Ensuring that student assess-

ment has an appropriate and useful impact on learning and teaching is essential to the University's assessment program," and, "The campus community has come to appreciate the value of assessment to program change, student learning, and the University's performance." (See Chapter 8.)

- **Criterion 4 – Continued Effectiveness (Working Team 7):** "As the planning and resource allocation processes have come to include greater participation of faculty, staff, students, and other stakeholders, the University itself has changed," and, "From the restructuring process has emerged a vision of the UA as a preeminent student-centered research university, a guiding principle in decision making today." (See Chapter 9.)

- **Criterion 5 – Institutional Integrity (Working Team 8):** "A student-centered research university, a supportive campus climate, and the well-being of every member of the campus community all depend on the University's commitment to, and exercise of, the highest principles." (See Chapter 11.)

These excerpts from the report illustrate that the student-centered research university theme permeates this document, as it permeates this University.

Student-Centered Research University Issues

While the University has made notable progress during the past decade toward preeminence as a student-centered research university, a number of issues remain.

One issue concerns reaching consensus on what student-centered research university means on a campuswide basis. For example, campus discussion continues regarding the use of learner rather than student in the phrase. Some argue that learner is a more appropriate term because it includes students, teachers, and others who benefit from the University. Furthermore, because outreach and service are important components in the mission of the University, some feel that student-centered research university is incomplete, preferring student-centered research university with a commitment to public service. Such discussion is useful if it helps the University community reach consensus on how to define the phrase and move forward toward becoming a preeminent student-centered research university.

Another issue is the relationship between student-centered and research activities. All institutions of higher educa-

tion strive to be student centered but few earn the Research 1 classification. The focus of the University of Arizona's efforts is to integrate its student-centered and research activities. President Likins, at the August 1999 department head's retreat, said, "We cannot set aside the intellectual inquiry that advances human understanding to go teach. We are a research institution. We must integrate the research, teaching, and service missions of the University. This must not be a zero-sum game. We must find effective, creative ways to combine these efforts in a way that makes the whole greater than the sum of the parts."

A third issue has to do with the very diverse student body at the University of Arizona in a state whose constitution affirms that access to the University should be open and as nearly free as possible. Most believe that the University is an excellent student-centered research university for the motivated, well-prepared student. "But we have a very heterogeneous student body, especially at the undergraduate level. It is a challenge for us to help all students reach full potential" (President Likins, at the department head's retreat, August 1999). This is one of the major challenges facing the University of Arizona in its effort to be a student-centered research university for all students.

The primary issue, however, is to marshal human, financial, and physical resources at the University to strategically pursue our vision "to be a preeminent student-centered research university." Activities that must be continued include assessment of student learning outcomes, both at the departmental level for majors and at the university level for general education; improvement of student advising and mentoring; expansion of faculty development and recognition for contributions in education; and renovation and construction projects such as the Integrated Learning Center. The University must build upon these activities to create an agenda that fosters student learning enhanced by research, scholarly, and creative activities.

Summary

This report has described highlights of the ongoing transformation of the University of Arizona in the last decade as a student-centered research university with aspirations of preeminence among such institutions. The transformation has involved the entire University community – students, faculty, staff, and administrators. For example, students now have an interdisciplinary, inquiry-based, writing-intensive general education program that for the first time is university wide; opportunities to enroll in First Year Colloquia taught by ranked faculty; and greater participation in research and creative activity. The faculty developed the content of the new general education curriculum, and faculty members have taken advantage of the University's professional-development opportunities to improve teaching. The Faculty Senate has adopted a post-tenure-review process that, along with other promotion and tenure reforms, emphasizes integration of

scholarly work and teaching. The University has affirmed the central role of advising and is considering models to improve the delivery of advising services. Staff members play important and acknowledged roles in advising students and provide other valued student services. The administration has restructured numerous responsibilities, notably by the appointment of a vice president for undergraduate education and creation of the University College serving undecided and preprofessional students and providing support for the new general education program. There is much to be proud of in the University's accomplishments as a student-centered research university.

The challenge for the University of Arizona is to become a preeminent student-centered research university. This objective has important implications. It means that the University cannot rest on the accomplishments of the past decade but must continually seek ways to improve the education of all students and, in particular,

expand access for undergraduates to the intellectual wealth of faculty research and creative activities, both in and out of the classroom. It must meet this challenge in an environment in which significant funding increases are unlikely and public demands for greater accountability are growing, and in a way that preserves and even strengthens the faculty's capacity to create and organize knowledge for the benefit of people everywhere. The University must continue to learn from other institutions while progressing toward national leadership, to the ultimate advantage of UA students. It must focus every institutional process, from strategic planning to conducting this self-study, on improving the student educational experience. The University looks forward to the NCA reaccreditation process as an opportunity to obtain constructive feedback on its accomplishments to date and its progress toward preeminence as a student-centered research university.

NCA 2000: UA Self-Study Steering Committee

Anne E. (Betty) Atwater, Co-chair, Professor and Associate Head, Physiology, and Director, School of Health Professions

Randall M. Richardson, Co-chair, Associate Vice President, Undergraduate Education, Professor, Geosciences

John Carter, Citizen, Tucson Community

Art Chapa, Citizen, Tucson Community, and Former Member, Arizona Board of Regents

David E. Cox, Associate Dean, Academic Programs, College of Agriculture

Michael A. Cusanovich, Professor, Biochemistry, and Director, Arizona Research Laboratories, Former Vice

President, Research and Graduate Studies

Edward G. Frisch Assistant Vice President, Academic Resource Planning and Management

A. Jay Gandolfi, Assistant Dean, Research and Graduate Affairs, College of Pharmacy,

Jane H. Hill, Regents Professor, Anthropology

Jerrold E. Hogle, University Distinguished Professor, English, and Chair of the Faculty

Douglas E. Jones, Librarian, Science and Engineering Library

Patricia R. Perkins, Administrative Associate, College of Agriculture Former President (1998-99), Staff Advisory

Council

Laura Roberts, President (1999-2000), Graduate and Professional Student Council (GPSC) (Replaced Barbara Cohen, former GPSC President, on Steering Committee)

Joaquin Ruiz, Professor and Department Head, Geosciences, Chair, Strategic Planning and Budget Advisory Committee

Larry C. Schooley, Professor, Electrical and Computer Engineering, Vice Chair of the Faculty and Presiding Officer of the Faculty Senate

Maurice J. Sevigny, Dean, College of Fine Arts

Francis C. Sherlock, Manager, TV Production/Operations, KUAT Communications Chair (1998-99), Appointed Personnel Organization

Kenneth R. Smith, Professor, Economics

Sandra L. Taylor, Vice President, Campus Life

NCA 2000: UA Working Teams

*Team Chair, **Steering Committee

Working Team 1: Institutional Mission

Carrie Braden, Professor, College of Nursing

***Roger Caldwell**, Chair, Professor and Director of Educational Communications and Technology, College of Agriculture

**John Carter, Citizen, Tucson Community

Lawrence Evers, Professor and Department Head, English

Christopher Impey, Professor, Astronomy

Jay Rochlin, Associate Director, Alumni Office

**Joaquin Ruiz, Professor and Department Head, Geosciences, and Chair of SPBAC

Alice Stilwell, Administrative Associate, Honors Center

Katherine Staab, Undergraduate Student, College of Business and Public Administration

Dudley Woodard Professor, Higher Education

Working Team 2: Human, Physical, and Financial Resources

Richard Davis, Assistant Director, Business Services, Facilities Design and Construction

Elizabeth Harrison, Associate Director, University Teaching Center

Patricia Hutton, Assistant Vice President, Human Resources

Jo Leeming, Business Manager, Sr., Chemical and Environmental Engineering

Emily Montgomery, Undergraduate Student, College of Agriculture

Richard Roberts, Assistant Vice President, Budget Director, Budget Office

Robert Sankey, Director, Academic Projects

**Maurice Sevigny, Dean, College of Fine Arts

Nancy Stautz, Special Assistant to the Vice President, Campus Life

***Carla Stoffle**, Chair, Dean, University Libraries and Center for Creative Photography

Malcolm Zwolinski, Professor, Watershed Management, Renewable Natural Resources

Working Team 3: Performance (Instruction)

**Barbara Cohen Graduate Student, Past President, Graduate and Professional Student Council

Richard Cosgrove, University Distinguished Professor, History

***David Cox**, Chair, Associate Dean, Academic Programs, College of Agriculture

Michelle Denham, Undergraduate Student, College of Humanities

Felicia Hermann, Administrative Assistant, Residence Life

Wanda Howell, Associate Professor, Nutritional Sciences

Gwendolyn Johnson, Research Specialist, Sr., Office of Curricular and Enrollment Research

Nancy Koff, Associate Dean, Curricular Affairs, College of Medicine

William McCallum, Professor, Mathematics

Terri Riffe, Director, University Teaching Center

**Larry Schooley, Professor, Electrical and Computer Engineering, and Vice Chair of the Faculty

John Schwarz, Professor, Political Science, and Senior Faculty Associate to the President

Working Team 4: Performance (Research)

Judith Becker, Acting Director, Social and Behavioral Sciences Research Institute

John Brobeck, Associate Professor, Music

**Michael Cusanovich, Professor, Biochemistry, and Director, Arizona Research Laboratories

Sheri Delp, Undergraduate Student, College of Science

**A. Jay Gandolfi, Assistant Dean, Research and Graduate Affairs, College of Pharmacy

Robert Gonzales, President and CEO, Greater Tucson Economic Council

John Hildebrand, Regents Professor, Arizona Research Labs

**Jane Hill, Regents Professor, Anthropology

Colin Kaltenbach, Vice Dean, College of Agriculture and Director, Agricultural Experiment Station

Tyson Kinnick, Graduate Student, Physiological Sciences Graduate Interdisciplinary Program

Chestalene Pintozi, Associate Librarian, University Library

Richard Powell, Vice President, Research and Graduate Studies

***Soroosh Sorooshian**, Chair, Professor, Hydrology and Water Resources

Working Team 5: Performance (Outreach)

Cassandra Brock, Undergraduate Student, College of Agriculture

**Art Chapa, Citizen, Tucson Community, and Former Member Board of Regents

Marie (Toni) Griego-Jones, Department Head, Teacher and Teaching Education

Anita McDonald, Dean, Extended University and Summer Session

Dona Pardo, Coordinator, Continuing Education, College of Nursing

***Andrew Polk**, Chair, Department Head, Art

Jack Roberts, Administrative Associate, Agriculture Extension, College of Agriculture

**Francis Sherlock, Manager, TV Production/Operations, KUAT Communications Group

Steve Villaescusa Senior Manager, Raytheon Systems Corp.

Peter Wierenga, Department Head, Soil, Water and Environmental Science

Deborah Young, Associate Director, Extension Programs, College of Agriculture

Working Team 6: Assessment

Sheldon Benson, Graduate Student, College of Education

Anne DeLuca, Associate Director, Admissions and New Student Enrollment

JoLaine Draugalis, Assistant Dean, Academic and Student Affairs, College of Pharmacy

Elizabeth Ervin, Vice Provost for Academic Personnel

Jennifer Franklin, Director, Instructional Assessment and Evaluation

Vern Johnson, Associate Dean, College of Engineering and Mines

Richard Kroc, Director, Office of Curricular and Enrollment Research

Anne Scott, Director, Institutional Research and

Evaluation, Arizona International College

***Kenneth Smith**, Chair, Professor, Economics

Joseph (Jay) Stauss, Director, American Indian Studies

Thomas Willard, Associate Professor, English

Working Team 7: Continued Effectiveness

**Douglas Jones, Librarian, Science and Engineering Library

Leeann Kovac, Undergraduate Student, College of Social and Behavioral Sciences

Larry Leslie, Vice Dean for Academic Affairs, College of Education

Dennis Ray, Associate Professor, Plant Sciences

Patricia St. Germain, Assistant Vice President for Health Sciences, Administrative and Finance Affairs, College of Medicine

Sherry Mallory, Coordinator, Research and Assessment, Campus Life

**Sandra Taylor, Vice President, Campus Life

***Melissa Vito**, Chair, Associate Vice President, Campus Life, and Dean of Students

W. Gary Wagner Director, Curriculum and Registration

Working Team 8: Institutional Integrity

Murray DeArmond, Director (Retired), Campus Health Service

***Jerrold Hogle**, Co-chair, University Distinguished Professor, English, and Chair of the Faculty

***Vernon Lamplot**, Co-chair, Associate Director, Public Information, News Services

Matthew Meaker, Undergraduate Student, College of Social and Behavioral Sciences

Janie Nunez, Associate Vice President, Equal Opportunity and Affirmative Action

**Patricia Perkins, Administrative Associate, College of Agriculture

Mary Poulton, Associate Professor, Mining and Geological Engineering

Michael Proctor, University Attorney, University Attorneys' Office

John Taylor, Dean, College of Education

**Tara Taylor, Former President, Associated Students of the University of Arizona

Self Study Planning Group

Anne (Betty) Atwater, Co-chair, Professor and Associate Head, Physiology, and Director, School of Health Professions

Randall Richardson, Co-chair, Associate Vice President, Undergraduate Education, and Professor, Geosciences

Kelly Brown, Administrative Assistant, Academic Projects

Edward Frisch, Assistant Vice President, Academic Resource Planning and Management

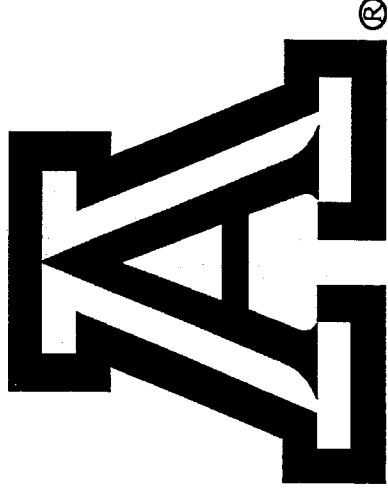
Douglas Jones, Librarian, University Library

John Lopez, Research Specialist, Sr., Academic Planning and Review

Mary Raphael, Coordinator, Academic Planning and Review

Robert Sankey, Director, Academic Projects

John Wilson, Director, Decision and Planning Support



The University of Arizona

A Student-Centered Research University

NCA2000: Self-Study Report North Central Association

Evaluation Team Site Visit Itinerary -- February 13-16, 2000

(DRAFT: February 7, 2000)

NCA CONSULTANT-EVALUATORS

Phillip R. Certain, Ph.D., Chair, Dean, College of Letters and Science
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Ronald R. Cavanagh, Ph.D., Vice President for Undergraduate Studies
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John E. Chapman, M.D., Dean of Medicine, Chair of the Division of Medical Administration
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Jesse G. Delia, Ph.D., Dean, College of Letters and Science
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Carol B. Lynch, Ph.D., Dean, Graduate School and Associate Vice Chancellor for Research
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Susan J. Noakes, Ph.D., Professor and Director of Graduate Studies, Department of French and Italian
University of Minnesota-Twin Cities

Morteza A. Rahimi, Ph.D., Vice President for Information Technology
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Donna Robertson, Ph.D., Dean, College of Architecture
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Bob Savinell, Ph.D., Professor, Department of Chemical Engineering and Associate Dean of Research
Case School of Engineering, Case Western Reserve University

Thomas W. Shaughnessy, Ph.D., University Librarian
University of Minnesota Twin Cities

Barbara Steidle, Ph.D., Assistant Provost for Undergraduate Education and Academic Services
Michigan State University

Alice M. Thomas, Ph.D., Coordinator of Graduate Studies, Dept. of Educational Policy & Administration
University of Minnesota Twin Cities

David Williams, II, Vice President for Student and Urban/Community Affairs, Professor of Law and Adjunct Professor of Education
Ohio State University

NCA EVALUATION TEAM – CHAPTER ASSIGNMENTS (* team chair)

Chapter 3: Institutional Mission and Purposes

Martin Massengale*

Chapter 7: The Outreach Mission

John Chapman

Chapter 4: Human, Financial, and Physical Resources

Chapter 9: Capacity for Continued Effectiveness

Phillip Certain*

Carol Lynch

Martin Massengale

Donna Robertson

Bob Savinell

Chapter 8: Assessment

Alice Thomas*

Barbara Steidle

Chapter 5: The Instructional Mission

Ron Cavanagh

Jesse Delia*

Susan Noakes

Donna Robertson

Thomas Shaughnessy

Barbara Steidle

Chapter 10: Student-Centered Research University

David Asai

Ronald Cavanagh*

Jesse Delia

Morteza Rahimi

David Williams

Chapter 6: The Research Mission

David Asai

Phillip Certain

John Chapman

Carol Lynch*

Alice Thomas

Chapter 11: Institutional Integrity

David Williams*

John Chapman

NCA EVALUATION TEAM ITINERARY – SUN. Y, FEBRUARY 13, 2000 – 02/07/00 DRAFT

6:00 p.m.	Opening Reception – Marriott University Park Hotel, Canyon Room
7:00 p.m.	NCA Evaluation Team Organizational Meeting

NCA EVALUATION TEAM ITINERARY – MONDAY, FEBRUARY 14, 2000 – 02/07/00 DRAFT

Meetings/Forums		Small Groups	Individual Discussions
7:00	Evaluation Team (ET) meeting with President Likins & Provost Sypherd [SU, Rm. 256]		
8:30 9:15			
9:30 10:45	ET Chapter 10 meets with Steering Committee ET Chapter 7 meets with Working Team 5 Decision & Planning Support and Academic Planning & Review (Robertson, Shaughnessy, Thomas) [Beal 104] [Library A349] [Library A314]	UE1 (Williams) CL1 (Certain)	Peter Likins, President (Massengale)
11:00 11:50	ET Chapters 4 & 9 meet with Working Teams 2 & 7 ET Chapter 8 meets with Working Team 6 ET Chapter 11 meets with Working Team 8 [Lib. A314] [Beal 104] [Library A349]	UE2 (Cavanagh) AD1 (Lynch)	Elizabeth Ervin, Vice Provost, Academic Personnel (Noakes)
12:00* Lunch 1:15	ET Group 1 meets with regents (Amos, Blessing, Gignac, Thompson, Ulrich) [Regents Room, Admin 712] ET Group 2 meets with students [Harvill 151] ET Group 3 meets with faculty fellows [Library A314] ET Group 4 meets with deans (Arch., BPA, Law, Pharm., SBS) AME 715 ET Group 5 meets with deans (Ag., Eng. & Mines, Libraries, Nurs.) [Library A349]		
1:30 2:45	ET Chapter 3 meets with Working Team 1 ET Chapter 5 meets with Working Team 3 ET Chapter 6 meets with Working Team 4 [Forbes 307] [Library A314] [Library A349]	CL2 (Williams) CL3 (Chapman) AD2 (Certain)	
3:00 4:15	Open Faculty Forum (Certain, Volunteers) Graduate & Professional Student Council (Savinell) (4:00 – 5:00) Faculty Senate Executive Committee (Delia) [SU, Sr. Ballroom] [Library A349] [Library A314]	RS1 (ET Chpt. 6) UE3 (Steidle) CL4 (Noakes)	Terri Riffe, Director, University Teaching Center (Thomas) The Self-Study Planning Group Executive Committee will be available in the resource room from 3:00-4:00 to address issues related to the site visit.
4:30 5:30	Open Student Forum (Certain, Volunteers) Faculty Development/Distributed Education (Rahimi, Noakes) Student Assessment Coordinating Committee (Thomas, Steidle) [SU, Sr. Ballroom] [Lib A349] [Lib A314]		Joel Valdez, Vice President, Business Affairs (Massengale) Michael Gottfredson, Vice President, Undergraduate Education (Cavanagh)
6:00	Team dinner and meeting		

* Evaluation Team membership in lunch groups will be assigned following the team's arrival in Tucson.

NCA EVALUATION TEAM ITINERARY - TUESDAY, FEBRUARY 15, 2000 - 02/07/00 DRAFT

<i>Meetings/Forums</i>		<i>Small Groups</i>	<i>Individual Discussions</i>
7:00			
8:00	Strategic Planning & Budget Advisory Comm. (SPBAC) (ET Chpt. 4&9)		Pete Perona, Vice Provost, Information Technology (Rahimi)
9:15	[SU, Rincon Rm] (8:00-8:45) Intercollegiate Athletics (Chapman, Williams) [McKale 233]		
9:30	Undergraduate Council (ET Chpt. 5)	AD3 (Massengale)	Sandra Taylor, Vice President, Campus Life (Williams)
10:45	Enrollment Management Group (Thomas)	BA1 (Robertson, Lynch)	Jerry Hogle, Chair of the Faculty (Asai) Paul Sypherd, Provost (Certain)
11:00	Open Department Heads Forum (Savinell, Volunteers)	RS2 (Lynch)	James Dalen, Vice President, Health Sciences (Chapman)
11:50	Information Technology Council (Rahimi)	BA2 (Massengale) UE4 (Steidle, Thomas)	Judith Leonard, General Counsel (Certain)
12:00* Lunch 1:15	ET Group 1 meets with regents profs & UA distinguished profs [Regents Room, Admin 712] ET Group 2 meets with students [Harvill 151] ET Group 3 meets with alumni [TBA] ET Group 4 meets with community leaders [TBA] ET Group 5 meets with deans (AZ Int'l, Educ., F. Arts, Hum., Science) [Library A349]		
1:30	Graduate Council (Lynch)	BA3 (Williams)	The Self Study Planning Group Executive Committee will be available in the resource room from 1:30-2:30 to address issues related to the site visit.
2:45	Enrollment Task Force (Cavanagh) General Education Committee (Asai, Steidle) Appointed Personnel Organization (Shaughnessy, Volunteers) Staff Advisory Council (Certain, Volunteers)	RS3 (Thomas)	
3:00	Open Staff Forum (Certain, Volunteers)		
4:15	Associated Students of the UA (Cavanagh)		
4:30	Open Public Forum (Certain, Volunteers)		
5:30			
6:00	Team dinner and meeting		

* Evaluation Team membership in lunch groups will be assigned following the team's arrival in Tucson.

NCA EVALUATION TEAM ITINERARY – TUESDAY, FEBRUARY 15, 2000 – 02/07/00 DRAFT
UNIVERSITY OF ARIZONA SOUTH TEAM (Susan Noakes and Jesse Delia)

7:00	
8:00	Depart Tucson
9:00	(9:45) Meeting with Dean Randy Groth and Regent Judy Gignac
10:00	(10:45) Meeting with Dean's Management Group
11:00	(11:30) Lunch with Community Leaders at Windemere Hotel & Conference Center, 2047 S. Highway 92
12:00	
1:00	(1:45) Meeting with Faculty and Staff
2:00	(2:45) Open Forum for Students
3:00	(3:30) Depart Sierra Vista
5:00	
6:00	(6:30) Team dinner and meeting

NCA EVALUATION TEAM ITINERARY – WEDNESDAY, FEBRUARY 16, 2000 – 02/07/00 DRAFT

7:00	
8:00	Open
9:00	Evaluation Team Chair pre-exit interview with President Likins, Provost Sypherd, Betty Atwater, Randy Richardson, Ed Frisch, John Lopez /SU, Santa Rita Rm./
9:30	Evaluation Team formal exit interview with President Likins, President's Council, Vice Presidents, Steering Committee, SPBAC, Provost's Council, Betty Atwater, Randy Richardson, Ed Frisch, John Lopez /SU, Sr. Ballroom/
11:00	
12:00	Depart University of Arizona

UA Small Group Clusters

Vice President Research (RS)

RS1: Research Administration & Policy

VP Research & Graduate Studies
Assoc. VP Research & Graduate Studies
Assoc. Dean Research – College of Medicine

RS2: Graduate Studies

VP Research & Graduate Studies
Dean, Graduate College

RS3: Special Support Areas

Director, Arizona State Museum
Director, Udal1 Cntr for Studies in Pub Policy
Interim Director, Art Museum

Vice President Campus Life (CL)

CL1: Student Life

Assoc. VP, Dean of Students
Director, Career Services
Director, Residence Life
UA-ASUA Bookstore
Director of Operations, UApresents

CL2: Diversity

Assoc. VP, Equal Oppor. & Affirm. Action
Prog. Coord., Pres. Council on Diversity
Dir. Multicultural Programs & Services
Chair, Commission on Status of Women
Pres., Association of Women Faculty

CL3: Campus Wellness

Assoc. Dir., Campus Recreation
Dir. CeDRR (Cntr Disab Related Res)
Dir. S.A.L.T (Learning Disabilities)
Assistant Dir. Campus Health

CL4: Human Resources

Assistant VP Human Resources
Assoc. Dir. Human Resources
Manager, Compensation
Dir. UA Life & Work Connections

Vice President Undergraduate Education (UE)

UE1: Enrollment

Director, Admissions
Director, Financial Aid
Director, Curriculum & Registration

UE2: Academic Support

Assoc. Dean, University College
Director, Freshman Year Center
Director, University Teaching Center
Director, University Composition Board
Writing Skills Improvement Program

UE3: Undergrad. Programs

Dean, Honors College
Dean, Extended University
Assoc. Dean, EU, Summer Session
Director, Humanities Program
Assoc. Exec. Dir. Internat'l Affairs
Faculty Assoc., Distributed Learning

UE4: Assessment

Chair, Stud Assess Coord Comm
Dir. Assess & Enroll Research
General Educ. Assessment
Assessment & Fac. Development
Faculty Assoc. Distributed Learn

Vice President Business Affairs (BA)

BA1: Capital

Director, Facilities Design & Construction
Director, Space Management

BA2: Financial

Assistant VP, Budget Director
Assistant VP, Controller

BA3: Administrative Services

Assoc. VP Business Affairs & Admin Serv.
Chief of Police
Dir. Procurement & Contracting

Vice President Advancement (AD)

AD1: Community & Business Relations

Assoc. VP, Economic Development
Assistant VP, Community Relations

AD2: Government & State Relations

VP, University Advancement
Assoc. to VP, Advancement
Assistant VP, Federal Relations

AD3: Foundation & Alumni

VP, University Advancement
VP, U of Arizona Foundation
President, Alumni Association

POLICY ON ETHICS IN RESEARCH AND**PROCEDURES FOR INVESTIGATIONS OF MISCONDUCT IN RESEARCH***A. Introduction*

Public trust in the integrity and ethical behavior of scholars must be maintained if research is to continue to play its proper role in the University and society. It is the policy of The University of Arizona that research, scholarly work, and creative endeavors carried out by its faculty, staff and students be characterized by the highest standards of integrity and ethical behavior. It is further the policy of the University to inform fully all affected parties where misconduct in research has occurred. It is understood that allegations of scientific misconduct are grave and the academic equivalent to the charge of a serious crime. Furthermore, academic freedom and ones career can be threatened by false accusations.

Each member of the University community has a personal responsibility for implementing this Policy in relation to any research, scholarly work or creative endeavor, whether or not externally sponsored, with which he or she is associated and for helping his or her associates in continuing efforts to avoid any activity which might be considered in violation of this Policy. It is, therefore, a fundamental responsibility of the faculty, staff, students and administration of The University of Arizona to ensure that misconduct in research is dealt with in a timely and effective manner, and that the reputation of the University for high standards of scholarly integrity is preserved. Failure to comply with this Policy shall be dealt with according to the procedures specified *and alluded to* herein.

Any use of this Policy to bring malicious charges or charges not otherwise in good faith against any individual, and any act of retaliation or reprisal against an individual for reporting in good faith a charge of misconduct, shall be dealt with through regular administrative processes for violations of University policies. Individuals making good faith reports under this Policy are entitled to protection against retaliation for such reports, even if the allegation is not confirmed.

This policy applies to all faculty, researchers and other staff members of The University of Arizona including, but not limited to: graduate and undergraduate students conducting research or other scholarly activities; postdoctoral fellows and postdoctoral research associates; visiting faculty or staff; faculty or staff on sabbatical leave; adjunct faculty when performing University work; and faculty or staff on leave without pay. In cases in which the student or employee status of the respondent is unclear, the Research Integrity Officer (RIO) in consultation with the Dean of Students and the Dean of the relevant academic college shall elect whether to employ these procedures or other procedures available for the investigation and adjudication of alleged academic misconduct by students. If the

University no longer employs the respondent, these procedures may nonetheless be used, at the discretion of the RIO in consultation with the Research Policy Committee and the Vice President for Research and Graduate Studies.

B. Definitions

1. Research Misconduct

Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing or reviewing research, or in reporting research results. Research, as defined herein, includes all basic, applied and demonstration research. Fabrication is making up results and recording or reporting them. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. The research record is defined as the record of data or results that embody the facts resulting from scientific inquiry, and includes, for example, laboratory records, both physical and electronic, research proposals, progress reports, abstracts, theses, oral presentations, internal reports, and journal articles. "Plagiarism" means the theft or misappropriation of intellectual property of another or one's self, as described under copyright law. It does not include authorship or credit disputes. Plagiarism also includes falsely taking credit for the work or ideas of another. Instances of honest error and honest differences in interpretations or judgements of data are not considered misconduct.

2. Findings of research misconduct.

A finding of research misconduct requires that: there be a significant departure from accepted practices of the scientific community for maintaining the integrity of the research record; the misconduct be committed intentionally, or knowingly or in conscious disregard of accepted practices; the allegations be proven beyond a reasonable doubt.

3. Retaliation

Punitive action against an individual who has in good faith made an allegation of misconduct in research or has cooperated in good faith with an inquiry or investigation of such allegation.

4. Inquiry

Information gathering and fact-finding to determine whether an allegation or apparent instance of misconduct warrants investigation.

5. Investigation

The formal examination and evaluation of all relevant facts to determine whether misconduct has occurred.

6. *Research*

Interpreted in this policy to include scholarship and creative work, as well as scientific research.

7. *Complainant*

The person who submits an allegation of misconduct to the Research Integrity Officer

8. *Respondent*

The researcher accused of misconduct.

11. *Research Integrity Officer*

The Vice President for Research in consultation with the President *and the Research Policy Committee* will appoint the Research Integrity Officer (RIO), who will have primary responsibility for the implementation of the procedures set forth in this Policy. The RIO will assist the inquiry and investigation committees and other institutional personnel in complying with these rules and with applicable standards imposed by government or external funding sources.

C. Reporting and Notification

C1. Reporting Requirements

The RIO shall be responsible, at any stage of an inquiry or investigation, for compliance with reporting requirements imposed by the research sponsor, including any such requirements concerning reporting to the Office of Research Integrity of the Department of Health and Human Services, or the National Science Foundation, where applicable. The RIO will notify the Office of Research Integrity at any stage of the inquiry or investigation if: (1) there is an immediate health hazard; (2) there is an immediate need to protect federal funding or equipment; (3) the allegation involves a public health sensitive issue (e.g., a clinical trial); (4) there is a reasonable indication of possible criminal violations which must be reported within twenty-four hours of obtaining the information; (5) there is an immediate need to protect the interests of the person[s] making the allegation [complainant] or of the individual[s] who is the subject of the allegation[s] [respondent] as well as the co-investigators and associates, if any; or (6) it is probable that the alleged incident is going to be publicly reported.

The RIO is also responsible for reporting anticipated delays in the investigation process and for notifying the funding agency of the outcome of the investigation. The inquiry and investigative committees under this Policy are responsible for keeping the RIO apprised of information that the committees receive related to any of these reporting requirements. The RIO shall also take steps to notify research sponsors of the initiation of an investigation in accordance with applicable law and regulations. The RIO and the committees shall take appropriate steps to preserve

and protect data and other records of the individual's research and any funding involved in the research. This includes computers, computer programs and the contents of computers belonging to, leased by or under the control or jurisdiction of, the University wherever located. The RIO is also responsible for assuring the maintenance of files of all documents and evidence, and for the confidentiality and security of the files.

C2. Notification

When an allegation of misconduct is reported, the RIO first determines whether the matter falls within the purview of this policy. At this point, the RIO may seek a confidential interview with the complainant. Having determined that an allegation does fall within the purview of this policy, the RIO will initiate an inquiry into the matter by convening a meeting of the University Committee on Ethics and Commitment (UCEC). The RIO will also notify, in confidence, appropriate administrators, the Research Policy Committee, and the respondent.

D. Reporting Allegations of Misconduct

Anyone having reason to believe that a person subject to this Policy has engaged in misconduct in research should make a detailed, written report to the RIO. If a report of misconduct is made orally, the individual should be asked to file a written report. If the report is made orally and *the complainant does not agree to submit the complaint in writing*, the RIO, if convinced of the seriousness of the allegations, may audio record the oral allegations and prepare a written report based thereon. The RIO shall instruct the Chair of UCEC to immediately appoint a panel to conduct an inquiry consistent with the requirements of this Policy.

E. Inquiry

E1. Confidentiality

During the inquiry phase of this process, the identities of the complainant and the respondent will remain confidential, except to each other, to the extent permitted by due process rights, to assure that no complainant acting in good faith will experience retaliation and that the damage to the integrity of the respondent will be minimized.

E2. Conduct of the Inquiry.

The inquiry shall consist of information gathering and fact-finding to determine whether an allegation of misconduct warrants an investigation. The Chair of UCEC shall appoint a panel composed of two members of UCEC and one faculty member from the general faculty having expertise in a discipline directly relevant to the inquiry, and who has neither a real nor an apparent conflict of interest to conduct the inquiry. In the event a panel member has a real or apparent conflict of interest, the Chair of UCEC shall excuse that member from the panel and

appoint a substitute. In the event that sufficient members of UCEC are not available either because of a conflict of interest or any other reason, the Chair, in consultation with the RIO, may appoint ad hoc members from the general faculty for purposes of conducting the specific inquiry. *The chair of UCEC shall ensure that the members of the panel possess the necessary and appropriate expertise to carry out thorough and authoritative evaluation of all relevant evidence. The respondent shall be promptly given a written copy of all allegations and reports that initiate any inquiry.*

The initial inquiry shall include examination of all pertinent information, including the review of appropriate records and the hearing of testimony from relevant individuals. The respondent shall be given the opportunity to be present when any testimony is presented, and shall have an opportunity to question the party giving the testimony. The respondent will have the opportunity to respond to the allegation of misconduct and the information collected during the inquiry. The respondent may be assisted, as he or she chooses, by others, including an attorney(s), research collaborators, professional associates, etc. An inquiry must be completed within 60 days of its initiation unless circumstances clearly warrant a longer period. Should it be necessary to extend the period for the inquiry beyond 60 calendar days after the initiation of the inquiry, UCEC must request an extension from the RIO. Extensions may only be granted for good cause, and the RIO must document the reasons for exceeding the 60-day period.

A written report of the inquiry shall be prepared by the UCEC panel that describes the evidence that was reviewed, summarizes relevant interviews and includes the conclusions of the inquiry. It shall contain an assessment of whether there is sufficient evidence to warrant a formal investigation. If the inquiry concludes that an investigation is warranted, the respondent shall be provided an opportunity to comment on the report, and any such comment shall become part of the record. The report of the inquiry, along with any comments on the report, shall be forwarded to the RIO. *The report shall specify the charges, if any, that warrant full investigation as well as the possible sanction(s) applicable to each charge or the charges as a whole.*

E. 3 Resolution of the Inquiry.

If the inquiry provides sufficient evidence, in the judgment of UCEC, to warrant a formal investigation, or if the RIO determines that Federal regulations require such action, the RIO will refer the report to the ad hoc Investigative Committee (see *Investigation*, below). *If the RIO and UCEC, based on the inquiry report, find that the charge does not warrant an investigation, any reference to the charge in the personnel file of any individual shall be removed promptly.* All materials relating to the charge and the determination shall be sent to the RIO, who shall be responsible for their security. Such records shall be maintained for at least three years. In the case of allegations not amounting to scientific misconduct but requiring further investigation, UCEC will request that the RIO refer the allegations to the appropriate University committee.

F. Investigation

F1. Introduction.

If the inquiry warrants an investigation, the ad hoc Investigative Committee shall begin a formal investigation within 30 days of the completion of the inquiry. The investigation including preparation of the report should ordinarily be completed within 120 days of its initiation (i.e., the first meeting). Exceptions require the approval of the RIO and the concurrence of any sponsoring agency. The RIO shall also notify the respondent of the initiation of an investigation and of the respondent's right to appear before the committee. The RIO shall take any additional appropriate steps to notify research sponsors of the initiation of the investigation in accordance with applicable law and regulations. The UCEC panel may ask the Vice President for Research or Provost, as appropriate, to suspend the individual accused from further participation in the research project in question, if the panel determines that serious harm to the individual or others would be threatened by the individual's continuance of his or her duties. Any such suspension shall not interrupt payment of salary.

F2. Ad hoc Investigative Committee

The ad hoc Investigative Committee shall consist of 5 faculty members who are, in the judgment of the RPC, without any relevant or apparent conflict of interest and who have appropriate expertise to carry out a thorough and authoritative evaluation of the relevant evidence. One individual shall be appointed by the Provost and shall be a faculty member, other than the RIO, who is familiar with or trained in the ethical and financial rules applicable to research, scholarly work, and other creative endeavors. This individual shall serve as chair of the committee. *The Chair of the Faculty shall choose two other individuals from the voting membership of The University of Arizona general faculty.*

After consultation with the committee members, the Chair of the ad hoc Investigative Committee shall select two additional committee members who are without any real or apparent conflict of interest and have appropriate expertise to carry out a thorough and authoritative evaluation of the relevant evidence. Generally, the two additional members shall also be members of the general faculty of The University of Arizona or from another university under the jurisdiction of the Arizona Board of Regents (ABOR). In unusual circumstances, external scholars or persons with expertise in other areas may be included on the committee where warranted by the nature of the field or allegations. The committee may also seek additional consultation from individuals outside of the ABOR system who have demonstrated expertise in the discipline or area of research that is the subject of the investigation.

No faculty member should serve on the committee if he or she has any real or apparent conflict of interest. In addition, the respondent may request that a committee member recuse himself or herself if the respondent believes the individual has a conflict of interest. A conflict of interest means the real or apparent interference of one person's

interest with the interests of another person, where potential bias may occur due to prior or existing personal, professional or financial relationships. Generally, differences of professional opinion held in good faith and without prospect of financial gain should not be construed as conflicts of interest.

F3. Conduct of Investigation

Upon receiving the allegation(s) of misconduct and the report of UCEC from the RIO, the ad hoc Investigative Committee shall promptly commence the investigation. *The scope of the investigation shall be determined by the committee at its discretion according to the allegations and the facts. The committee shall consider only such evidence that it receives and shall use its judgment in deciding what evidence presented is fair and reliable. In doing so the committee is not bound by the rules of evidence, but hearsay shall not be admitted except in the form of sworn affidavits or depositions. The committee may interview, either by written questions or in person, individuals who have or are believed to have information germane to the investigation.* The respondent shall have an opportunity to cross-examine in the same form. The committee shall have the right, insofar as allowed by law, of access to any University document or record, however preserved, and by whoever held. The committee shall have the power, insofar as allowed by law, to sequester any University record or tangible object. This includes computers, computer programs and the contents of computers belonging to, leased by or under the control or jurisdiction of, the University wherever located. The investigation normally will include examination of all documentation, including but necessarily limited to relevant research data and proposals, publications, correspondence, and memoranda of telephone calls. Whenever possible, interviews shall be conducted of all individuals involved in either making the allegation or against whom the allegation is made, as well as other individuals who might have information regarding key aspects of the allegations; complete summaries of these interviews should be prepared, provided to the interviewed party and the respondent for comment or revision, and included as part of the investigatory file.

The committee chair shall establish a schedule for the conduct of the investigation. It is the responsibility of all parties to make themselves available according to the schedule. *Accommodations will be made in a manner that allows the respondent to participate in the investigation while maintaining the most important job-related and professional obligations.* The committee shall have the power to compel the attendance and testimony of any University employee except the respondent. If the respondent chooses not to make him or herself available, the committee may proceed in his or her absence. *Early in the course of the investigation the committee should discuss the matter in confidence with the respondent. The respondent shall also be given the opportunity to be present at any proceedings that involve discussions with persons other than the respondent, such as persons with whom he or she has collaborated in relation to the work under review.* During the formal investigation, every reasonable effort shall be made to protect the identity of the respondent(s) and the complainant(s) from third parties. However, at this stage the respondent must be informed of the identity of all witnesses called before the committee. Cases that depend specifically upon the observations or statements of a complainant cannot proceed without the involvement of the complainant. The respondent must be given the opportunity to appear before the committee and to suggest other

witnesses for the committee to interview. The respondent may be accompanied by an advisor, who may be a lawyer but who may not participate in the proceeding. On its own initiative or at the request of the respondent, the committee shall accept documents or other evidence, which the respondent believes to be favorable to his or her defense. If the respondent requests an interview with the Investigative Committee, it must provide an opportunity for the interview. *The Ad Hoc Investigative Committee will establish the time required to complete the investigation and the respondent's defense.*

F4. Record of the Investigation

A written transcript or an audiotape shall be kept of all meetings at which evidence is presented. Upon request, a copy of the transcript shall be provided to the respondent at the University's expense. The committee shall make and keep accurate and complete records, including transcripts or audiotapes of all interviews, original or legible and complete photocopies of all documents or records including where and how obtained. The RIO shall preserve the evidence of each investigation in such a manner that it is not subject to unauthorized use or tampering until such time as it is no longer needed and for a minimum of three years.

F5. Report of the Investigation

At the conclusion of its investigation, the committee shall prepare a written report indicating the process of investigation, findings, conclusions and recommendations for an appropriate course of action. The report shall specifically state whether or not misconduct has occurred in violation of this Policy and with respect to each allegation, the facts and reasons for each of the findings and conclusions. *If the evidence supports a finding of scientific misconduct, the recommendations must include appropriate sanctions and shall include adequate steps to meet the University's obligations, if any, to third parties affected by the violation, including co-investigators and co-authors, funding agencies and other research sponsors and professional journals. In deciding what sanctions are appropriate, the agency should consider the seriousness of the misconduct, including whether the misconduct was intentional or in conscious disregard; was an isolated event or part of a pattern; had significant impact on the research record; and had significant impact on other researchers or institutions.* An outline for investigative reports is attached to this Policy as Appendix A and is strongly recommended as a general format. A preliminary copy of the report will be provided to the respondent who will be provided an opportunity to respond orally, or in writing, before final recommendations are made. To the extent he or she can be identified, the person(s) who made the allegations should be provided with those portions of the report that address his or her role and opinions in the investigation. The committee shall send its final report, including any comments on the preliminary report received from the respondent or complainant, to the *respondent and the RIO* for transmission to the Vice President for Research and the Provost.

F6. Outcome and Resolution of the Investigation

F6a. Initial procedures.

The Provost shall consider the committee's recommendations and, in consultation with the Vice President for Research, produce a written decision as promptly as possible. A finding of no misconduct cannot be overturned. Written notification of the decision will be sent to the respondent, who shall accept, reject or modify all or any part of the committee report and the decision of the provost, including all conclusions and recommendations as is warranted by the evidence. The Provost shall report to the President the full account of the investigation and the basis of the Provost's decision. The Provost's decision, together with the Investigative Committee's report, shall be transmitted to the Office of Research Integrity.

F6b. Finding of no misconduct

The University, including the RIO, Vice President for Research and the Provost shall undertake diligent efforts, as appropriate, to restore the reputations of persons alleged to have engaged in misconduct in research when allegations are not confirmed and also undertake diligent efforts to protect the positions and reputations of those persons who, in good faith, made the allegations. Those making disclosures of misconduct in research in good faith are entitled to protection from retaliation, even if the allegation is determined to be unfounded.

F6c. Finding of improper or malicious allegations

If the inquiry finds that the allegations were improper or malicious, the RIO will notify the appropriate university administrators, who will initiate disciplinary procedures against the defendant under other University of Arizona policies and procedures pertinent to such actions and circumstances.

F6d. Finding of misconduct

In the event that the Provost concurs that misconduct has occurred in violation of this Policy, the Provost shall take all appropriate steps after determining whether to notify law enforcement agencies or other parties affected of the outcome of the case. *The Provost shall propose sanctions within the specifications outlined in the inquiry report. In the case of a Policy violation, the Provost's report to the President shall include information on the steps taken, if any, to notify affected parties. To the extent any disciplinary action is recommended, that portion of the decision shall proceed in accordance with established University policies and procedures on such matters for faculty, professional or classified staff, and students as is appropriate. Faculty members will have the opportunity to appeal any recommended disciplinary actions to the Committee on Academic Freedom and Tenure (CAFT), which shall include at least two ad hoc members who have expertise in the discipline or area of research of the respondent.*

Hearings before the appropriate grievance committee shall be conducted in accordance with the normally applicable procedures, and their recommended decisions are advisory to the President who makes the final decision. Final decisions of the President are subject to *de novo* judicial review under applicable Arizona law pursuant to A.R. S. § 12-90 1, et seq.

G. Informal Resolution

If at any time during the investigative process the ad hoc committee and the respondent determine that the charges may be resolved in a manner satisfactory to the University, any sponsor of the research, and the respondent, the committee may enter into an appropriate agreement subject to the approval of the RIO and the Provost, subject to the required approval of the Office of Research Integrity. In such instances, the resolution must address the interests of all affected parties, including federal sponsoring agencies.

H. Legal Advice for Committees

At the discretion of the relevant committees, either an independent attorney or General Counsel shall advise the inquiry and investigating committees on procedural matters.

I. Further Administrative Action

Once the University process has concluded, further administrative action may be taken by a federal agency. Any such action may or may not be based upon the University investigation and findings and is beyond the purview of the University. However, it is the University policy that generally all employees will cooperate in such agency inquiries.